Film Capacitors

General Purpose, Pulse and DC Transient Suppression

One world. One KEMET.

The Capacitance Company

KEMET

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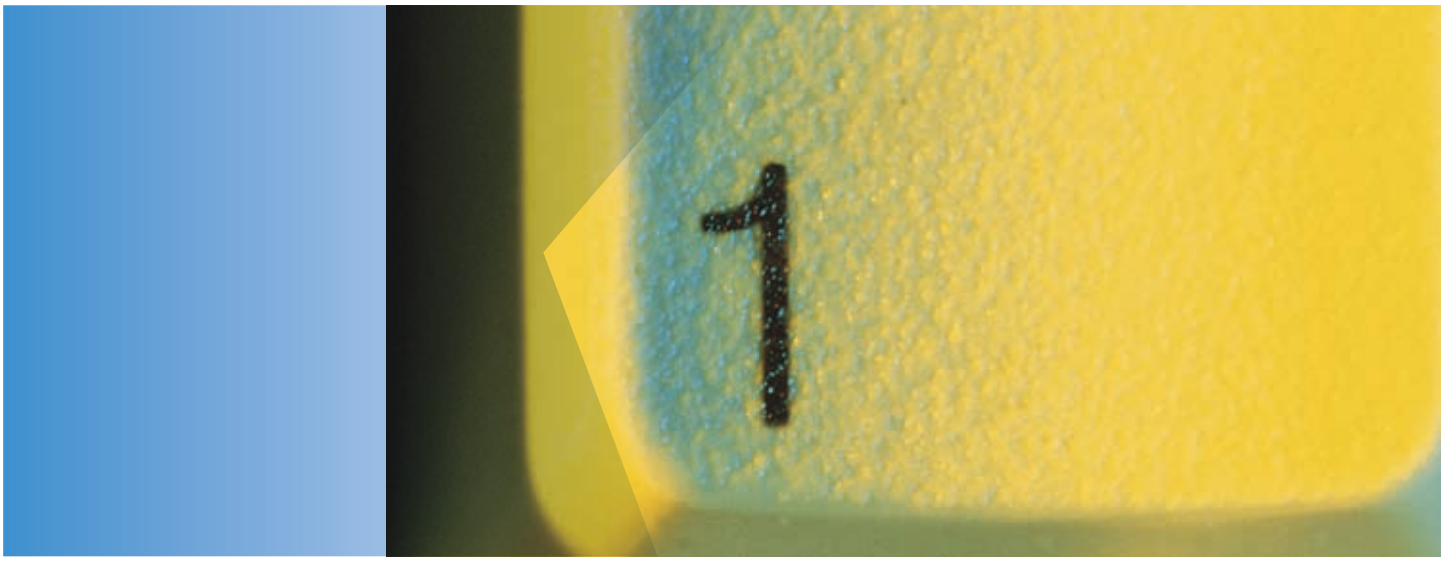


One world. One source. One KEMET.

No bouncing from supplier to supplier to find what you need. No multiple web sites and phone calls to get answers.

When you partner with KEMET, our entire global organization seamlessly provides you with the coordinated action and service you need. We're your single, integrated source for capacitance solutions worldwide, offering 95% of possible dielectric solutions, to cover practically any application. With new, innovative products year after year after year. Global availability. Full design collaboration, with fast custom design and prototyping to give your new products a competitive edge. Plus consistent quality, reliability and on-time delivery.

All from one company that's easy to work with and totally dedicated to your success. For anything to do with capacitance, call *The Capacitance Company* – KEMET.

Looking for a hassle-free source for 95% of possible dielectric solutions?

KEMET is the place for one-stop dielectric shopping. We offer our customers the broadest selection of capacitor technologies in the industry, including tantalum, ceramic, aluminum, electrolytic, film and paper.

But the range of products is only the beginning. You simply won't find an electronic components manufacturer more determined to find new technological solutions to customer problems, or more committed to product quality and on-time delivery – in every case, lowering your total cost of ownership as much as we possibly can. It's how we've helped customers succeed for more than 90 years. And it's how we're helping them succeed today.

We're everywhere you need us to be.

AMERICA

Canada
Mexico
USA

EMEA

Bulgaria
Finland
France
Germany
Italy
Portugal
Sweden
Switzerland
United Kingdom

ASIA-PACIFIC

China
Hong Kong
India
Indonesia
Japan
Malaysia
Singapore
Taiwan

The next time you board an airplane, boot up your computer or read about a breakthrough medical device, a piece of our technology is likely involved. KEMET customers include nearly all of the world's major electronics original equipment manufacturers, manufacturing services companies and electronics distributors. High Reliability versions of our capacitors are even in outer space, part of every important military and aerospace effort of the past 60 years, from the first Telstar satellite and Apollo 11 to the Patriot missile, International Space Station and Mars Pathfinder.

Our sales offices can't be quite as ubiquitous as our products, but we do pride ourselves on being where you need us. This map shows you our sales offices around the world.

As you can see, we're not only easy to work with, we're easy to find. And we're more than ready to be your single source capacitance solutions supplier.

One world. One source. One KEMET.

Why *The Capacitance Company* is also the "Easy-To-Buy-From" company.

When you choose KEMET, you'll enjoy a level of responsiveness you just won't get from any other component manufacturer. You simply won't find an electronic components manufacturer more passionate about customer service. Our innovative service offerings and superior localized support are known throughout the industry, powered by our global, customer-focused sales organization and worldwide logistics capabilities. We're 100% committed to serving any customer, anywhere, and meeting customer needs when they need to be met.

Whether you need rush samples, technical assistance, in-person consultations or accelerated custom design, design collaboration and prototype services, we have a solution. If it's anything to do with capacitance, we can help – and help fast.

Working to make a better world.

At KEMET, we're proud to work with customers to develop products that truly make the world a better, safer, more connected place to live – from hand-held devices to automotive systems to the greenest energy technology.

As a company, KEMET is dedicated to economically, environmentally and socially sustainable development. We've adopted the Electronic Industry Code of Conduct (EICC), addressing all aspects of corporate responsibility. All of our commercial-grade products are available in RoHS-compliant versions with Pb-free terminations. Our manufacturing facilities have won numerous environmental excellence awards and recognitions. And our supply chain is certified to be sourced from areas that are neither environmentally protected nor under conflict.

After all, we believe that doing the right thing is in everyone's interest.

Which capacitor is right for you?

As The Capacitance Company, we make over 95% of possible dielectric solutions – the broadest selection of capacitor technologies in the industry. By offering a wide variety of dielectrics, dimensions, voltages, temperature characteristics and terminations, KEMET capacitors satisfy an expansive range of customer requirements and applications.

In fact, if the capacitor you need hasn't been invented, it's only because you haven't asked. We can quickly develop custom products and carry out early-stage manufacturing through our accelerated collaboration services. Available through our global innovation and manufacturing centers around the world, accelerated collaboration brings together the necessary people, equipment and facilities together to get the job done, on time and in budget.

Of course, when you're under pressure to design smaller and smaller products with greater and greater functionality, there's no time for the traditional back-and-forth with your suppliers. With KEMET, you get direct contact to the engineers and other professionals who can help you successfully solve your design problems, and in record time. We deal personally with customers to ascertain the new part types needed for their next-generation products. In many cases, we can go from start to samples in only four months.

We've helped some of the world's most prominent electronics companies slash time to market and gain significant windows of competitive advantage. We can do the same for you, too.

F611 & F612 Series Metallized Polyester Film, 5 – 37.5 mm Lead Spacing, 50 – 1,000 VDC

Overview

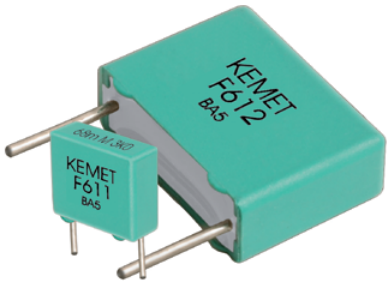
The F611 and F612 Series is constructed of metallized winded or stacked polyester film capacitor with radial leads of tinned wire. Radial leads are electrically welded to the contact metal layer on the ends of the capacitor winding. The capacitor is encapsulated in a self-extinguishing material meeting the requirements of UL 94 V–0.

Applications

Typical applications include blocking, coupling, decoupling, bypassing and interference suppression in low voltage applications such as automotive. Not for use with the mains.

Benefits

- Voltage range: 50 – 1,000 VDC
- Capacitance range: 0.001 – 330 µF
- Lead spacing: 5 – 37.5 mm
- Capacitance tolerance: ±10%, ±20%, ±5% on request
- Climatic category: 55/105/56, IEC 60068–1
- Tape and reel packaging in accordance with IEC 60286–2
- RoHS Compliant and lead-free terminations
- Operating temperature range of -55˚C to +105˚C



Part Number System

F	611	J	F	104	M	050	C
Capacitor Class	Series	Lead Spacing (mm)	Size Code	Capacitance Code (pF)	Capacitance Tolerance	Voltage (VDC)	Lead and Packaging Code
F = Film	Metallized Polyester 611 = Wound 612 = Stacked	J = 5 K = 7.5 A = 10.0 B = 15.0 D = 22.5 F = 27.5 R = 37.5	See Dimension Table	First two digits represent significant figures. Third digit specifies number of zeros.	J = ± 5% K = ± 10% M = ± 20%	050 = 50 063 = 63 100 = 100 160 = 160 250 = 250 400 = 400 630 = 630 1K0 = 1000	See Ordering Options Table

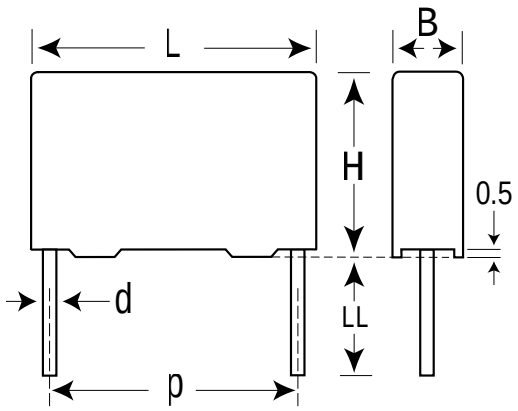
Ordering Options Table

Lead Spacing Nominal (mm)	Type of Leads and Packaging	Lead Length (mm)	Lead and Packaging Code
5	Standard Lead and Packaging Options		
	Bulk (Bag) – Short Leads	4 +2/-0	C
	Bulk (Bag) – Long Leads	17 +0/-1	A
	Tape & Reel (Standard Reel)	H_0= 18.5 +/-0.5	L
	Other Lead and Packaging Options		
	Bulk (Bag) – Max Length Leads	20 +5/-0	ALL0L
	Ammo Pack	H_0= 18.5 +/-0.5	R
7.5	Standard Lead and Packaging Options		
	Bulk (Bag) – Short Leads	4 +2/-0	C
	Bulk (Bag) – Long Leads	17 +0/-1	A
	Tape & Reel (Standard Reel)	H_0= 18.5 +/-0.5	L
	Other Lead and Packaging Options		
	Bulk (Bag) – Max Length Leads	20 +5/-0	ALL0L
	Ammo Pack	H_0= 18.5 +/-0.5	R
10	Standard Lead and Packaging Options		
	Bulk (Bag) – Short Leads	4 +2/-0	C
	Bulk (Bag) – Long Leads	17 +0/-1	A
	Tape & Reel (Standard Reel)	H_0= 18.5 +/-0.5	L
	Other Lead and Packaging Options		
	Bulk (Bag) – Max Length Leads	20 +5/-0	ALL0L
	Ammo Pack	H_0= 18.5 +/-0.5	R
	Tape & Reel (Large Reel)	H_0= 18.5 +/-0.5	P
15	Standard Lead and Packaging Options		
	Bulk (Bag) – Short Leads	4 +2/-0	C
	Bulk (Bag) – Long Leads	17 +0/-1	A
	Tape & Reel (Standard Reel)	H_0= 18.5 +/-0.5	L
	Pizza Pack	4 +2/-0	Z
	Other Lead and Packaging Options		
	Bulk (Bag) – Max Length Leads	25 +5/-0	ALR0L
	Ammo Pack	H_0= 18.5 +/-0.5	R
	Tape & Reel (Large Reel)	H_0= 18.5 +/-0.5	P

Ordering Options Table cont'd

Lead Spacing Nominal (mm)	Type of Leads and Packaging	Lead Length (mm)	Lead and Packaging Code
22.5	Standard Lead and Packaging Options		
	Bulk (Tray) – Short Leads	4 +2/-0	C
	Bulk (Tray) – Long Leads	17 +0/-1	A
	Pizza Pack	4 +2/-0	Z
	Other Lead and Packaging Options		
	Tape & Reel (Standard Reel)	H_0= 18.5 +/-0.5	L
	Tape & Reel (Large Reel)	H_0= 18.5 +/-0.5	P
	Ammo Pack	H_0= 18.5 +/-0.5	R
27.5	Standard Lead and Packaging Options		
	Bulk (Tray) – Short Leads	4 +2/-0	C
	Bulk (Tray) – Long Leads	17 +0/-1	A
	Pizza Pack	4 +2/-0	Z
37.5	Standard Lead and Packaging Options		
	Bulk (Tray) – Short Leads	4 +2/-0	C
	Bulk (Tray) – Long Leads	17 +0/-1	A
	Pizza Pack	4 +2/-0	Z

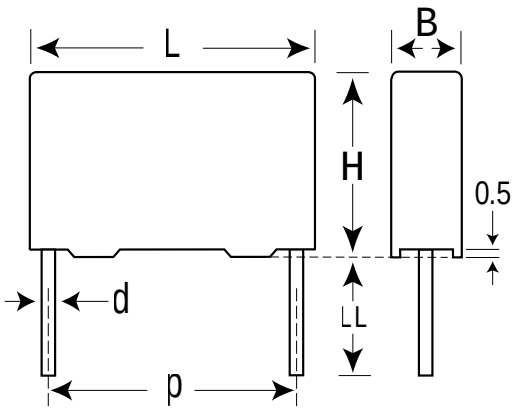
Dimensions – Millimeters



Size Code	p		B		H		L		d	
	Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance
JF	5.0	+/-0.4	2.5	Maximum	6.5	Maximum	7.2	Maximum	0.6	+/-0.05
JG	5.0	+/-0.4	3.5	Maximum	7.5	Maximum	7.2	Maximum	0.6	+/-0.05
JM	5.0	+/-0.4	4.5	Maximum	9.5	Maximum	7.2	Maximum	0.6	+/-0.05
JQ	5.0	+/-0.4	5.0	Maximum	10.0	Maximum	7.2	Maximum	0.6	+/-0.05
JT	5.0	+/-0.4	6.0	Maximum	11.0	Maximum	7.2	Maximum	0.6	+/-0.05
JU	5.0	+/-0.4	7.2	Maximum	13.0	Maximum	7.2	Maximum	0.6	+/-0.05
KE	7.5	+/-0.4	2.5	Maximum	6.0	Maximum	10.0	Maximum	0.6	+/-0.05
KF	7.5	+/-0.4	3.0	Maximum	8.0	Maximum	10.0	Maximum	0.6	+/-0.05
KG	7.5	+/-0.4	4.0	Maximum	8.0	Maximum	10.0	Maximum	0.6	+/-0.05
KH	7.5	+/-0.4	4.0	Maximum	9.0	Maximum	10.0	Maximum	0.6	+/-0.05
KJ	7.5	+/-0.4	5.0	Maximum	10.5	Maximum	10.0	Maximum	0.6	+/-0.05
KM	7.5	+/-0.4	6.0	Maximum	12.0	Maximum	10.5	Maximum	0.6	+/-0.05
AG	10.0	+/-0.4	4.0	Maximum	9.0	Maximum	13.0	Maximum	0.6	+/-0.05
AK	10.0	+/-0.4	5.0	Maximum	11.0	Maximum	13.0	Maximum	0.6	+/-0.05
AP	10.0	+/-0.4	6.0	Maximum	12.0	Maximum	13.0	Maximum	0.6	+/-0.05
BB	15.0	+/-0.4	4.0	Maximum	10.0	Maximum	18.0	Maximum	0.8	+/-0.05
BC	15.0	+/-0.4	5.0	Maximum	11.0	Maximum	18.0	Maximum	0.8	+/-0.05
BE	15.0	+/-0.4	5.5	Maximum	12.5	Maximum	18.0	Maximum	0.8	+/-0.05
BG	15.0	+/-0.4	6.0	Maximum	12.0	Maximum	18.0	Maximum	0.8	+/-0.05
BK	15.0	+/-0.4	7.5	Maximum	13.5	Maximum	18.0	Maximum	0.8	+/-0.05
BP	15.0	+/-0.4	8.5	Maximum	14.5	Maximum	18.0	Maximum	0.8	+/-0.05
BS	15.0	+/-0.4	10.0	Maximum	16.0	Maximum	18.0	Maximum	0.8	+/-0.05
BY	15.0	+/-0.4	11.0	Maximum	19.0	Maximum	18.0	Maximum	0.8	+/-0.05
DB	22.5	+/-0.4	6.0	Maximum	14.5	Maximum	26	Maximum	0.8	+/-0.05
DI	22.5	+/-0.4	7.0	Maximum	16.0	Maximum	26.0	Maximum	0.8	+/-0.05
DH	22.5	+/-0.4	8.0	Maximum	16.0	Maximum	26.0	Maximum	0.8	+/-0.05
DJ	22.5	+/-0.4	8.5	Maximum	17.0	Maximum	26.0	Maximum	0.8	+/-0.05
DM	22.5	+/-0.4	9.0	Maximum	18.5	Maximum	26.0	Maximum	0.8	+/-0.05
DO	22.5	+/-0.4	10.0	Maximum	18.5	Maximum	26.0	Maximum	0.8	+/-0.05
DP	22.5	+/-0.4	11.0	Maximum	20.0	Maximum	26.0	Maximum	0.8	+/-0.05

Note: See Ordering Options Table for lead length (LL) options.

Dimensions – Millimeters cont'd



Size Code	p		B		H		L		d	
	Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance
DU	22.5	+/-0.4	13.0	Maximum	22.0	Maximum	26.0	Maximum	0.8	+/-0.05
DY	22.5	+/-0.4	15.5	Maximum	24.5	Maximum	26.0	Maximum	0.8	+/-0.05
FB	27.5	+/-0.4	9.0	Maximum	17.0	Maximum	31.5	Maximum	0.8	+/-0.05
FC	27.5	+/-0.4	11.0	Maximum	20.0	Maximum	31.5	Maximum	0.8	+/-0.05
FI	27.5	+/-0.4	13.0	Maximum	25.0	Maximum	31.5	Maximum	0.8	+/-0.05
FN	27.5	+/-0.4	14.0	Maximum	28.0	Maximum	31.5	Maximum	0.8	+/-0.05
FR	27.5	+/-0.4	17.5	Maximum	28.0	Maximum	31.5	Maximum	0.8	+/-0.05
FS	27.5	+/-0.4	19.0	Maximum	29.0	Maximum	31.5	Maximum	0.8	+/-0.05
FY	27.5	+/-0.4	22.0	Maximum	37.0	Maximum	31.5	Maximum	0.8	+/-0.05
RB	37.5	+/-0.4	11.0	Maximum	22.0	Maximum	41.0	Maximum	1	+/-0.05
RF	37.5	+/-0.4	13.0	Maximum	24.0	Maximum	41.0	Maximum	1	+/-0.05
RH	37.5	+/-0.4	15.0	Maximum	26.0	Maximum	41.0	Maximum	1	+/-0.05
RC	37.5	+/-0.4	16.0	Maximum	28.5	Maximum	41.0	Maximum	1	+/-0.05
RD	37.5	+/-0.4	19.0	Maximum	32.0	Maximum	41.0	Maximum	1	+/-0.05
RP	37.5	+/-0.4	21.0	Maximum	38.0	Maximum	41.0	Maximum	1	+/-0.05
RO	37.5	+/-0.4	24.0	Maximum	44.0	Maximum	41.0	Maximum	1	+/-0.05
RU	37.5	+/-0.4	30.0	Maximum	45.0	Maximum	41.0	Maximum	1	+/-0.05

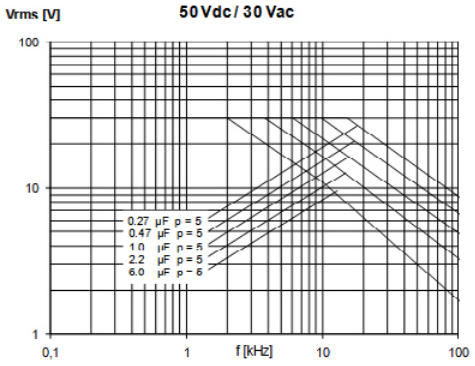
Note: See Ordering Options Table for lead length (LL) options.

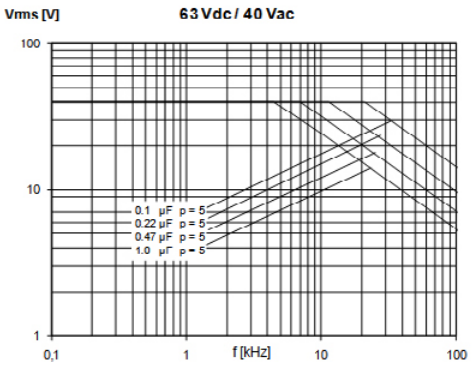
Performance Characteristics

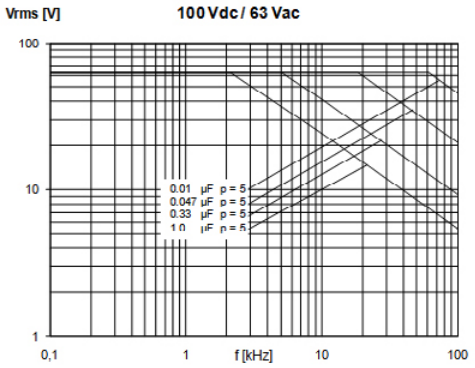
Voltage Range V_R (VDC)	50	63	100	160	250	400	630	1,000
Voltage Range V_R (VAC)	30	40	63	90	160/140	200/160	220	250
Capacitance Range (µF)	0.27 – 15	0.1 – 330	0.001 – 220	0.18 – 180	0.0068 – 82	0.001 – 33	0.0012 – 12	0.001 – 5.6
Capacitance Tolerance	±10%, ±20%, ±5% on request							
Category Temperature Range	-55°C to +105°C							
Voltage Derating	Above +85°C DC and AC voltage derating is 1.25%/°C							
Rated Temperature	+85°C							
Climatic Category	IEC60068–1, 55/105/56							
	–55 to +105°C (For +125°C, please consult KEMET)							
	Average relative humidity ≤ 75%							
	RH = 95% for 30 days per year							
	RH = 85% for further days limited by average value per year							
Test Voltage	1.6 x V_R VDC for 2 seconds							
Capacitance Drift	Maximum 2% after a 2 year storage period at a temperature of +10°C to +40°C and a relative humidity of 40% to 60%							
Reliability	Operational life > 200,000 hours							
	Failure rate < 3 FIT, T = +40°C, V = 0.5 x V_R							
	Failure criteria: open circuit, short circuit, cap change > 10%, DF 2 times the catalog limits, IR < 50 MΩ							
Maximum Pulse Steepness	dV/dt according to Table 1. For peak to peak voltages lower than rated voltage (Vpp < V_R), the specified dV/dt can be multiplied by the factor V_R/Vpp.							
Temperature Coefficient	+400 (±200) ppm/°C at 1 kHz							
Self Inductance	Approximately 6 nH/cm for the total length of capacitor winding and the leads							
Dissipation Factor tanδ	Maximum Values at +23°C							
		C ≤ 0.1 µF		0.1 µF < C ≤ 1.0 µF		C > 1.0 µF		
Lead Spacing 5 mm	1 kHz	0.8%		0.8%		0.8%		
	10 kHz	1.2%		1.2%		1.5%		
	100 kHz	2.5%						
Lead Spacing 7.5 – 37.5 mm	1 kHz	0.8%		0.8%		1.2%		
	10 kHz	1.5%		1.5%				
	100 kHz	3.0%						
Insulation Resistance	Measured at +20°C, according to IEC 60384–2							
	Minimum Values Between Terminals							
		C ≤ 0.33 µF			C > 0.33 µF			
	V_R ≤ 100 VDC	15,000 MΩ			5,000 MΩ • µF			
	V_R > 100 VDC	30,000 MΩ			10,000 MΩ • µF			

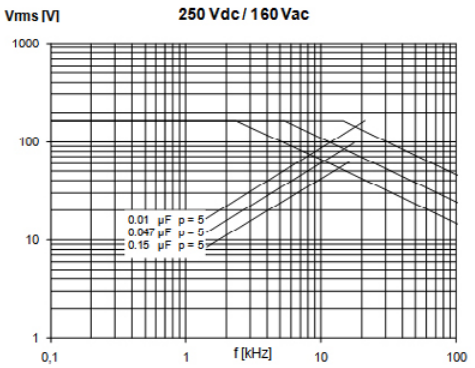
Maximum Voltage (V_{rms}) vs. Frequency (Sinusoidal Waveform/T ≤ 40°C)

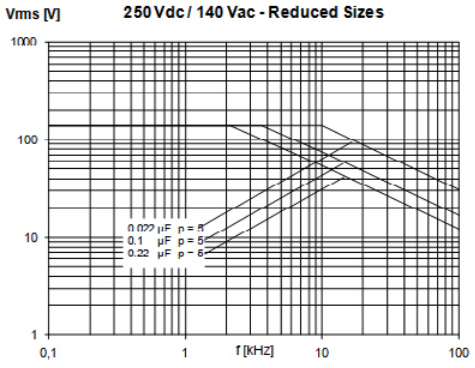
Lead Spacing 5 mm

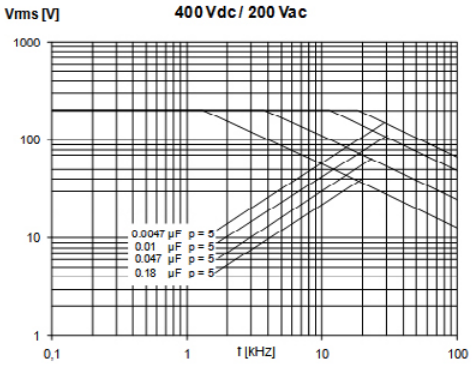


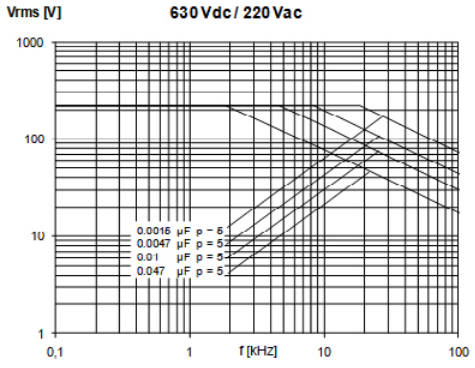


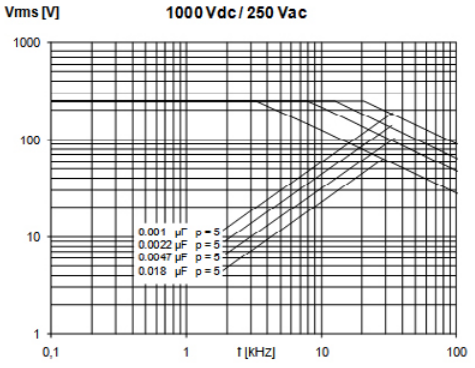






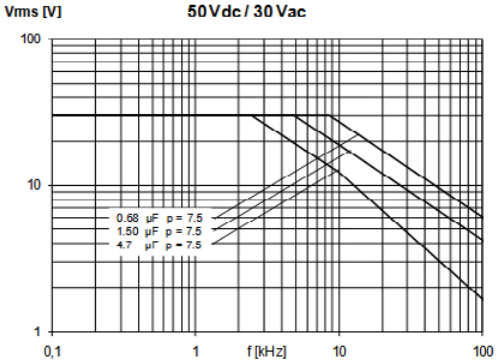


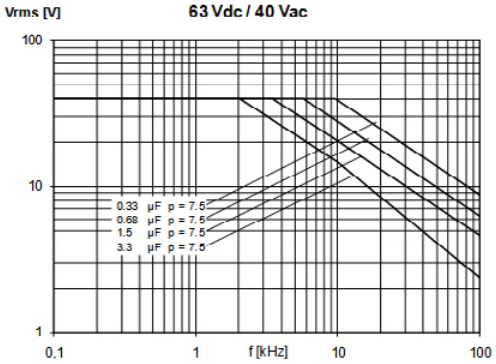


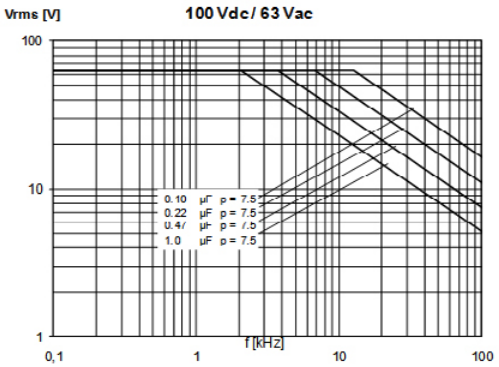


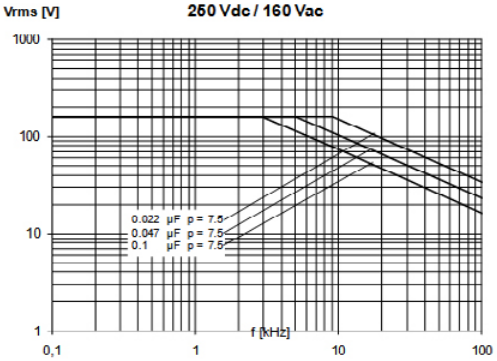
Maximum Voltage (V_{rms}) vs. Frequency (Sinusoidal Waveform/T ≤ 40°C)

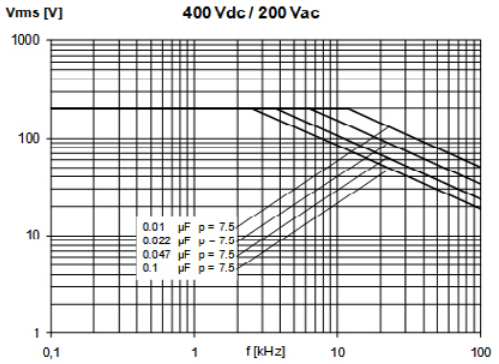
Lead Spacing 7.5 mm

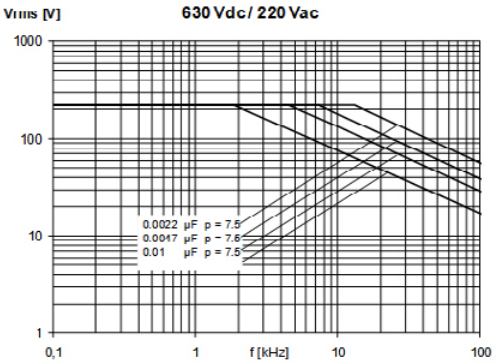


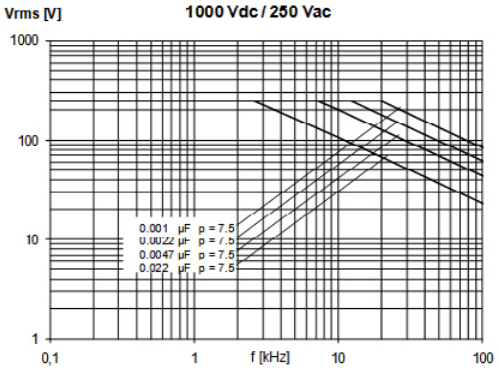






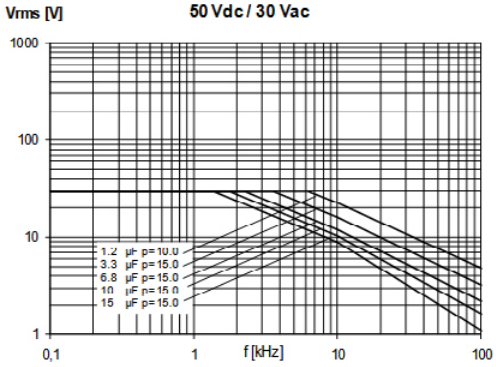


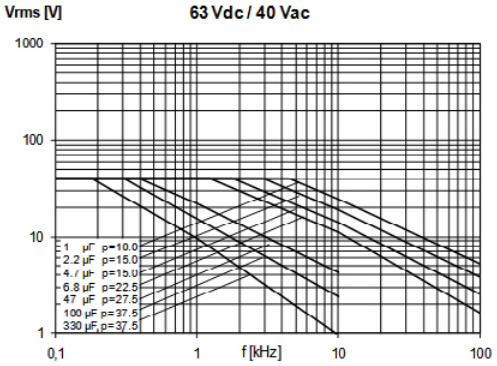


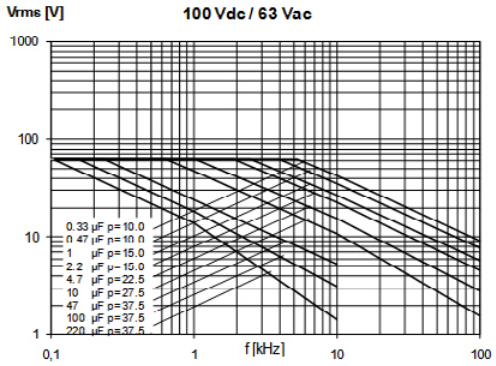


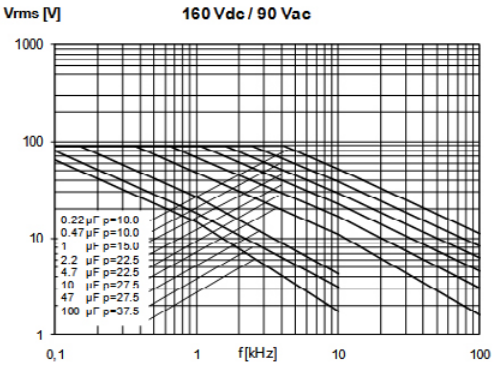
Maximum Voltage (V_{rms}) vs. Frequency (Sinusoidal Waveform/T ≤ 40°C)

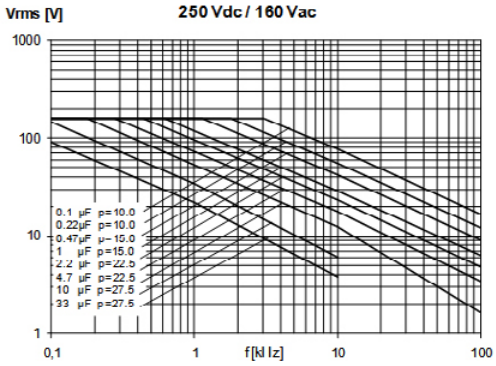
Lead Spacing 10 – 37.5 mm

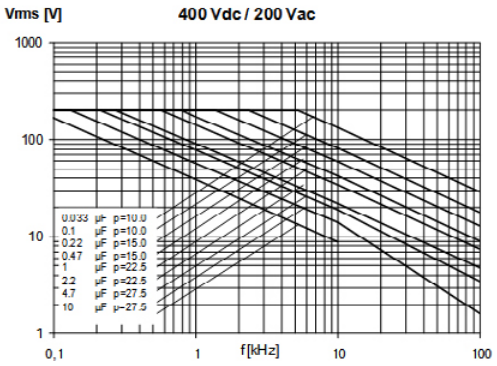


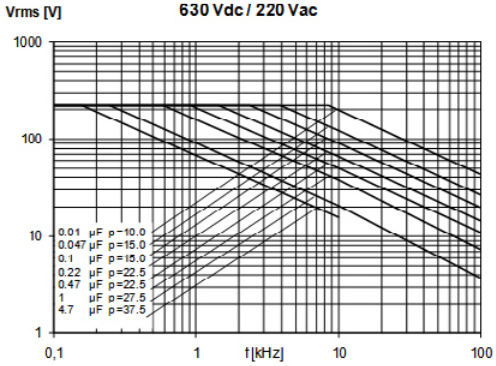


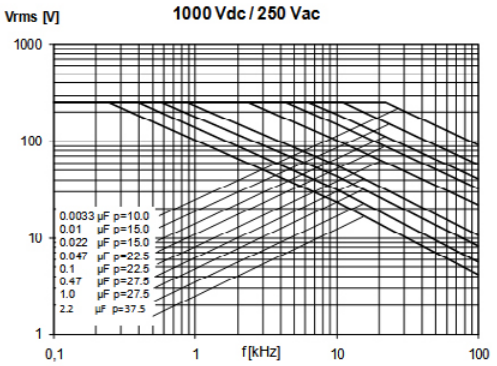






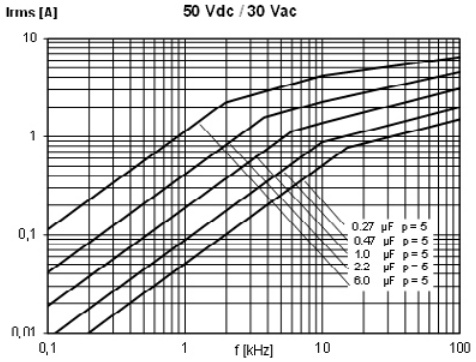


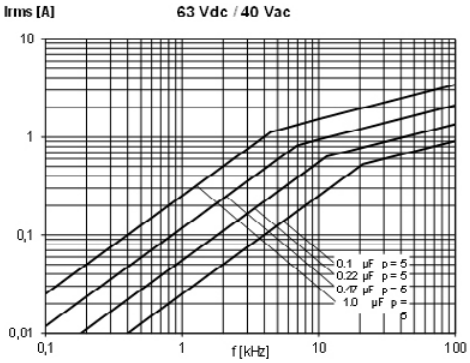


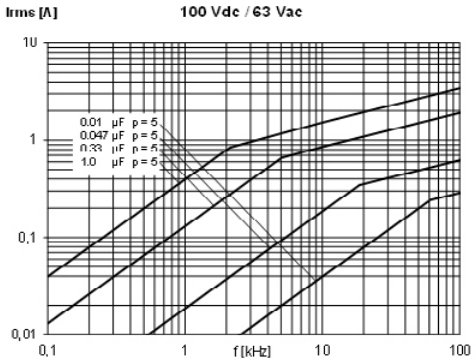


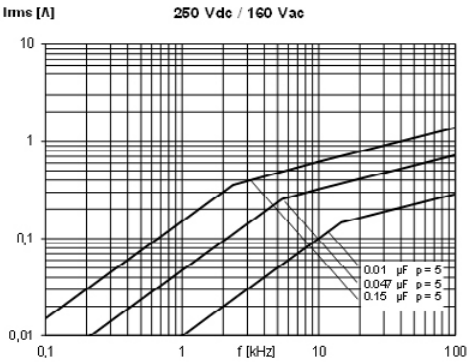
Maximum Current (I_{rms}) vs. Frequency (Sinusoidal Waveform/T ≤ 40°C)

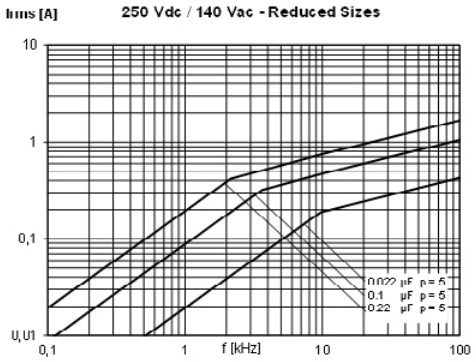
Lead Spacing 5 mm

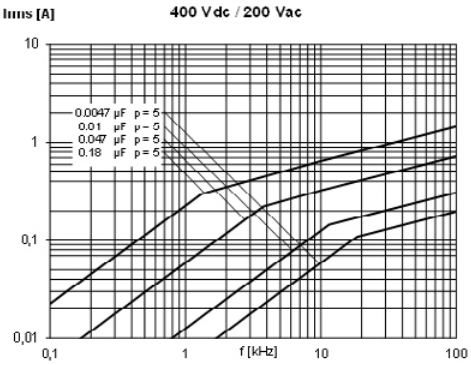


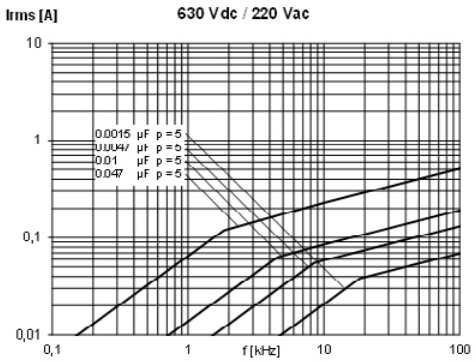


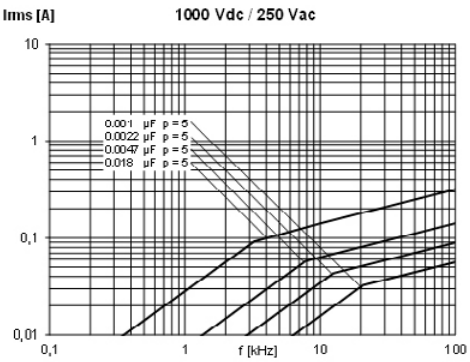






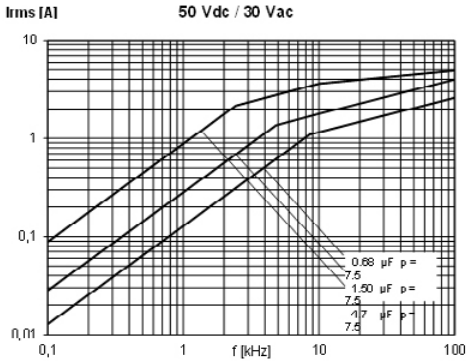


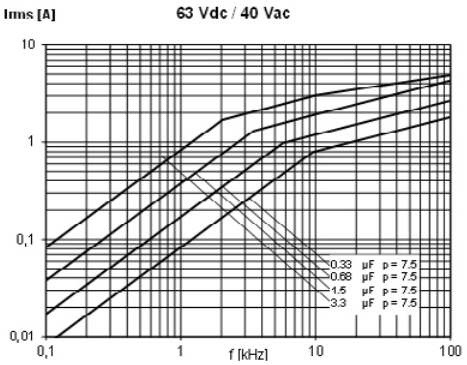


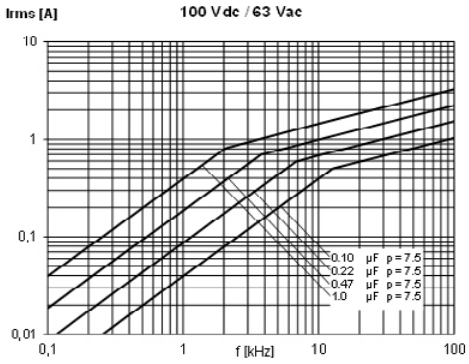


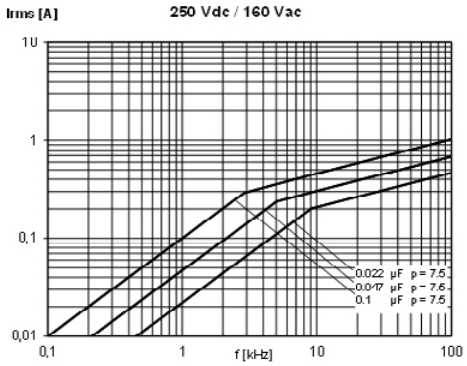
Maximum Current (I_{rms}) vs. Frequency (Sinusoidal Waveform/T ≤ 40°C)

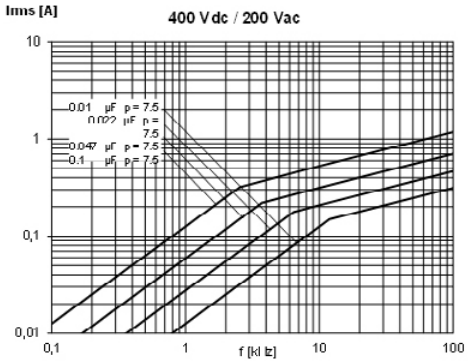
Lead Spacing 7.5 mm

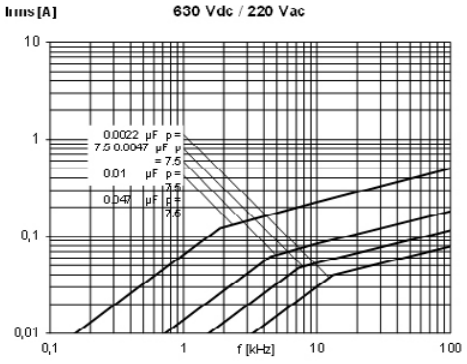


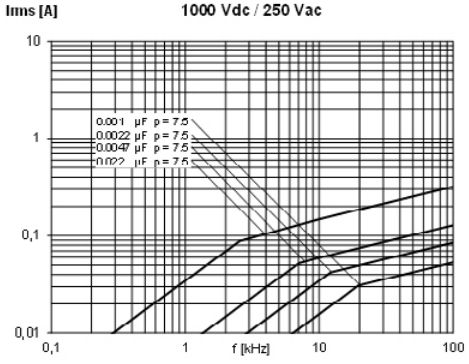






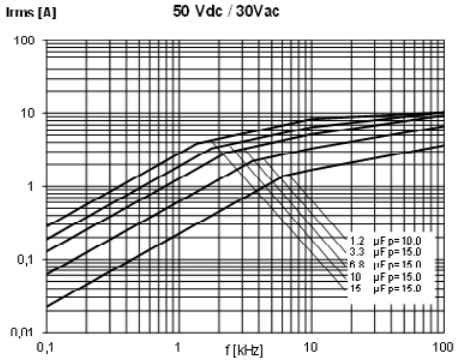


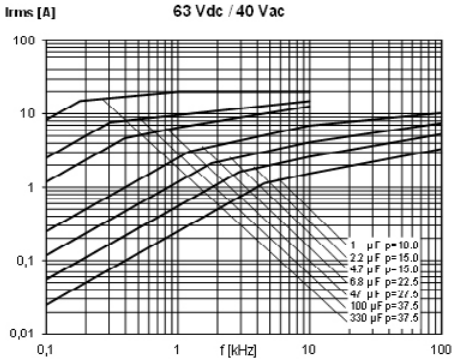


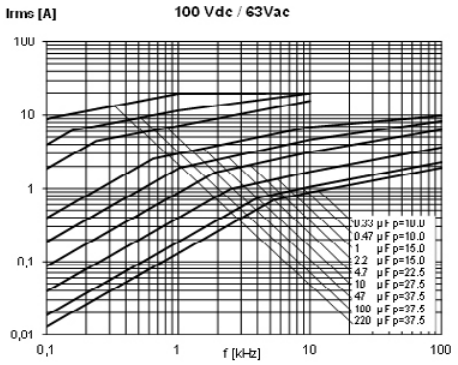


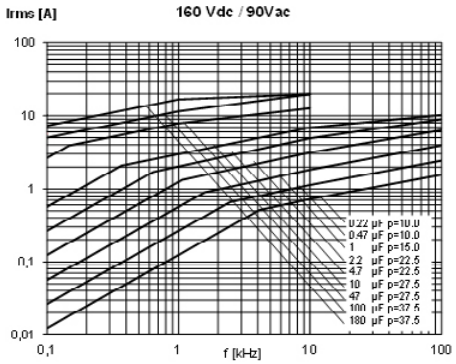
Maximum Current (I_{rms}) vs. Frequency (Sinusoidal Waveform/T ≤ 40°C)

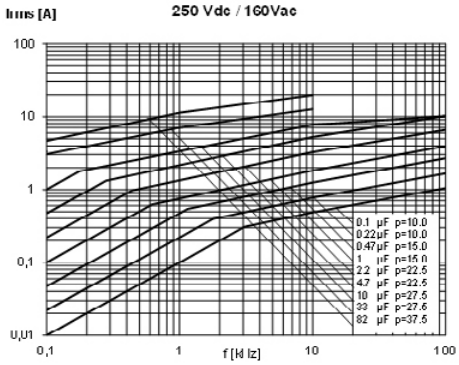
Lead Spacing 10 – 37.5 mm

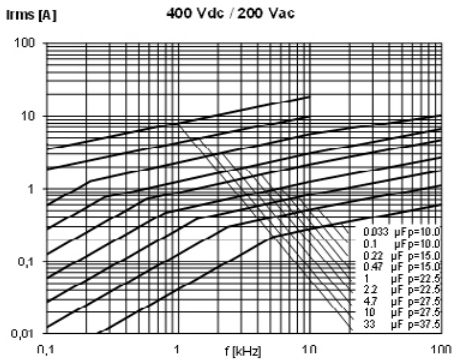


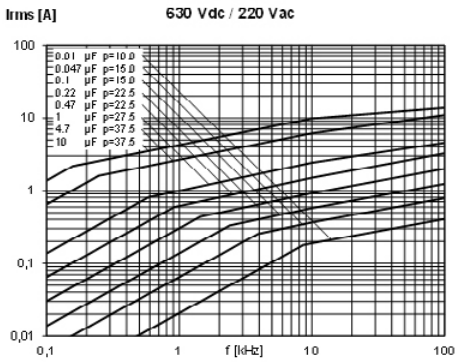


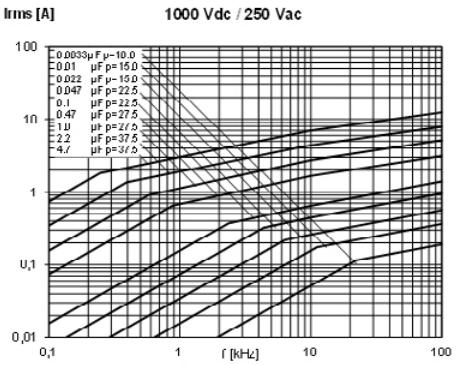












Environmental Test Data

Damp Heat Test	Test Conditions	T = +40°C, RH = 93%, t = 56 days
	Test Criteria	Δ C/C ≤ ±5% Δ tanδ ≤ 0.005 (1 kHz) IR after test 0.5 x IR minimum
Endurance Test	**Test Conditions**	**T = +100°C, U = 1.25 x (0.8 x U_R)**
	Test Criteria	t = 2,000 hours Δ C/C ≤ ±5%, Δ tanδ ≤ 0.005 (1 kHz) Δ tanδ ≤ 0.010 (100 kHz) IR after test 0.5 x IR minimum

Environmental Compliance

All KEMET MKTI capacitors are RoHS Compliant.

RoHS Compliant

Table 1 – Ratings & Part Number Reference

VDC	VAC	Capacitance Value (µF)	Size Code	Maximum Dimensions in mm			Lead Spacing (p)	dV/dt (V/µs)	Part Number
				B	H	L			
50	30	0.27	JF	2.5	6.5	7.2	5.0	12	F611JF274(1)050(2)
50	30	0.33	JF	2.5	6.5	7.2	5.0	12	F611JF334(1)050(2)
50	30	0.39	JF	2.5	6.5	7.2	5.0	12	F611JF394(1)050(2)
50	30	0.47	JF	2.5	6.5	7.2	5.0	12	F611JF474(1)050(2)
50	30	0.56	JG	3.5	7.5	7.2	5.0	12	F611JG564(1)050(2)
50	30	0.68	JG	3.5	7.5	7.2	5.0	12	F611JG684(1)050(2)
50	30	0.82	JG	3.5	7.5	7.2	5.0	12	F611JG824(1)050(2)
50	30	1	JG	3.5	7.5	7.2	5.0	12	F611JG105(1)050(2)
50	30	1.2	JM	4.5	9.5	7.2	5.0	12	F611JM125(1)050(2)
50	30	1.5	JM	4.5	9.5	7.2	5.0	12	F611JM155(1)050(2)
50	30	1.8	JQ	5	10	7.2	5.0	12	F611JQ185(1)050(2)
50	30	2.2	JQ	5	10	7.2	5.0	12	F611JQ225(1)050(2)
50	30	2.7	JT	6	11	7.2	5.0	12	F611JT275(1)050(2)
50	30	3.3	JT	6	11	7.2	5.0	12	F611JT335(1)050(2)
50	30	3.9	JU	7.2	13	7.2	5.0	12	F611JU395(1)050(2)
50	30	4.7	JU	7.2	13	7.2	5.0	12	F611JU475(1)050(2)
50	30	5.6	JU	7.2	13	7.2	5.0	12	F611JU565(1)050(2)
50	30	6	JU	7.2	13	7.2	5.0	12	F611JU605(1)050(2)
50	30	0.68	KF	3	8	10	7.5	100	F612KF684(1)050(2)
50	30	0.82	KF	3	8	10	7.5	100	F612KF824(1)050(2)
50	30	1	KF	3	8	10	7.5	100	F612KF105(1)050(2)
50	30	1.2	KH	4	9	10	7.5	100	F612KH125(1)050(2)
50	30	1.5	KH	4	9	10	7.5	100	F612KH155(1)050(2)
50	30	1.8	KJ	5	10.5	10	7.5	100	F612KJ185(1)050(2)
50	30	2.2	KJ	5	10.5	10	7.5	100	F612KJ225(1)050(2)
50	30	2.7	KJ	5	10.5	10	7.5	100	F612KJ275(1)050(2)
50	30	3.3	KJ	5	10.5	10	7.5	100	F612KJ335(1)050(2)
50	30	3.9	KM	6	12	10.5	7.5	100	F612KM395(1)050(2)
50	30	4.7	KM	6	12	10.5	7.5	100	F612KM475(1)050(2)
50	30	1.2	AG	4	9	13	10.0	30	F612AG125(1)050(2)
50	30	1.5	AG	4	9	13	10.0	30	F612AG155(1)050(2)
50	30	1.8	AG	4	9	13	10.0	30	F612AG185(1)050(2)
50	30	2.2	AG	4	9	13	10.0	30	F612AG225(1)050(2)
50	30	2.7	AK	5	11	13	10.0	30	F612AK275(1)050(2)
50	30	3.3	AK	5	11	13	10.0	30	F612AK335(1)050(2)
50	30	3.9	AK	5	11	13	10.0	30	F612AK395(1)050(2)
50	30	4.7	AP	6	12	13	10.0	30	F612AP475(1)050(2)
50	30	5.6	AP	6	12	13	10.0	30	F612AP565(1)050(2)
50	30	1.8	BB	4	10	18	15.0	3	F611BB185(1)050(2)
50	30	2.2	BC	5	11	18	15.0	3	F611BC225(1)050(2)
50	30	2.7	BC	5	11	18	15.0	3	F611BC275(1)050(2)
50	30	3.3	BE	5.5	12.5	18	15.0	3	F611BE335(1)050(2)
50	30	3.9	BE	5.5	12.5	18	15.0	3	F611BE395(1)050(2)
50	30	4.7	BK	7.5	13.5	18	15.0	3	F611BK475(1)050(2)
50	30	5.6	BK	7.5	13.5	18	15.0	3	F611BK565(1)050(2)
50	30	6.8	BP	8.5	14.5	18	15.0	3	F611BP685(1)050(2)
50	30	8.2	BP	8.5	14.5	18	15.0	3	F611BP825(1)050(2)
50	30	10	BS	10	16	18	15.0	3	F611BS106(1)050(2)
50	30	12	BY	11	19	18	15.0	3	F611BY126(1)050(2)
50	30	15	BY	11	19	18	15.0	3	F611BY156(1)050(2)
63	40	0.1	JF	2.5	6.5	7.2	5.0	160	F612JF104(1)063(2)
63	40	0.12	JF	2.5	6.5	7.2	5.0	160	F612JF124(1)063(2)
63	40	0.15	JF	2.5	6.5	7.2	5.0	160	F612JF154(1)063(2)
63	40	0.18	JF	2.5	6.5	7.2	5.0	160	F612JF184(1)063(2)
63	40	0.22	JF	2.5	6.5	7.2	5.0	160	F612JF224(1)063(2)
63	40	0.27	JG	3.5	7.5	7.2	5.0	160	F612JG274(1)063(2)
63	40	0.33	JG	3.5	7.5	7.2	5.0	160	F612JG334(1)063(2)
63	40	0.39	JG	3.5	7.5	7.2	5.0	160	F612JG394(1)063(2)
63	40	0.47	JG	3.5	7.5	7.2	5.0	160	F612JG474(1)063(2)
63	40	0.56	JM	4.5	9.5	7.2	5.0	160	F612JM564(1)063(2)
VDC	VAC	Capacitance Value (µF)	Size Code	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/µs)	Part Number

(1) K= ±10%, M = ±20%, J = ±5% on request.

(2) Insert lead and packaging code. See table for available options.

Roll Over for Order Info.

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Capacitance Value (µF)	Size Code	Maximum Dimensions in mm			Lead Spacing (p)	dV/dt (V/µs)	Part Number
				B	H	L			
63	40	0.68	JM	4.5	9.5	7.2	5.0	160	F612JM684(1)063(2)
63	40	0.82	JM	4.5	9.5	7.2	5.0	160	F612JM824(1)063(2)
63	40	1	JQ	5	10	7.2	5.0	160	F612JQ105(1)063(2)
63	40	1.2	JT	6	11	7.2	5.0	160	F612JT125(1)063(2)
63	40	1.5	JT	6	11	7.2	5.0	160	F612JT155(1)063(2)
63	40	0.33	KF	3	8	10	7.5	120	F612KF334(1)063(2)
63	40	0.39	KF	3	8	10	7.5	120	F612KF394(1)063(2)
63	40	0.47	KF	3	8	10	7.5	120	F612KF474(1)063(2)
63	40	0.56	KH	4	9	10	7.5	120	F612KH564(1)063(2)
63	40	0.68	KH	4	9	10	7.5	120	F612KH684(1)063(2)
63	40	0.82	KH	4	9	10	7.5	120	F612KH824(1)063(2)
63	40	1	KH	4	9	10	7.5	120	F612KH105(1)063(2)
63	40	1.2	KJ	5	10.5	10	7.5	120	F612KJ125(1)063(2)
63	40	1.5	KJ	5	10.5	10	7.5	120	F612KJ155(1)063(2)
63	40	1.8	KM	6	12	10.5	7.5	120	F612KM185(1)063(2)
63	40	2.2	KM	6	12	10.5	7.5	120	F612KM225(1)063(2)
63	40	2.7	KM	6	12	10.5	7.5	120	F612KM275(1)063(2)
63	40	3.3	KM	6	12	10.5	7.5	120	F612KM335(1)063(2)
63	40	1	AG	4	9	13	10.0	50	F612AG105(1)063(2)
63	40	1.2	AG	4	9	13	10.0	50	F612AG125(1)063(2)
63	40	1.5	AK	5	11	13	10.0	50	F612AK155(1)063(2)
63	40	1.8	AK	5	11	13	10.0	50	F612AK185(1)063(2)
63	40	2.2	AK	5	11	13	10.0	50	F612AK225(1)063(2)
63	40	2.7	AK	5	11	13	10.0	50	F612AK275(1)063(2)
63	40	3.3	AP	6	12	13	10.0	50	F612AP335(1)063(2)
63	40	3.9	AP	6	12	13	10.0	50	F612AP395(1)063(2)
63	40	1.2	BB	4	10	18	15.0	5	F611BB125(1)063(2)
63	40	1.5	BB	4	10	18	15.0	5	F611BB155(1)063(2)
63	40	1.8	BC	5	11	18	15.0	5	F611BC185(1)063(2)
63	40	2.2	BE	5.5	12.5	18	15.0	5	F611BE225(1)063(2)
63	40	2.7	BE	5.5	12.5	18	15.0	5	F611BE275(1)063(2)
63	40	3.3	BG	6	12	18	15.0	5	F611BG335(1)063(2)
63	40	3.9	BK	7.5	13.5	18	15.0	5	F611BK395(1)063(2)
63	40	4.7	BK	7.5	13.5	18	15.0	5	F611BK475(1)063(2)
63	40	5.6	BP	8.5	14.5	18	15.0	5	F611BP565(1)063(2)
63	40	6.8	BP	8.5	14.5	18	15.0	5	F611BP685(1)063(2)
63	40	8.2	BS	10	16	18	15.0	5	F611BS825(1)063(2)
63	40	10	BS	10	16	18	15.0	5	F611BS106(1)063(2)
63	40	12	BY	11	19	18	15.0	5	F611BY126(1)063(2)
63	40	4.7	DB	6	14.5	26	22.5	3	F611DB475(1)063(2)
63	40	5.6	DB	6	14.5	26	22.5	3	F611DB565(1)063(2)
63	40	6.8	DI	7	16	26	22.5	3	F611DI685(1)063(2)
63	40	8.2	DI	7	16	26	22.5	3	F611DI825(1)063(2)
63	40	10	DJ	8.5	17	26	22.5	3	F611DJ106(1)063(2)
63	40	12	DM	9	18.5	26	22.5	3	F611DM126(1)063(2)
63	40	15	DO	10	18.5	26	22.5	3	F611DO156(1)063(2)
63	40	18	DP	11	20	26	22.5	3	F611DP186(1)063(2)
63	40	22	DU	13	22	26	22.5	3	F611DU226(1)063(2)
63	40	27	DY	15.5	24.5	26	22.5	3	F611DY276(1)063(2)
63	40	33	DY	15.5	24.5	26	22.5	3	F611DY336(1)063(2)
63	40	15	FB	9	17	31.5	27.5	2	F611FB156(1)063(2)
63	40	18	FC	11	20	31.5	27.5	2	F611FC186(1)063(2)
63	40	22	FC	11	20	31.5	27.5	2	F611FC226(1)063(2)
63	40	27	FI	13	25	31.5	27.5	2	F611FI276(1)063(2)
63	40	33	FI	13	25	31.5	27.5	2	F611FI336(1)063(2)
63	40	39	FN	14	28	31.5	27.5	2	F611FN396(1)063(2)
63	40	47	FR	17.5	28	31.5	27.5	2	F611FR476(1)063(2)
63	40	56	FS	19	29	31.5	27.5	2	F611FS566(1)063(2)
63	40	68	FY	22	37	31.5	27.5	2	F611FY686(1)063(2)
63	40	82	FY	22	37	31.5	27.5	2	F611FY826(1)063(2)
VDC	VAC	Capacitance Value (µF)	Size Code	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/µs)	Part Number

(1) K= ±10%, M = ±20%, J = ±5% on request.

(2) Insert lead and packaging code. See table for available options.

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Capacitance Value (µF)	Size Code	Maximum Dimensions in mm			Lead Spacing (p)	dV/dt (V/µs)	Part Number
				B	H	L			
63	40	100	FY	22	37	31.5	27.5	2	F611FY107(1)063(2)
63	40	33	RB	11	22	41	37.5	1	F611RB336(1)063(2)
63	40	39	RF	13	24	41	37.5	1	F611RF396(1)063(2)
63	40	47	RF	13	24	41	37.5	1	F611RF476(1)063(2)
63	40	56	RH	15	26	41	37.5	1	F611RH566(1)063(2)
63	40	68	RC	16	28.5	41	37.5	1	F611RC686(1)063(2)
63	40	82	RD	19	32	41	37.5	1	F611RD826(1)063(2)
63	40	100	RD	19	32	41	37.5	1	F611RD107(1)063(2)
63	40	120	RP	21	38	41	37.5	1	F611RP127(1)063(2)
63	40	150	RP	21	38	41	37.5	1	F611RP157(1)063(2)
63	40	180	RO	24	44	41	37.5	1	F611RO187(1)063(2)
63	40	220	RU	30	45	41	37.5	1	F611RU227(1)063(2)
63	40	270	RU	30	45	41	37.5	1	F611RU277(1)063(2)
100	63	0.001	JF	2.5	6.5	7.2	5.0	200	F612JF102(1)100(2)
100	63	0.0012	JF	2.5	6.5	7.2	5.0	200	F612JF122(1)100(2)
100	63	0.0015	JF	2.5	6.5	7.2	5.0	200	F612JF152(1)100(2)
100	63	0.0018	JF	2.5	6.5	7.2	5.0	200	F612JF182(1)100(2)
100	63	0.0022	JF	2.5	6.5	7.2	5.0	200	F612JF222(1)100(2)
100	63	0.0027	JF	2.5	6.5	7.2	5.0	200	F612JF272(1)100(2)
100	63	0.0033	JF	2.5	6.5	7.2	5.0	200	F612JF332(1)100(2)
100	63	0.0039	JF	2.5	6.5	7.2	5.0	200	F612JF392(1)100(2)
100	63	0.0047	JF	2.5	6.5	7.2	5.0	200	F612JF472(1)100(2)
100	63	0.0056	JF	2.5	6.5	7.2	5.0	200	F612JF562(1)100(2)
100	63	0.0068	JF	2.5	6.5	7.2	5.0	200	F612JF682(1)100(2)
100	63	0.0082	JF	2.5	6.5	7.2	5.0	200	F612JF822(1)100(2)
100	63	0.01	JF	2.5	6.5	7.2	5.0	200	F612JF103(1)100(2)
100	63	0.012	JF	2.5	6.5	7.2	5.0	200	F612JF123(1)100(2)
100	63	0.015	JF	2.5	6.5	7.2	5.0	200	F612JF153(1)100(2)
100	63	0.018	JF	2.5	6.5	7.2	5.0	200	F612JF183(1)100(2)
100	63	0.022	JF	2.5	6.5	7.2	5.0	200	F612JF223(1)100(2)
100	63	0.027	JF	2.5	6.5	7.2	5.0	200	F612JF273(1)100(2)
100	63	0.033	JF	2.5	6.5	7.2	5.0	200	F612JF333(1)100(2)
100	63	0.039	JF	2.5	6.5	7.2	5.0	200	F612JF393(1)100(2)
100	63	0.047	JF	2.5	6.5	7.2	5.0	200	F612JF473(1)100(2)
100	63	0.056	JF	2.5	6.5	7.2	5.0	200	F612JF563(1)100(2)
100	63	0.068	JF	2.5	6.5	7.2	5.0	200	F612JF683(1)100(2)
100	63	0.082	JF	2.5	6.5	7.2	5.0	200	F612JF823(1)100(2)
100	63	0.1	JF	2.5	6.5	7.2	5.0	200	F612JF104(1)100(2)
100	63	0.12	JF	2.5	6.5	7.2	5.0	200	F612JF124(1)100(2)
100	63	0.15	JG	3.5	7.5	7.2	5.0	200	F612JG154(1)100(2)
100	63	0.18	JG	3.5	7.5	7.2	5.0	200	F612JG184(1)100(2)
100	63	0.22	JG	3.5	7.5	7.2	5.0	200	F612JG224(1)100(2)
100	63	0.27	JG	3.5	7.5	7.2	5.0	200	F612JG274(1)100(2)
100	63	0.33	JM	4.5	9.5	7.2	5.0	200	F612JM334(1)100(2)
100	63	0.39	JM	4.5	9.5	7.2	5.0	200	F612JM394(1)100(2)
100	63	0.47	JM	4.5	9.5	7.2	5.0	200	F612JM474(1)100(2)
100	63	0.56	JQ	5	10	7.2	5.0	200	F612JQ564(1)100(2)
100	63	0.68	JQ	5	10	7.2	5.0	200	F612JQ684(1)100(2)
100	63	0.82	JT	6	11	7.2	5.0	200	F612JT824(1)100(2)
100	63	1	JT	6	11	7.2	5.0	200	F612JT105(1)100(2)
100	63	0.068	KF	3	8	10	7.5	150	F612KF683(1)100(2)
100	63	0.082	KF	3	8	10	7.5	150	F612KF823(1)100(2)
100	63	0.1	KF	3	8	10	7.5	150	F612KF104(1)100(2)
100	63	0.12	KF	3	8	10	7.5	150	F612KF124(1)100(2)
100	63	0.15	KF	3	8	10	7.5	150	F612KF154(1)100(2)
100	63	0.18	KF	3	8	10	7.5	150	F612KF184(1)100(2)
100	63	0.22	KF	3	8	10	7.5	150	F612KF224(1)100(2)
100	63	0.27	KH	4	9	10	7.5	150	F612KH274(1)100(2)
100	63	0.33	KH	4	9	10	7.5	150	F612KH334(1)100(2)
100	63	0.39	KH	4	9	10	7.5	150	F612KH394(1)100(2)
VDC	VAC	Capacitance Value (µF)	Size Code	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/µs)	Part Number

(1) K= ±10%, M = ±20%, J = ±5% on request.

(2) Insert lead and packaging code. See table for available options.

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Capacitance Value (µF)	Size Code	Maximum Dimensions in mm			Lead Spacing (p)	dV/dt (V/µs)	Part Number
				B	H	L			
100	63	0.47	KH	4	9	10	7.5	150	F612KH474(1)100(2)
100	63	0.56	KH	4	9	10	7.5	150	F612KH564(1)100(2)
100	63	0.68	KH	4	9	10	7.5	150	F612KH684(1)100(2)
100	63	0.82	KJ	5	10.5	10	7.5	150	F612KJ824(1)100(2)
100	63	1	KJ	5	10.5	10	7.5	150	F612KJ105(1)100(2)
100	63	1.5	KM	6	12	10.5	7.5	150	F612KM155(1)100(2)
100	63	1.8	KM	6	12	10.5	7.5	150	F612KM185(1)100(2)
100	63	0.33	AG	4	9	13	10.0	75	F612AG334(1)100(2)
100	63	0.39	AG	4	9	13	10.0	75	F612AG394(1)100(2)
100	63	0.47	AG	4	9	13	10.0	75	F612AG474(1)100(2)
100	63	0.56	AG	4	9	13	10.0	75	F612AG564(1)100(2)
100	63	0.68	AG	4	9	13	10.0	75	F612AG684(1)100(2)
100	63	0.82	AG	4	9	13	10.0	75	F612AG824(1)100(2)
100	63	1	AK	5	11	13	10.0	75	F612AK105(1)100(2)
100	63	1.2	AK	5	11	13	10.0	75	F612AK125(1)100(2)
100	63	1.5	AK	5	11	13	10.0	75	F612AK155(1)100(2)
100	63	1.8	AP	6	12	13	10.0	75	F612AP185(1)100(2)
100	63	0.56	BB	4	10	18	15.0	8	F611BB564(1)100(2)
100	63	0.68	BB	4	10	18	15.0	8	F611BB684(1)100(2)
100	63	0.82	BB	4	10	18	15.0	8	F611BB824(1)100(2)
100	63	1	BB	4	10	18	15.0	8	F611BB105(1)100(2)
100	63	1.2	BC	5	11	18	15.0	8	F611BC125(1)100(2)
100	63	1.5	BC	5	11	18	15.0	8	F611BC155(1)100(2)
100	63	1.8	BE	5.5	12.5	18	15.0	8	F611BE185(1)100(2)
100	63	2.2	BG	6	12	18	15.0	8	F611BG225(1)100(2)
100	63	2.7	BK	7.5	13.5	18	15.0	8	F611BK275(1)100(2)
100	63	3.3	BK	7.5	13.5	18	15.0	8	F611BK335(1)100(2)
100	63	3.9	BP	8.5	14.5	18	15.0	8	F611BP395(1)100(2)
100	63	4.7	BP	8.5	14.5	18	15.0	8	F611BP475(1)100(2)
100	63	5.6	BS	10	16	18	15.0	8	F611BS565(1)100(2)
100	63	6.8	BY	11	19	18	15.0	8	F611BY685(1)100(2)
100	63	8.2	BY	11	19	18	15.0	8	F611BY825(1)100(2)
100	63	2.2	DB	6	14.5	26	22.5	5	F611DB225(1)100(2)
100	63	2.7	DB	6	14.5	26	22.5	5	F611DB275(1)100(2)
100	63	3.3	DB	6	14.5	26	22.5	5	F611DB335(1)100(2)
100	63	3.9	DB	6	14.5	26	22.5	5	F611DB395(1)100(2)
100	63	4.7	DI	7	16	26	22.5	5	F611DI475(1)100(2)
100	63	5.6	DI	7	16	26	22.5	5	F611DI565(1)100(2)
100	63	6.8	DH	8	16	26	22.5	5	F611DH685(1)100(2)
100	63	8.2	DJ	8.5	17	26	22.5	5	F611DJ825(1)100(2)
100	63	10	DM	9	18.5	26	22.5	5	F611DM106(1)100(2)
100	63	12	DO	10	18.5	26	22.5	5	F611DO126(1)100(2)
100	63	15	DP	11	20	26	22.5	5	F611DP156(1)100(2)
100	63	18	DU	13	22	26	22.5	5	F611DU186(1)100(2)
100	63	22	DY	15.5	24.5	26	22.5	5	F611DY226(1)100(2)
100	63	27	DY	15.5	24.5	26	22.5	5	F611DY276(1)100(2)
100	63	10	FB	9	17	31.5	27.5	3	F611FB106(1)100(2)
100	63	10	FB	9	17	31.5	27.5	3	F611FB126(1)100(2)
100	63	15	FC	11	20	31.5	27.5	3	F611FC156(1)100(2)
100	63	18	FC	11	20	31.5	27.5	3	F611FC186(1)100(2)
100	63	22	FI	13	25	31.5	27.5	3	F611FI226(1)100(2)
100	63	27	FI	13	25	31.5	27.5	3	F611FI276(1)100(2)
100	63	33	FN	14	28	31.5	27.5	3	F611FN336(1)100(2)
100	63	39	FR	17.5	28	31.5	27.5	3	F611FR396(1)100(2)
100	63	47	FS	19	29	31.5	27.5	3	F611FS476(1)100(2)
100	63	56	FY	22	37	31.5	27.5	3	F611FY566(1)100(2)
100	63	68	FY	22	37	31.5	27.5	3	F611FY686(1)100(2)
100	63	82	FY	22	37	31.5	27.5	3	F611FY826(1)100(2)
100	63	22	RB	11	22	41	37.5	2	F611RB226(1)100(2)
100	63	27	RB	11	22	41	37.5	2	F611RB276(1)100(2)
VDC	VAC	Capacitance Value (µF)	Size Code	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/µs)	Part Number

(1) K= ±10%, M = ±20%, J = ±5% on request.

(2) Insert lead and packaging code. See table for available options.

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Capacitance Value (µF)	Size Code	Maximum Dimensions in mm			Lead Spacing (p)	dV/dt (V/µs)	Part Number
				B	H	L			
100	63	33	RF	13	24	41	37.5	2	F611RF336(1)100(2)
100	63	39	RH	15	26	41	37.5	2	F611RH396(1)100(2)
100	63	47	RH	15	26	41	37.5	2	F611RH476(1)100(2)
100	63	56	RC	16	28.5	41	37.5	2	F611RC566(1)100(2)
100	63	68	RD	19	32	41	37.5	2	F611RD686(1)100(2)
100	63	82	RP	21	38	41	37.5	2	F611RP826(1)100(2)
100	63	100	RP	21	38	41	37.5	2	F611RP107(1)100(2)
100	63	120	RO	24	44	41	37.5	2	F611RO127(1)100(2)
100	63	150	RO	24	44	41	37.5	2	F611RO157(1)100(2)
100	63	180	RU	30	45	41	37.5	2	F611RU187(1)100(2)
100	63	220	RU	30	45	41	37.5	2	F611RU227(1)100(2)
160	90	0.18	AG	4	9	13	10.0	100	F612AG184(1)160(2)
160	90	0.22	AG	4	9	13	10.0	100	F612AG224(1)160(2)
160	90	0.27	AG	4	9	13	10.0	100	F612AG274(1)160(2)
160	90	0.33	AG	4	9	13	10.0	100	F612AG334(1)160(2)
160	90	0.39	AK	5	11	13	10.0	100	F612AK394(1)160(2)
160	90	0.47	AK	5	11	13	10.0	100	F612AK474(1)160(2)
160	90	0.56	AK	5	11	13	10.0	100	F612AK564(1)160(2)
160	90	0.68	AP	6	12	13	10.0	100	F612AP684(1)160(2)
160	90	0.82	AP	6	12	13	10.0	100	F612AP824(1)160(2)
160	90	0.33	BB	4	10	18	15.0	10	F611BB334(1)160(2)
160	90	0.39	BB	4	10	18	15.0	10	F611BB394(1)160(2)
160	90	0.47	BC	5	11	18	15.0	10	F611BC474(1)160(2)
160	90	0.56	BC	5	11	18	15.0	10	F611BC564(1)160(2)
160	90	0.68	BC	5	11	18	15.0	10	F611BC684(1)160(2)
160	90	0.82	BE	5.5	12.5	18	15.0	10	F611BE824(1)160(2)
160	90	1	BG	6	12	18	15.0	10	F611BG105(1)160(2)
160	90	1.2	BK	7.5	13.5	18	15.0	10	F611BK125(1)160(2)
160	90	1.5	BK	7.5	13.5	18	15.0	10	F611BK155(1)160(2)
160	90	1.8	BP	8.5	14.5	18	15.0	10	F611BP185(1)160(2)
160	90	2.2	BS	10	16	18	15.0	10	F611BS225(1)160(2)
160	90	2.7	BY	11	19	18	15.0	10	F611BY275(1)160(2)
160	90	3.3	BY	11	19	18	15.0	10	F611BY335(1)160(2)
160	90	3.9	BY	11	19	18	15.0	10	F611BY395(1)160(2)
160	90	1.2	DB	6	14.5	26	22.5	6	F611DB125(1)160(2)
160	90	1.5	DB	6	14.5	26	22.5	6	F611DB155(1)160(2)
160	90	1.8	DB	6	14.5	26	22.5	6	F611DB185(1)160(2)
160	90	2.2	DI	7	16	26	22.5	6	F611DI225(1)160(2)
160	90	2.7	DI	7	16	26	22.5	6	F611DI275(1)160(2)
160	90	3.3	DJ	8.5	17	26	22.5	6	F611DJ335(1)160(2)
160	90	3.9	DM	9	18.5	26	22.5	6	F611DM395(1)160(2)
160	90	4.7	DO	10	18.5	26	22.5	6	F611DO475(1)160(2)
160	90	5.6	DP	11	20	26	22.5	6	F611DP565(1)160(2)
160	90	6.8	DU	13	22	26	22.5	6	F611DU685(1)160(2)
160	90	8.2	DU	13	22	26	22.5	6	F611DU825(1)160(2)
160	90	10	DY	15.5	24.5	26	22.5	6	F611DY106(1)160(2)
160	90	12	DY	15.5	24.5	26	22.5	6	F611DY126(1)160(2)
160	90	5.6	FB	9	17	31.5	27.5	4	F611FB565(1)160(2)
160	90	6.8	FB	9	17	31.5	27.5	4	F611FB685(1)160(2)
160	90	8.2	FB	9	17	31.5	27.5	4	F611FB825(1)160(2)
160	90	10	FC	11	20	31.5	27.5	4	F611FC106(1)160(2)
160	90	12	FC	11	20	31.5	27.5	4	F611FC126(1)160(2)
160	90	15	FI	13	25	31.5	27.5	4	F611FI156(1)160(2)
160	90	18	FI	13	25	31.5	27.5	4	F611FI186(1)160(2)
160	90	22	FN	14	28	31.5	27.5	4	F611FN226(1)160(2)
160	90	27	FR	17.5	28	31.5	27.5	4	F611FR276(1)160(2)
160	90	33	FS	19	29	31.5	27.5	4	F611FS336(1)160(2)
160	90	39	FY	22	37	31.5	27.5	4	F611FY396(1)160(2)
160	90	47	FY	22	37	31.5	27.5	4	F611FY476(1)160(2)
160	90	56	FY	22	37	31.5	27.5	4	F611FY566(1)160(2)
VDC	VAC	Capacitance Value (µF)	Size Code	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/µs)	Part Number

(1) K= ±10%, M = ±20%, J = ±5% on request.

(2) Insert lead and packaging code. See table for available options.

Roll Over for Order Info.

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Capacitance Value (µF)	Size Code	Maximum Dimensions in mm			Lead Spacing (p)	dV/dt (V/µs)	Part Number
				B	H	L			
160	90	15	RB	11	22	41	37.5	3	F611RB156(1)160(2)
160	90	18	RB	11	22	41	37.5	3	F611RB186(1)160(2)
160	90	22	RF	13	24	41	37.5	3	F611RF226(1)160(2)
160	90	27	RH	15	26	41	37.5	3	F611RH276(1)160(2)
160	90	33	RH	15	26	41	37.5	3	F611RH336(1)160(2)
160	90	39	RC	16	28.5	41	37.5	3	F611RC396(1)160(2)
160	90	47	RD	19	32	41	37.5	3	F611RD476(1)160(2)
160	90	56	RP	21	38	41	37.5	3	F611RP566(1)160(2)
160	90	68	RP	21	38	41	37.5	3	F611RP686(1)160(2)
160	90	82	RO	24	44	41	37.5	3	F611RO826(1)160(2)
160	90	100	RO	24	44	41	37.5	3	F611RO107(1)160(2)
160	90	120	RU	30	45	41	37.5	3	F611RU127(1)160(2)
160	90	150	RU	30	45	41	37.5	3	F611RU157(1)160(2)
250	160	0.0068	JF	2.5	6.5	7.2	5.0	250	F612JF682(1)250(2)
250	160	0.0082	JF	2.5	6.5	7.2	5.0	250	F612JF822(1)250(2)
250	160	0.01	JF	2.5	6.5	7.2	5.0	250	F612JF103(1)250(2)
250	160	0.012	JF	2.5	6.5	7.2	5.0	250	F612JF123(1)250(2)
250	160	0.015	JF	2.5	6.5	7.2	5.0	250	F612JF153(1)250(2)
250	160	0.018	JF	2.5	6.5	7.2	5.0	250	F612JF183(1)250(2)
250	160	0.022	JG	3.5	7.5	7.2	5.0	250	F612JG223(1)250(2)
250	160	0.027	JG	3.5	7.5	7.2	5.0	250	F612JG273(1)250(2)
250	160	0.033	JG	3.5	7.5	7.2	5.0	250	F612JG333(1)250(2)
250	160	0.039	JG	3.5	7.5	7.2	5.0	250	F612JG393(1)250(2)
250	160	0.047	JM	4.5	9.5	7.2	5.0	250	F612JM473(1)250(2)
250	160	0.056	JM	4.5	9.5	7.2	5.0	250	F612JM563(1)250(2)
250	160	0.068	JM	4.5	9.5	7.2	5.0	250	F612JM683(1)250(2)
250	160	0.082	JQ	5	10	7.2	5.0	250	F612JQ823(1)250(2)
250	160	0.1	JQ	5	10	7.2	5.0	250	F612JQ104(1)250(2)
250	160	0.12	JT	6	11	7.2	5.0	250	F612JT124(1)250(2)
250	160	0.15	JT	6	11	7.2	5.0	250	F612JT154(1)250(2)
250	140	0.022	JF	2.5	6.5	7.2	5.0	130	F612JF223(1)250(2)
250	140	0.027	JF	2.5	6.5	7.2	5.0	130	F612JF273(1)250(2)
250	140	0.047	JG	3.5	7.5	7.2	5.0	130	F612JG473(1)250(2)
250	140	0.056	JG	3.5	7.5	7.2	5.0	130	F612JG563(1)250(2)
250	140	0.068	JG	3.5	7.5	7.2	5.0	130	F612JG683(1)250(2)
250	140	0.082	JM	4.5	9.5	7.2	5.0	130	F612JM823(1)250(2)
250	140	0.1	JM	4.5	9.5	7.2	5.0	130	F612JM104(1)250(2)
250	140	0.12	JM	4.5	9.5	7.2	5.0	130	F612JM124(1)250(2)
250	140	0.15	JQ	5	10	7.2	5.0	130	F612JQ154(1)250(2)
250	140	0.18	JT	6	11	7.2	5.0	130	F612JT184(1)250(2)
250	140	0.22	JT	6	11	7.2	5.0	130	F612JT224(1)250(2)
250	160	0.022	KF	3	8	10	7.5	200	F612KF223(1)250(2)
250	160	0.027	KF	3	8	10	7.5	200	F612KF273(1)250(2)
250	160	0.033	KF	3	8	10	7.5	200	F612KF333(1)250(2)
250	160	0.039	KF	3	8	10	7.5	200	F612KF393(1)250(2)
250	160	0.047	KF	3	8	10	7.5	200	F612KF473(1)250(2)
250	160	0.056	KF	3	8	10	7.5	200	F612KF563(1)250(2)
250	160	0.068	KF	3	8	10	7.5	200	F612KF683(1)250(2)
250	160	0.082	KH	4	9	10	7.5	200	F612KH823(1)250(2)
250	160	0.1	KH	4	9	10	7.5	200	F612KH104(1)250(2)
250	160	0.12	KH	4	9	10	7.5	200	F612KH124(1)250(2)
250	160	0.15	KH	4	9	10	7.5	200	F612KH154(1)250(2)
250	160	0.18	KJ	5	10.5	10	7.5	200	F612KJ184(1)250(2)
250	160	0.22	KJ	5	10.5	10	7.5	200	F612KJ224(1)250(2)
250	160	0.27	KM	6	12	10.5	7.5	200	F612KM274(1)250(2)
250	160	0.33	KM	6	12	10.5	7.5	200	F612KM334(1)250(2)
250	160	0.39	KM	6	12	10.5	7.5	200	F612KM394(1)250(2)
250	160	0.1	AG	4	9	13	10.0	20	F611AG104(1)250(2)
250	160	0.12	AG	4	9	13	10.0	20	F611AG124(1)250(2)
250	160	0.15	AG	4	9	13	10.0	20	F611AG154(1)250(2)
VDC	VAC	Capacitance Value (µF)	Size Code	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/µs)	Part Number

(1) K= ±10%, M = ±20%, J = ±5% on request.

(2) Insert lead and packaging code. See table for available options.

Roll Over for Order Info.

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Capacitance Value (µF)	Size Code	Maximum Dimensions in mm			Lead Spacing (p)	dV/dt (V/µs)	Part Number
				B	H	L			
250	160	0.18	AK	5	11	13	10.0	20	F611AK184(1)250(2)
250	160	0.22	AK	5	11	13	10.0	20	F611AK224(1)250(2)
250	160	0.27	AK	5	11	13	10.0	20	F611AK274(1)250(2)
250	160	0.33	AP	6	12	13	10.0	20	F611AP334(1)250(2)
250	160	0.39	AP	6	12	13	10.0	20	F611AP394(1)250(2)
250	160	0.47	AP	6	12	13	10.0	20	F611AP474(1)250(2)
250	160	0.18	BB	4	10	18	15.0	12	F611BB184(1)250(2)
250	160	0.22	BB	4	10	18	15.0	12	F611BB224(1)250(2)
250	160	0.27	BB	4	10	18	15.0	12	F611BB274(1)250(2)
250	160	0.33	BC	5	11	18	15.0	12	F611BC334(1)250(2)
250	160	0.39	BC	5	11	18	15.0	12	F611BC394(1)250(2)
250	160	0.47	BE	5.5	12.5	18	15.0	12	F611BE474(1)250(2)
250	160	0.56	BG	6	12	18	15.0	12	F611BG564(1)250(2)
250	160	0.68	BK	7.5	13.5	18	15.0	12	F611BK684(1)250(2)
250	160	0.82	BK	7.5	13.5	18	15.0	12	F611BK824(1)250(2)
250	160	1	BK	7.5	13.5	18	15.0	12	F611BK105(1)250(2)
250	160	1.2	BP	8.5	14.5	18	15.0	12	F611BP125(1)250(2)
250	160	1.5	BS	10	16	18	15.0	12	F611BS155(1)250(2)
250	160	1.8	BY	11	19	18	15.0	12	F611BY185(1)250(2)
250	160	2.2	BY	11	19	18	15.0	12	F611BY225(1)250(2)
250	160	0.82	DB	6	14.5	26	22.5	8	F611DB824(1)250(2)
250	160	1	DB	6	14.5	26	22.5	8	F611DB105(1)250(2)
250	160	1.2	DI	7	16	26	22.5	8	F611DI125(1)250(2)
250	160	1.5	DI	7	16	26	22.5	8	F611DI155(1)250(2)
250	160	1.8	DH	8	16	26	22.5	8	F611DH185(1)250(2)
250	160	2.2	DJ	8.5	17	26	22.5	8	F611DJ225(1)250(2)
250	160	2.7	DO	10	18.5	26	22.5	8	F611DO275(1)250(2)
250	160	3.3	DP	11	20	26	22.5	8	F611DP335(1)250(2)
250	160	3.9	DU	13	22	26	22.5	8	F611DU395(1)250(2)
250	160	4.7	DU	13	22	26	22.5	8	F611DU475(1)250(2)
250	160	5.6	DY	15.5	24.5	26	22.5	8	F611DY565(1)250(2)
250	160	6.8	DY	15.5	24.5	26	22.5	8	F611DY685(1)250(2)
250	160	2.2	FB	9	17	31.5	27.5	5	F611FB225(1)250(2)
250	160	2.7	FB	9	17	31.5	27.5	5	F611FB275(1)250(2)
250	160	3.3	FB	9	17	31.5	27.5	5	F611FB335(1)250(2)
250	160	3.9	FB	9	17	31.5	27.5	5	F611FB395(1)250(2)
250	160	4.7	FB	9	17	31.5	27.5	5	F611FB475(1)250(2)
250	160	5.6	FC	11	20	31.5	27.5	5	F611FC565(1)250(2)
250	160	6.8	FC	11	20	31.5	27.5	5	F611FC685(1)250(2)
250	160	8.2	FI	13	25	31.5	27.5	5	F611FI825(1)250(2)
250	160	10	FI	13	25	31.5	27.5	5	F611FI106(1)250(2)
250	160	12	FI	13	25	31.5	27.5	5	F611FI126(1)250(2)
250	160	15	FN	14	28	31.5	27.5	5	F611FN156(1)250(2)
250	160	18	FR	17.5	28	31.5	27.5	5	F611FR186(1)250(2)
250	160	22	FS	19	29	31.5	27.5	5	F611FS226(1)250(2)
250	160	27	FY	22	37	31.5	27.5	5	F611FY276(1)250(2)
250	160	33	FY	22	37	31.5	27.5	5	F611FY336(1)250(2)
250	160	39	FY	22	37	31.5	27.5	5	F611FY396(1)250(2)
250	160	5.6	RB	11	22	41	37.5	4	F611RB565(1)250(2)
250	160	6.8	RB	11	22	41	37.5	4	F611RB685(1)250(2)
250	160	8.2	RB	11	22	41	37.5	4	F611RB825(1)250(2)
250	160	10	RB	11	22	41	37.5	4	F611RB106(1)250(2)
250	160	12	RB	11	22	41	37.5	4	F611RB126(1)250(2)
250	160	15	RF	13	24	41	37.5	4	F611RF156(1)250(2)
250	160	18	RH	15	26	41	37.5	4	F611RH186(1)250(2)
250	160	22	RH	15	26	41	37.5	4	F611RH226(1)250(2)
250	160	27	RC	16	28.5	41	37.5	4	F611RC276(1)250(2)
250	160	33	RD	19	32	41	37.5	4	F611RD336(1)250(2)
250	160	39	RP	21	38	41	37.5	4	F611RP396(1)250(2)
250	160	47	RP	21	38	41	37.5	4	F611RP476(1)250(2)
VDC	VAC	Capacitance Value (µF)	Size Code	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/µs)	Part Number

(1) K= ±10%, M = ±20%, J = ±5% on request.

(2) Insert lead and packaging code. See table for available options.

Roll Over for Order Info.

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Capacitance Value (µF)	Size Code	Maximum Dimensions in mm			Lead Spacing (p)	dV/dt (V/µs)	Part Number
				B	H	L			
250	160	56	RO	24	44	41	37.5	4	F611RO566(1)250(2)
250	160	68	RO	24	44	41	37.5	4	F611RO686(1)250(2)
250	160	82	RU	30	45	41	37.5	4	F611RU826(1)250(2)
400	200	0.001	JF	2.5	6.5	7.2	5.0	400	F612JF102(1)400(2)
400	200	0.0012	JF	2.5	6.5	7.2	5.0	400	F612JF122(1)400(2)
400	200	0.0015	JF	2.5	6.5	7.2	5.0	400	F612JF152(1)400(2)
400	200	0.0018	JF	2.5	6.5	7.2	5.0	400	F612JF182(1)400(2)
400	200	0.0022	JF	2.5	6.5	7.2	5.0	400	F612JF222(1)400(2)
400	200	0.0027	JF	2.5	6.5	7.2	5.0	400	F612JF272(1)400(2)
400	200	0.0033	JF	2.5	6.5	7.2	5.0	400	F612JF332(1)400(2)
400	200	0.0039	JF	2.5	6.5	7.2	5.0	400	F612JF392(1)400(2)
400	200	0.0047	JF	2.5	6.5	7.2	5.0	400	F612JF472(1)400(2)
400	200	0.0056	JG	3.5	7.5	7.2	5.0	400	F612JG562(1)400(2)
400	200	0.0068	JG	3.5	7.5	7.2	5.0	400	F612JG682(1)400(2)
400	200	0.082	JG	3.5	7.5	7.2	5.0	400	F612JG823(1)400(2)
400	200	0.01	JG	3.5	7.5	7.2	5.0	400	F612JG103(1)400(2)
400	200	0.012	JG	3.5	7.5	7.2	5.0	400	F612JG123(1)400(2)
400	200	0.015	JM	4.5	9.5	7.2	5.0	400	F612JM153(1)400(2)
400	200	0.018	JM	4.5	9.5	7.2	5.0	400	F612JM183(1)400(2)
400	200	0.022	JM	4.5	9.5	7.2	5.0	400	F612JM223(1)400(2)
400	200	0.027	JQ	5	10	7.2	5.0	400	F612JQ273(1)400(2)
400	200	0.033	JQ	5	10	7.2	5.0	400	F612JQ333(1)400(2)
400	200	0.039	JT	6	11	7.2	5.0	400	F612JT393(1)400(2)
400	200	0.047	JT	6	11	7.2	5.0	400	F612JT473(1)400(2)
400	200	0.056	JT	6	11	7.2	5.0	400	F612JT563(1)400(2)
400	160	0.0068	JF	2.5	6.5	7.2	5.0	200	F612JF682(1)400(2)
400	160	0.0082	JF	2.5	6.5	7.2	5.0	200	F612JF822(1)400(2)
400	160	0.015	JG	3.5	7.5	7.2	5.0	200	F612JG153(1)400(2)
400	160	0.018	JG	3.5	7.5	7.2	5.0	200	F612JG183(1)400(2)
400	160	0.033	JM	4.5	9.5	7.2	5.0	200	F612JM333(1)400(2)
400	160	0.039	JM	4.5	9.5	7.2	5.0	200	F612JM393(1)400(2)
400	160	0.047	JQ	5	10	7.2	5.0	200	F612JQ473(1)400(2)
400	160	0.068	JT	6	11	7.2	5.0	200	F612JT683(1)400(2)
400	200	0.0068	KF	3	8	10	7.5	275	F612KF682(1)400(2)
400	200	0.0082	KF	3	8	10	7.5	275	F612KF822(1)400(2)
400	200	0.01	KF	3	8	10	7.5	275	F612KF103(1)400(2)
400	200	0.012	KF	3	8	10	7.5	275	F612KF123(1)400(2)
400	200	0.015	KF	3	8	10	7.5	275	F612KF153(1)400(2)
400	200	0.018	KF	3	8	10	7.5	275	F612KF183(1)400(2)
400	200	0.022	KF	3	8	10	7.5	275	F612KF223(1)400(2)
400	200	0.027	KF	3	8	10	7.5	275	F612KF273(1)400(2)
400	200	0.033	KH	4	9	10	7.5	275	F612KH333(1)400(2)
400	200	0.039	KH	4	9	10	7.5	275	F612KH393(1)400(2)
400	200	0.047	KH	4	9	10	7.5	275	F612KH473(1)400(2)
400	200	0.056	KH	4	9	10	7.5	275	F612KH563(1)400(2)
400	200	0.068	KJ	5	10.5	10	7.5	275	F612KJ683(1)400(2)
400	200	0.082	KJ	5	10.5	10	7.5	275	F612KJ823(1)400(2)
400	200	0.1	KM	6	12	10.5	7.5	275	F612KM104(1)400(2)
400	200	0.12	KM	6	12	10.5	7.5	275	F612KM124(1)400(2)
400	200	0.15	KM	6	12	10.5	7.5	275	F612KM154(1)400(2)
400	200	0.033	AG	4	9	13	10.0	30	F611AG333(1)400(2)
400	200	0.039	AG	4	9	13	10.0	30	F611AG393(1)400(2)
400	200	0.047	AG	4	9	13	10.0	30	F611AG473(1)400(2)
400	200	0.056	AG	4	9	13	10.0	30	F611AG563(1)400(2)
400	200	0.068	AG	4	9	13	10.0	30	F611AG683(1)400(2)
400	200	0.082	AG	4	9	13	10.0	30	F611AG823(1)400(2)
400	200	0.1	AK	5	11	13	10.0	30	F611AK104(1)400(2)
400	200	0.12	AK	5	11	13	10.0	30	F611AK124(1)400(2)
400	200	0.15	AK	5	11	13	10.0	30	F611AK154(1)400(2)
400	200	0.18	AP	6	12	13	10.0	30	F611AP184(1)400(2)
VDC	VAC	Capacitance Value (µF)	Size Code	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/µs)	Part Number

(1) K= ±10%, M = ±20%, J = ±5% on request.

(2) Insert lead and packaging code. See table for available options.

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Capacitance Value (µF)	Size Code	Maximum Dimensions in mm			Lead Spacing (p)	dV/dt (V/µs)	Part Number
				B	H	L			
400	200	0.22	AP	6	12	13	10.0	30	F611AP224(1)400(2)
400	200	0.056	BB	4	10	18	15.0	20	F611BB563(1)400(2)
400	200	0.068	BB	4	10	18	15.0	20	F611BB683(1)400(2)
400	200	0.082	BB	4	10	18	15.0	20	F611BB823(1)400(2)
400	200	0.1	BB	4	10	18	15.0	20	F611BB104(1)400(2)
400	200	0.12	BB	4	10	18	15.0	20	F611BB124(1)400(2)
400	200	0.15	BB	4	10	18	15.0	20	F611BB154(1)400(2)
400	200	0.18	BC	5	11	18	15.0	20	F611BC184(1)400(2)
400	200	0.22	BC	5	11	18	15.0	20	F611BC224(1)400(2)
400	200	0.27	BE	5.5	12.5	18	15.0	20	F611BE274(1)400(2)
400	200	0.33	BG	6	12	18	15.0	20	F611BG334(1)400(2)
400	200	0.39	BK	7.5	13.5	18	15.0	20	F611BK394(1)400(2)
400	200	0.47	BK	7.5	13.5	18	15.0	20	F611BK474(1)400(2)
400	200	0.56	BK	7.5	13.5	18	15.0	20	F611BK564(1)400(2)
400	200	0.68	BP	8.5	14.5	18	15.0	20	F611BP684(1)400(2)
400	200	0.82	BS	10	16	18	15.0	20	F611BS824(1)400(2)
400	200	1	BY	11	19	18	15.0	20	F611BY105(1)400(2)
400	200	1.2	BY	11	19	18	15.0	20	F611BY125(1)400(2)
400	200	1.5	BY	11	19	18	15.0	20	F611BY155(1)400(2)
400	200	0.27	DB	6	14.5	26	22.5	10	F611DB274(1)400(2)
400	200	0.33	DB	6	14.5	26	22.5	10	F611DB334(1)400(2)
400	200	0.39	DB	6	14.5	26	22.5	10	F611DB394(1)400(2)
400	200	0.47	DB	6	14.5	26	22.5	10	F611DB474(1)400(2)
400	200	0.56	DB	6	14.5	26	22.5	10	F611DB564(1)400(2)
400	200	0.68	DB	6	14.5	26	22.5	10	F611DB684(1)400(2)
400	200	0.82	DI	7	16	26	22.5	10	F611DI824(1)400(2)
400	200	1	DI	7	16	26	22.5	10	F611DI105(1)400(2)
400	200	1.2	DJ	8.5	17	26	22.5	10	F611DJ125(1)400(2)
400	200	1.5	DM	9	18.5	26	22.5	10	F611DM155(1)400(2)
400	200	1.8	DO	10	18.5	26	22.5	10	F611DO185(1)400(2)
400	200	2.2	DP	11	20	26	22.5	10	F611DP225(1)400(2)
400	200	2.7	DU	13	22	26	22.5	10	F611DU275(1)400(2)
400	200	3.3	DU	13	22	26	22.5	10	F611DU335(1)400(2)
400	200	3.9	DY	15.5	24.5	26	22.5	10	F611DY395(1)400(2)
400	200	4.7	DY	15.5	24.5	26	22.5	10	F611DY475(1)400(2)
400	200	0.82	FB	9	17	31.5	27.5	8.5	F611FB824(1)400(2)
400	200	1	FB	9	17	31.5	27.5	8.5	F611FB105(1)400(2)
400	200	1.2	FB	9	17	31.5	27.5	8.5	F611FB125(1)400(2)
400	200	1.5	FB	9	17	31.5	27.5	8.5	F611FB155(1)400(2)
400	200	1.8	FB	9	17	31.5	27.5	8.5	F611FB185(1)400(2)
400	200	2.2	FC	11	20	31.5	27.5	8.5	F611FC225(1)400(2)
400	200	2.7	FC	11	20	31.5	27.5	8.5	F611FC275(1)400(2)
400	200	3.3	FI	13	25	31.5	27.5	8.5	F611FI335(1)400(2)
400	200	3.9	FI	13	25	31.5	27.5	8.5	F611FI395(1)400(2)
400	200	4.7	FI	13	25	31.5	27.5	8.5	F611FI475(1)400(2)
400	200	5.6	FN	14	28	31.5	27.5	8.5	F611FN565(1)400(2)
400	200	6.8	FR	17.5	28	31.5	27.5	8.5	F611FR685(1)400(2)
400	200	8.2	FR	17.5	28	31.5	27.5	8.5	F611FR825(1)400(2)
400	200	10	FS	19	29	31.5	27.5	8.5	F611FS106(1)400(2)
400	200	12	FY	22	37	31.5	27.5	8.5	F611FY126(1)400(2)
400	200	15	FY	22	37	31.5	27.5	8.5	F611FY156(1)400(2)
400	200	2.2	RB	11	22	41	37.5	6	F611RB225(1)400(2)
400	200	2.7	RB	11	22	41	37.5	6	F611RB275(1)400(2)
400	200	3.3	RB	11	22	41	37.5	6	F611RB335(1)400(2)
400	200	3.9	RB	11	22	41	37.5	6	F611RB395(1)400(2)
400	200	4.7	RB	11	22	41	37.5	6	F611RB475(1)400(2)
400	200	5.6	RF	13	24	41	37.5	6	F611RF565(1)400(2)
400	200	6.8	RF	13	24	41	37.5	6	F611RF685(1)400(2)
400	200	8.2	RH	15	26	41	37.5	6	F611RH825(1)400(2)
400	200	10	RC	16	28.5	41	37.5	6	F611RC106(1)400(2)
VDC	VAC	Capacitance Value (µF)	Size Code	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/µs)	Part Number

(1) K= ±10%, M = ±20%, J = ±5% on request.

(2) Insert lead and packaging code. See table for available options.

Roll Over for Order Info.

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Capacitance Value (µF)	Size Code	Maximum Dimensions in mm			Lead Spacing (p)	dV/dt (V/µs)	Part Number
				B	H	L			
400	200	12	RD	19	32	41	37.5	6	F611RD126(1)400(2)
400	200	15	RP	21	38	41	37.5	6	F611RP156(1)400(2)
400	200	18	RP	21	38	41	37.5	6	F611RP186(1)400(2)
400	200	22	RO	24	44	41	37.5	6	F611RO226(1)400(2)
400	200	27	RO	24	44	41	37.5	6	F611RO276(1)400(2)
400	200	33	RU	30	45	41	37.5	6	F611RU336(1)400(2)
630	220	0.0012	JF	2.5	6.5	7.2	5.0	80	F611JF122(1)630(2)
630	220	0.0015	JF	2.5	6.5	7.2	5.0	80	F611JF152(1)630(2)
630	220	0.0018	JF	2.5	6.5	7.2	5.0	80	F611JF182(1)630(2)
630	220	0.0022	JF	2.5	6.5	7.2	5.0	80	F611JF222(1)630(2)
630	220	0.0027	JF	2.5	6.5	7.2	5.0	80	F611JF272(1)630(2)
630	220	0.0033	JF	2.5	6.5	7.2	5.0	80	F611JF332(1)630(2)
630	220	0.0039	JF	2.5	6.5	7.2	5.0	80	F611JF392(1)630(2)
630	220	0.0047	JG	3.5	7.5	7.2	5.0	80	F611JG472(1)630(2)
630	220	0.0056	JG	3.5	7.5	7.2	5.0	80	F611JG562(1)630(2)
630	220	0.0068	JG	3.5	7.5	7.2	5.0	80	F611JG682(1)630(2)
630	220	0.0082	JG	3.5	7.5	7.2	5.0	80	F611JG822(1)630(2)
630	220	0.01	JG	3.5	7.5	7.2	5.0	80	F611JG103(1)630(2)
630	220	0.012	JM	4.5	9.5	7.2	5.0	80	F611JM123(1)630(2)
630	220	0.015	JM	4.5	9.5	7.2	5.0	80	F611JM153(1)630(2)
630	220	0.018	JM	4.5	9.5	7.2	5.0	80	F611JM183(1)630(2)
630	220	0.022	JQ	5	10	7.2	5.0	80	F611JQ223(1)630(2)
630	220	0.027	JT	6	11	7.2	5.0	80	F611JT273(1)630(2)
630	220	0.033	JT	6	11	7.2	5.0	80	F611JT333(1)630(2)
630	220	0.039	JU	7.2	13	7.2	5.0	80	F611JU393(1)630(2)
630	220	0.047	JU	7.2	13	7.2	5.0	80	F611JU473(1)630(2)
630	220	0.0018	KE	2.5	6	10	7.5	60	F611KE182(1)630(2)
630	220	0.0022	KE	2.5	6	10	7.5	60	F611KE222(1)630(2)
630	220	0.0027	KE	2.5	6	10	7.5	60	F611KE272(1)630(2)
630	220	0.0033	KE	2.5	6	10	7.5	60	F611KE332(1)630(2)
630	220	0.0039	KE	2.5	6	10	7.5	60	F611KE392(1)630(2)
630	220	0.0047	KE	2.5	6	10	7.5	60	F611KE472(1)630(2)
630	220	0.0056	KF	3	8	10	7.5	60	F611KF562(1)630(2)
630	220	0.0068	KF	3	8	10	7.5	60	F611KF682(1)630(2)
630	220	0.0082	KF	3	8	10	7.5	60	F611KF822(1)630(2)
630	220	0.01	KF	3	8	10	7.5	60	F611KF103(1)630(2)
630	220	0.012	KG	4	8	10	7.5	60	F611KG123(1)630(2)
630	220	0.015	KG	4	8	10	7.5	60	F611KG153(1)630(2)
630	220	0.018	KG	4	8	10	7.5	60	F611KG183(1)630(2)
630	220	0.022	KJ	5	10.5	10	7.5	60	F611KJ223(1)630(2)
630	220	0.027	KJ	5	10.5	10	7.5	60	F611KJ273(1)630(2)
630	220	0.033	KJ	5	10.5	10	7.5	60	F611KJ333(1)630(2)
630	220	0.039	KJ	5	10.5	10	7.5	60	F611KJ393(1)630(2)
630	220	0.047	KM	6	12	10.5	7.5	60	F611KM473(1)630(2)
630	220	0.056	KM	6	12	10.5	7.5	60	F611KM563(1)630(2)
630	220	0.068	KM	6	12	10.5	7.5	60	F611KM683(1)630(2)
630	220	0.012	AG	4	9	13	10.0	40	F611AG123(1)630(2)
630	220	0.015	AG	4	9	13	10.0	40	F611AG153(1)630(2)
630	220	0.018	AG	4	9	13	10.0	40	F611AG183(1)630(2)
630	220	0.022	AG	4	9	13	10.0	40	F611AG223(1)630(2)
630	220	0.027	AG	4	9	13	10.0	40	F611AG273(1)630(2)
630	220	0.033	AK	5	11	13	10.0	40	F611AK333(1)630(2)
630	220	0.039	AK	5	11	13	10.0	40	F611AK393(1)630(2)
630	220	0.047	AK	5	11	13	10.0	40	F611AK473(1)630(2)
630	220	0.056	AP	6	12	13	10.0	40	F611AP563(1)630(2)
630	220	0.068	AP	6	12	13	10.0	40	F611AP683(1)630(2)
630	220	0.082	AP	6	12	13	10.0	40	F611AP823(1)630(2)
630	220	0.022	BB	4	10	18	15.0	25	F611BB223(1)630(2)
630	220	0.027	BB	4	10	18	15.0	25	F611BB273(1)630(2)
630	220	0.033	BB	4	10	18	15.0	25	F611BB333(1)630(2)
VDC	VAC	Capacitance Value (µF)	Size Code	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/µs)	Part Number

(1) K= ±10%, M = ±20%, J = ±5% on request.

(2) Insert lead and packaging code. See table for available options.

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Capacitance Value (µF)	Size Code	Maximum Dimensions in mm			Lead Spacing (p)	dV/dt (V/µs)	Part Number
				B	H	L			
630	220	0.039	BB	4	10	18	15.0	25	F611BB393(1)630(2)
630	220	0.047	BB	4	10	18	15.0	25	F611BB473(1)630(2)
630	220	0.056	BC	5	11	18	15.0	25	F611BC563(1)630(2)
630	220	0.068	BC	5	11	18	15.0	25	F611BC683(1)630(2)
630	220	0.082	BC	5	11	18	15.0	25	F611BC823(1)630(2)
630	220	0.1	BE	5.5	12.5	18	15.0	25	F611BE104(1)630(2)
630	220	0.12	BG	6	12	18	15.0	25	F611BG124(1)630(2)
630	220	0.15	BK	7.5	13.5	18	15.0	25	F611BK154(1)630(2)
630	220	0.18	BK	7.5	13.5	18	15.0	25	F611BK184(1)630(2)
630	220	0.22	BP	8.5	14.5	18	15.0	25	F611BP224(1)630(2)
630	220	0.27	BS	10	16	18	15.0	25	F611BS274(1)630(2)
630	220	0.33	BS	10	16	18	15.0	25	F611BS334(1)630(2)
630	220	0.39	BY	11	19	18	15.0	25	F611BY394(1)630(2)
630	220	0.47	BY	11	19	18	15.0	25	F611BY474(1)630(2)
630	220	0.12	DB	6	14.5	26	22.5	12	F611DB124(1)630(2)
630	220	0.15	DB	6	14.5	26	22.5	12	F611DB154(1)630(2)
630	220	0.18	DB	6	14.5	26	22.5	12	F611DB184(1)630(2)
630	220	0.22	DB	6	14.5	26	22.5	12	F611DB224(1)630(2)
630	220	0.27	DI	7	16	26	22.5	12	F611DI274(1)630(2)
630	220	0.33	DI	7	16	26	22.5	12	F611DI334(1)630(2)
630	220	0.39	DH	8	16	26	22.5	12	F611DH394(1)630(2)
630	220	0.47	DJ	8.5	17	26	22.5	12	F611DJ474(1)630(2)
630	220	0.56	DM	9	18.5	26	22.5	12	F611DM564(1)630(2)
630	220	0.68	DO	10	18.5	26	22.5	12	F611DO684(1)630(2)
630	220	0.82	DP	11	20	26	22.5	12	F611DP824(1)630(2)
630	220	1	DU	13	22	26	22.5	12	F611DU105(1)630(2)
630	220	1.2	DY	15.5	24.5	26	22.5	12	F611DY125(1)630(2)
630	220	1.5	DY	15.5	24.5	26	22.5	12	F611DY155(1)630(2)
630	220	0.33	FB	9	17	31.5	27.5	10	F611FB334(1)630(2)
630	220	0.39	FB	9	17	31.5	27.5	10	F611FB394(1)630(2)
630	220	0.47	FB	9	17	31.5	27.5	10	F611FB474(1)630(2)
630	220	0.56	FB	9	17	31.5	27.5	10	F611FB564(1)630(2)
630	220	0.68	FB	9	17	31.5	27.5	10	F611FB684(1)630(2)
630	220	0.82	FC	11	20	31.5	27.5	10	F611FC824(1)630(2)
630	220	1	FC	11	20	31.5	27.5	10	F611FC105(1)630(2)
630	220	1.2	FI	13	25	31.5	27.5	10	F611FI125(1)630(2)
630	220	1.5	FI	13	25	31.5	27.5	10	F611FI155(1)630(2)
630	220	1.8	FI	13	25	31.5	27.5	10	F611FI185(1)630(2)
630	220	2.2	FN	14	28	31.5	27.5	10	F611FN225(1)630(2)
630	220	2.7	FR	17.5	28	31.5	27.5	10	F611FR275(1)630(2)
630	220	3.3	FS	19	29	31.5	27.5	10	F611FS335(1)630(2)
630	220	3.9	FY	22	37	31.5	27.5	10	F611FY395(1)630(2)
630	220	4.7	FY	22	37	31.5	27.5	10	F611FY475(1)630(2)
630	220	0.82	RB	11	22	41	37.5	8	F611RB824(1)630(2)
630	220	1	RB	11	22	41	37.5	8	F611RB105(1)630(2)
630	220	1.2	RB	11	22	41	37.5	8	F611RB125(1)630(2)
630	220	1.5	RB	11	22	41	37.5	8	F611RB155(1)630(2)
630	220	1.8	RB	11	22	41	37.5	8	F611RB185(1)630(2)
630	220	2.2	RF	13	24	41	37.5	8	F611RF225(1)630(2)
630	220	2.7	RH	15	26	41	37.5	8	F611RH275(1)630(2)
630	220	3.3	RC	16	28.5	41	37.5	8	F611RC335(1)630(2)
630	220	3.9	RD	19	32	41	37.5	8	F611RD395(1)630(2)
630	220	4.7	RD	19	32	41	37.5	8	F611RD475(1)630(2)
630	220	5.6	RP	21	38	41	37.5	8	F611RP565(1)630(2)
630	220	6.8	RP	21	38	41	37.5	8	F611RP685(1)630(2)
630	220	8.2	RO	24	44	41	37.5	8	F611RO825(1)630(2)
630	220	10	RO	24	44	41	37.5	8	F611RO106(1)630(2)
630	220	12	RU	30	45	41	37.5	8	F611RU126(1)630(2)
1000	250	0.001	JF	2.5	6.5	7.2	5.0	100	F611JF102(1)1K0(2)
1000	250	0.0012	JG	3.5	7.5	7.2	5.0	100	F611JG122(1)1K0(2)
VDC	VAC	Capacitance Value (µF)	Size Code	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/µs)	Part Number

(1) K= ±10%, M = ±20%, J = ±5% on request.

(2) Insert lead and packaging code. See table for available options.

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Capacitance Value (µF)	Size Code	Maximum Dimensions in mm			Lead Spacing (p)	dV/dt (V/µs)	Part Number
				B	H	L			
1000	250	0.0015	JG	3.5	7.5	7.2	5.0	100	F611JG152(1)1K0(2)
1000	250	0.0018	JG	3.5	7.5	7.2	5.0	100	F611JG182(1)1K0(2)
1000	250	0.0022	JG	3.5	7.5	7.2	5.0	100	F611JG222(1)1K0(2)
1000	250	0.0027	JG	3.5	7.5	7.2	5.0	100	F611JG272(1)1K0(2)
1000	250	0.0033	JG	3.5	7.5	7.2	5.0	100	F611JG332(1)1K0(2)
1000	250	0.0039	JM	4.5	9.5	7.2	5.0	100	F611JM392(1)1K0(2)
1000	250	0.0047	JM	4.5	9.5	7.2	5.0	100	F611JM472(1)1K0(2)
1000	250	0.0056	JM	4.5	9.5	7.2	5.0	100	F611JM562(1)1K0(2)
1000	250	0.0068	JQ	5	10	7.2	5.0	100	F611JQ682(1)1K0(2)
1000	250	0.0082	JT	6	11	7.2	5.0	100	F611JT822(1)1K0(2)
1000	250	0.01	JT	6	11	7.2	5.0	100	F611JT103(1)1K0(2)
1000	250	0.012	JT	6	11	7.2	5.0	100	F611JT123(1)1K0(2)
1000	250	0.015	JU	7.2	13	7.2	5.0	100	F611JU153(1)1K0(2)
1000	250	0.018	JU	7.2	13	7.2	5.0	100	F611JU183(1)1K0(2)
1000	250	0.001	KE	2.5	6	10	7.5	80	F611KE102(1)1K0(2)
1000	250	0.0012	KE	2.5	6	10	7.5	80	F611KE122(1)1K0(2)
1000	250	0.0015	KE	2.5	6	10	7.5	80	F611KE152(1)1K0(2)
1000	250	0.0018	KF	3	8	10	7.5	80	F611KF182(1)1K0(2)
1000	250	0.0022	KF	3	8	10	7.5	80	F611KF222(1)1K0(2)
1000	250	0.0027	KF	3	8	10	7.5	80	F611KF272(1)1K0(2)
1000	250	0.0033	KF	3	8	10	7.5	80	F611KF332(1)1K0(2)
1000	250	0.0039	KG	4	8	10	7.5	80	F611KG392(1)1K0(2)
1000	250	0.0047	KG	4	8	10	7.5	80	F611KG472(1)1K0(2)
1000	250	0.0056	KG	4	8	10	7.5	80	F611KG562(1)1K0(2)
1000	250	0.0068	KG	4	8	10	7.5	80	F611KG682(1)1K0(2)
1000	250	0.0082	KJ	5	10.5	10	7.5	80	F611KJ822(1)1K0(2)
1000	250	0.01	KJ	5	10.5	10	7.5	80	F611KJ103(1)1K0(2)
1000	250	0.012	KJ	5	10.5	10	7.5	80	F611KJ123(1)1K0(2)
1000	250	0.015	KM	6	12	10.5	7.5	80	F611KM153(1)1K0(2)
1000	250	0.018	KM	6	12	10.5	7.5	80	F611KM183(1)1K0(2)
1000	250	0.022	KM	6	12	10.5	7.5	80	F611KM223(1)1K0(2)
1000	250	0.001	AG	4	9	13	10.0	60	F611AG102(1)1K0(2)
1000	250	0.0012	AG	4	9	13	10.0	60	F611AG122(1)1K0(2)
1000	250	0.0015	AG	4	9	13	10.0	60	F611AG152(1)1K0(2)
1000	250	0.0018	AG	4	9	13	10.0	60	F611AG182(1)1K0(2)
1000	250	0.0022	AG	4	9	13	10.0	60	F611AG222(1)1K0(2)
1000	250	0.0027	AG	4	9	13	10.0	60	F611AG272(1)1K0(2)
1000	250	0.0033	AG	4	9	13	10.0	60	F611AG332(1)1K0(2)
1000	250	0.0039	AG	4	9	13	10.0	60	F611AG392(1)1K0(2)
1000	250	0.0047	AG	4	9	13	10.0	60	F611AG472(1)1K0(2)
1000	250	0.0056	AG	4	9	13	10.0	60	F611AG562(1)1K0(2)
1000	250	0.0068	AG	4	9	13	10.0	60	F611AG682(1)1K0(2)
1000	250	0.0082	AG	4	9	13	10.0	60	F611AG822(1)1K0(2)
1000	250	0.01	AG	4	9	13	10.0	60	F611AG103(1)1K0(2)
1000	250	0.012	AG	4	9	13	10.0	60	F611AG123(1)1K0(2)
1000	250	0.015	AK	5	11	13	10.0	60	F611AK153(1)1K0(2)
1000	250	0.018	AK	5	11	13	10.0	60	F611AK183(1)1K0(2)
1000	250	0.022	AP	6	12	13	10.0	60	F611AP223(1)1K0(2)
1000	250	0.027	AP	6	12	13	10.0	60	F611AP273(1)1K0(2)
1000	250	0.033	AP	6	12	13	10.0	60	F611AP333(1)1K0(2)
1000	250	0.0082	BB	4	10	18	15.0	30	F611BB822(1)1K0(2)
1000	250	0.01	BB	4	10	18	15.0	30	F611BB103(1)1K0(2)
1000	250	0.012	BB	4	10	18	15.0	30	F611BB123(1)1K0(2)
1000	250	0.015	BB	4	10	18	15.0	30	F611BB153(1)1K0(2)
1000	250	0.018	BB	4	10	18	15.0	30	F611BB183(1)1K0(2)
1000	250	0.022	BC	5	11	18	15.0	30	F611BC223(1)1K0(2)
1000	250	0.027	BC	5	11	18	15.0	30	F611BC273(1)1K0(2)
1000	250	0.033	BC	5	11	18	15.0	30	F611BC333(1)1K0(2)
1000	250	0.039	BE	5.5	12.5	18	15.0	30	F611BE393(1)1K0(2)
1000	250	0.047	BG	6	12	18	15.0	30	F611BG473(1)1K0(2)
VDC	VAC	Capacitance Value (µF)	Size Code	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/µs)	Part Number

(1) K= ±10%, M = ±20%, J = ±5% on request.

(2) Insert lead and packaging code. See table for available options.

Table 1 – Ratings & Part Number Reference cont'd

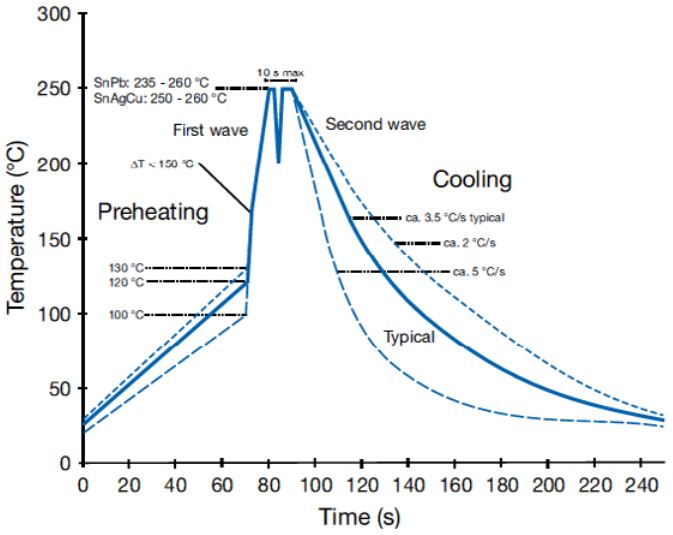
VDC	VAC	Capacitance Value (µF)	Size Code	Maximum Dimensions in mm			Lead Spacing (p)	dV/dt (V/µs)	Part Number
				B	H	L			
1000	250	0.056	BK	7.5	13.5	18	15.0	30	F611BK563(1)1K0(2)
1000	250	0.068	BK	7.5	13.5	18	15.0	30	F611BK683(1)1K0(2)
1000	250	0.082	BP	8.5	14.5	18	15.0	30	F611BP823(1)1K0(2)
1000	250	0.1	BP	8.5	14.5	18	15.0	30	F611BP104(1)1K0(2)
1000	250	0.12	BS	10	16	18	15.0	30	F611BS124(1)1K0(2)
1000	250	0.15	BY	11	19	18	15.0	30	F611BY154(1)1K0(2)
1000	250	0.18	BY	11	19	18	15.0	30	F611BY184(1)1K0(2)
1000	250	0.033	DB	6	14.5	26	22.5	15	F611DB333(1)1K0(2)
1000	250	0.039	DB	6	14.5	26	22.5	15	F611DB393(1)1K0(2)
1000	250	0.047	DB	6	14.5	26	22.5	15	F611DB473(1)1K0(2)
1000	250	0.056	DB	6	14.5	26	22.5	15	F611DB563(1)1K0(2)
1000	250	0.068	DB	6	14.5	26	22.5	15	F611DB683(1)1K0(2)
1000	250	0.082	DB	6	14.5	26	22.5	15	F611DB823(1)1K0(2)
1000	250	0.1	DB	6	14.5	26	22.5	15	F611DB104(1)1K0(2)
1000	250	0.12	DI	7	16	26	22.5	15	F611DI124(1)1K0(2)
1000	250	0.15	DI	7	16	26	22.5	15	F611DI154(1)1K0(2)
1000	250	0.18	DH	8	16	26	22.5	15	F611DH184(1)1K0(2)
1000	250	0.22	DM	9	18.5	26	22.5	15	F611DM224(1)1K0(2)
1000	250	0.27	DO	10	18.5	26	22.5	15	F611DO274(1)1K0(2)
1000	250	0.33	DP	11	20	26	22.5	15	F611DP334(1)1K0(2)
1000	250	0.39	DU	13	22	26	22.5	15	F611DU394(1)1K0(2)
1000	250	0.47	DU	13	22	26	22.5	15	F611DU474(1)1K0(2)
1000	250	0.56	DY	15.5	24.5	26	22.5	15	F611DY564(1)1K0(2)
1000	250	0.68	DY	15.5	24.5	26	22.5	15	F611DY684(1)1K0(2)
1000	250	0.15	FB	9	17	31.5	27.5	12	F611FB154(1)1K0(2)
1000	250	0.18	FB	9	17	31.5	27.5	12	F611FB184(1)1K0(2)
1000	250	0.22	FB	9	17	31.5	27.5	12	F611FB224(1)1K0(2)
1000	250	0.27	FB	9	17	31.5	27.5	12	F611FB274(1)1K0(2)
1000	250	0.33	FB	9	17	31.5	27.5	12	F611FB334(1)1K0(2)
1000	250	0.39	FC	11	20	31.5	27.5	12	F611FC394(1)1K0(2)
1000	250	0.47	FC	11	20	31.5	27.5	12	F611FC474(1)1K0(2)
1000	250	0.56	FI	13	25	31.5	27.5	12	F611FI564(1)1K0(2)
1000	250	0.68	FI	13	25	31.5	27.5	12	F611FI684(1)1K0(2)
1000	250	0.82	FN	14	28	31.5	27.5	12	F611FN824(1)1K0(2)
1000	250	1	FR	17.5	28	31.5	27.5	12	F611FR105(1)1K0(2)
1000	250	1.2	FR	17.5	28	31.5	27.5	12	F611FR125(1)1K0(2)
1000	250	1.5	FS	19	29	31.5	27.5	12	F611FS155(1)1K0(2)
1000	250	1.8	FY	22	37	31.5	27.5	12	F611FY185(1)1K0(2)
1000	250	2.2	FY	22	37	31.5	27.5	12	F611FY225(1)1K0(2)
1000	250	0.47	RB	11	22	41	37.5	10	F611RB474(1)1K0(2)
1000	250	0.56	RB	11	22	41	37.5	10	F611RB564(1)1K0(2)
1000	250	0.68	RB	11	22	41	37.5	10	F611RB684(1)1K0(2)
1000	250	0.82	RF	13	24	41	37.5	10	F611RF824(1)1K0(2)
1000	250	1	RF	13	24	41	37.5	10	F611RF105(1)1K0(2)
1000	250	1.2	RH	15	26	41	37.5	10	F611RH125(1)1K0(2)
1000	250	1.5	RC	16	28.5	41	37.5	10	F611RC155(1)1K0(2)
1000	250	1.8	RD	19	32	41	37.5	10	F611RD185(1)1K0(2)
1000	250	2.2	RD	19	32	41	37.5	10	F611RD225(1)1K0(2)
1000	250	2.7	RP	21	38	41	37.5	10	F611RP275(1)1K0(2)
1000	250	3.3	RO	24	44	41	37.5	10	F611RO335(1)1K0(2)
1000	250	3.9	RO	24	44	41	37.5	10	F611RO395(1)1K0(2)
1000	250	4.7	RU	30	45	41	37.5	10	F611RU475(1)1K0(2)
1000	250	5.6	RU	30	45	41	37.5	10	F611RU565(1)1K0(2)
VDC	VAC	Capacitance Value (µF)	Size Code	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/µs)	Part Number

(1) K= ±10%, M = ±20%, J = ±5% on request.

(2) Insert lead and packaging code. See table for available options.

Soldering Process

The implementation of the RoHS Directive has required the selection SnAuCu (SAC) alloys or SnCu alloys as primary solder. This has increased the liquidus temperature from that of 183°C for SnPb eutectic alloy to 217°C – 221°C for the new alloys. As a result, the heat stress to components, even in wave soldering, has increased considerably due to higher pre-heat and wave temperatures. Wave soldering can be destructive especially for mechanically small polypropylene capacitors and great care must be taken during soldering. The solder profiles from KEMET are highly recommended. You may also refer to the wave soldering curve from IEC Publication 61760–1 Edition 2. Please consult KEMET with any questions.



Marking

- KEMET's logo
- Series
- Capacitance
- Capacitance tolerance
- Rated voltage
- IEC climatic category
- Passive flammability class
- Manufacturing date code

Packaging Quantities

Size Code	Lead Spacing	Thickness (mm)	Height (mm)	Length (mm)	Bulk Short Leads	Bulk Long Leads	Standard Reel ø 355 mm	Large Reel ø 500 mm	Ammo	Pizza
JF	5	2.5	6.5	7.2	3000	4000	2500		3500	
JG		3.5	7.5	7.2	2000	3000	1800		2500	
JM		4.5	9.5	7.2	1500	2000	1400		1900	
JQ		5.0	10.0	7.2	1000	1500	1200		1700	
JT		6	11	7.2	2000	1000	1000		1400	
JU		7.2	13	7.2	1500	750	800		1150	
KE	7.5	2.5	6	10	2000	3000	2500		3500	
KF		3	8	10	1500	1750	2100		2800	
KG		4	8	10	2000	1500	1500		2100	
KJ		5	10.5	10	1500	1000	1200		1600	
KM		6	12	10.5	1000	800	1000		1350	
KH		4	9	10	2000	1500	1500		2100	
AN	10	3.5	9	13	2200	3200	850	1700	1150	
AG		4	9	13	2000	2200	750	1500	1000	
AK		5	11	13	1300	2000	600	1250	800	
AP		6	12	13	1000	1800	500	1000	680	
AO		7	17	13	600	900	450	900	580	
AL		9.5	7.5	13	1100	2000	300	600	430	
AE		4	8	13	2000	2200	750	1500	1000	
BB	15	4	10	18	1300	1500	750	1500	1000	1411
BC		5	11	18	1000	1250	600	1250	800	1139
BE		5.5	12.5	18	800	1100	550	1100	750	1020
BG		6	12	18	1750	1000	500	1000	680	935
BK		7.5	13.5	18	1000	800	350	800	500	748
BI		6	17.5	18	1000	800	500	1000	680	935
BP		8.5	14.5	18	1000	650	300	700	440	663
BT		9	12.5	18	1000	700	270	650	410	629
BO		7.5	18.5	18	900	600	350	800	500	748
BS		10	16	18	750	550	300	600	380	561
BR		13	12	18	750	520	200	480	280	425
BY		11	19	18	450	400	250	500	340	510
BA		8.5	12.5	18	1000	650	300	700	440	663
BZ		12	20	18	350	300	220	450	330	459

Packaging Quantities cont'd

Size Code	Lead Spacing	Thickness (mm)	Height (mm)	Length (mm)	Bulk Short Leads	Bulk Long Leads	Standard Reel ø 355 mm	Large Reel ø 500 mm	Ammo	Pizza
DB	22.5	6	14.5	26	1638	702	300	700	464	660
DI		7	16	26	1188	594	250	550	380	564
DH		8.0	16.0	26	1026	513	240	500	330	492
DJ		8.5	17	26	972	486	250	450	280	468
DM		9	18.5	26	918	459	200	400	300	444
DO		10	18.5	26	810	405	160	350	235	396
DP		11	20	26	756	378	190	350	217	360
DU		13	22	26	540	324	150	300	200	300
DY		15.5	24.5	26	450	270	120	250	170	252
FB	27.5	9.0	17.0	31.5	816	408				370
FC		11.0	20.0	31.5	672	336				300
FI		13.0	25.0	31.5	480	288				250
FN		14.0	28.0	31.5	352	176				230
FO		17.0	40.0	31.5	216	144				190
FR		17.5	28.0	31.5	256	128				190
FS		19.0	29.0	31.5	256	128				170
FY		22.0	37.0	31.5	168	112				150
FH		21.0	12.5	31.5	392	168				150
FQ		27.5	16.0	31.5	280	120				120
FT		31.0	19.0	31.5	240	120				100
RB	37.5	11.0	22.0	41.0	420	252				210
RF		13.0	24.0	41.0	360	216				175
RH		15.0	26.0	41.0	300	180				154
RC		16.0	28.5	41.0	216	108				140
RD		19.0	32.0	41.0	192	96				119
RP		21.0	38.0	41.0	126	84				105
RO		24.0	44.0	41.0	108	72				91
RU		30.0	45.0	41.0	90	60				77
RV		24.0	15.0	41.0	252	108				91
RW		24.0	19.0	41.0	216	108				91

F622 Series Metallized Polyester Film, 5 mm Lead Spacing, 50 – 630 VDC

Overview

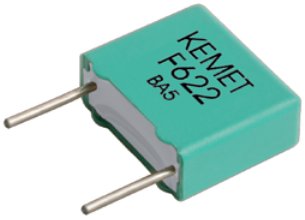
The F622 Series is constructed of metallized stacked polyester film capacitor with radial leads of tinned wire. Radial leads are electrically welded to the contact metal layer on the ends of the capacitor winding. The capacitor is encapsulated in a self-extinguishing material meeting the requirements of UL 94 V–0.

Applications

Typical applications include high performance, high temperature blocking, coupling, decoupling, bypassing and interference suppression in low voltage applications such as automotive. Not for use with the mains.

Benefits

- Voltage range: 50 – 630 VDC
- Capacitance range: 0.001 – 2.2 µF
- Lead spacing: 5 mm
- Capacitance tolerance: ±10%, ±20%, ±5% on request
- Climatic category: 55/125/56
- Tape and reel packaging in accordance with IEC 60286–2
- RoHS Compliant and lead-free terminations
- Operating temperature range of -55˚C to +125˚C
- Designed for high performance, high temperature applications



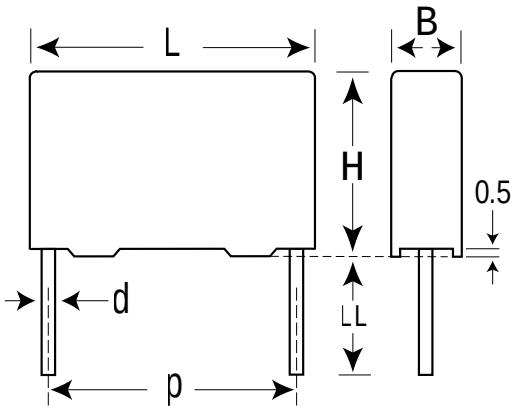
Part Number System

F	622	J	F	104	M	050	C
Capacitor Class	Series	Lead Spacing (mm)	Size Code	Capacitance Code (pF)	Capacitance Tolerance	Voltage (VDC)	Lead and Packaging Code
F = Film	Metallized Polyester	J = 5	See Dimension Table	First two digits represent significant figures. Third digit specifies number of zeros.	J = ± 5% K = ± 10% M = ± 20%	050 = 50 063 = 63 100 = 100 250 = 250 400 = 400 500 = 500 630 = 630	See Ordering Options Table

Ordering Options Table

Lead Spacing Nominal (mm)	Type of Leads and Packaging	Lead Length (mm)	Lead and Packaging Code
5	Standard Lead and Packaging Options		
	Bulk (Bag) – Short Leads	4 +2/-0	C
	Bulk (Bag) – Long Leads	17 +0/-1	A
	Tape & Reel (Standard Reel)	H_0= 18.5 +/-0.5	L
	Other Lead and Packaging Options		
	Bulk (Bag) – Max Length Leads	20 +5/-0	ALL0L
	Ammo Pack	H_0= 18.5 +/-0.5	R

Dimensions – Millimeters



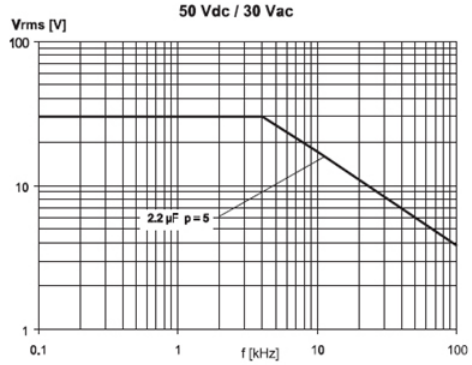
Size Code	p		B		H		L		d	
	Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance
JF	5.0	+/-0.4	2.5	Maximum	6.5	Maximum	7.2	Maximum	0.6	+/-0.05
JG	5.0	+/-0.4	3.5	Maximum	7.5	Maximum	7.2	Maximum	0.6	+/-0.05
JM	5.0	+/-0.4	4.5	Maximum	9.5	Maximum	7.2	Maximum	0.6	+/-0.05
JQ	5.0	+/-0.4	5.0	Maximum	10.0	Maximum	7.2	Maximum	0.6	+/-0.05
JT	5.0	+/-0.4	6.0	Maximum	11.0	Maximum	7.2	Maximum	0.6	+/-0.05
Note: See Ordering Options Table for lead length (LL) options.										

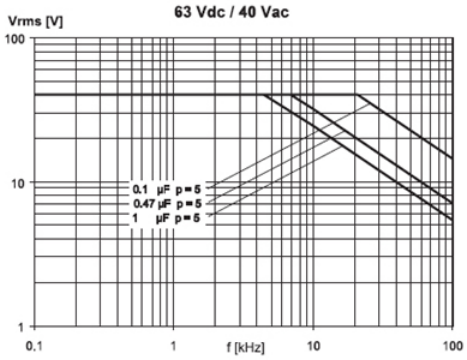
Performance Characteristics

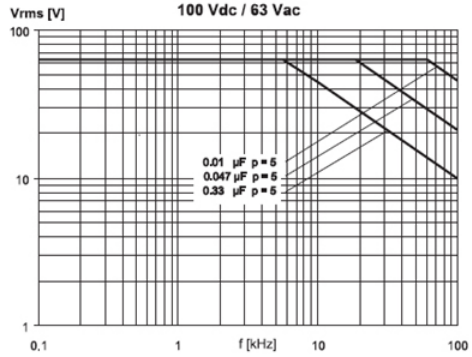
Capacitance Tolerance	±20%, ±10%, ±5% on request			
Category Temperature Range	-55°C to 125°C			
Voltage Derating	Above +85°C DC and AC voltage derating is 1.25%/°C			
Rated Temperature	+85°C			
Climatic Category	–55 to +125°C			
	Average relative humidity ≤ 75%			
	RH = 95% for 30 days per year			
	RH = 85% for further days limited by average value per year			
Test Voltage	1.6 x V_R VDC for 2 seconds			
Capacitance Drift	Maximum 3% after a 2 year storage period at a temperature of +10°C to +40°C and a relative humidity of 40% to 60%			
Reliability	Operational life > 200,000 hours			
	Failure rate < 3 FIT, T = +40°C, V = 0.5 x V_R			
	Failure criteria: open circuit, short circuit, cap change > 10%, DF 2 times the catalog limits, IR < 50 MΩ			
Maximum Pulse Steepness	dV/dt according to Table 1. For peak to peak voltages lower than rated voltage (Vpp < V_R), the specified dV/dt can be multiplied by the factor V_R/Vpp.			
Temperature Coefficient	+400 (±200) ppm/°C at 1 kHz			
Self Inductance	Approximately 6 nH/cm for the total length of capacitor winding and the leads			
Dissipation Factor tanδ	Maximum Values at +23°C			
		C ≤ 0.1 µF	0.1 µF < C ≤ 1.0 µF	C > 1.0 µF
	1 kHz	0.8%	0.8%	0.8%
	10 kHz	1.2%	1.2%	1.5%
	100 kHz	2.5%		
Insulation Resistance	Measured at +20°C, according to IEC 60384–2			
	Minimum Values Between Terminals			
		C ≤ 0.33 µF	C > 0.33 µF and < 1 µF	C > 1.0 µF
	V_R ≤ 100 VDC	15,000 MΩ	5,000 MΩ • µF	1,000 MΩ • µF
	V_R > 100 VDC	30,000 MΩ	10,000 MΩ • µF	

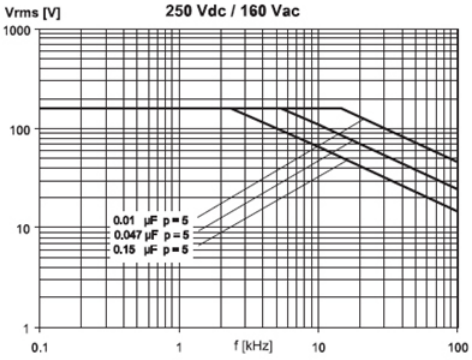
Maximum Voltage (V_{rms}) vs. Frequency (Sinusoidal Waveform/T ≤ 40°C)

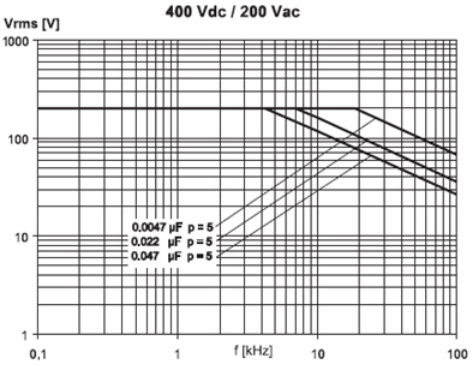
Lead Spacing 5 mm

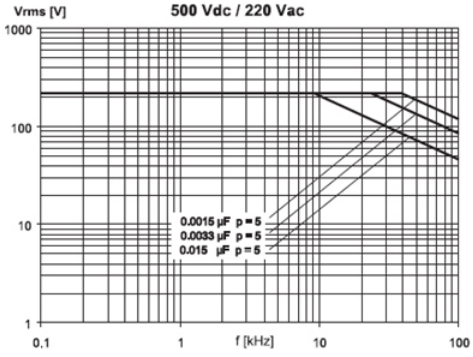


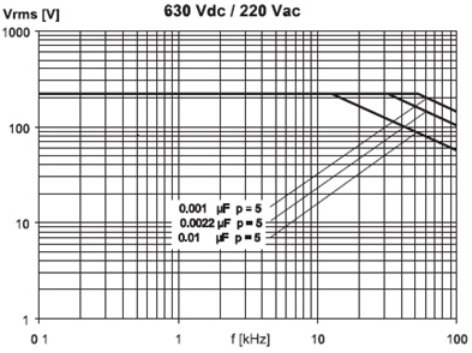






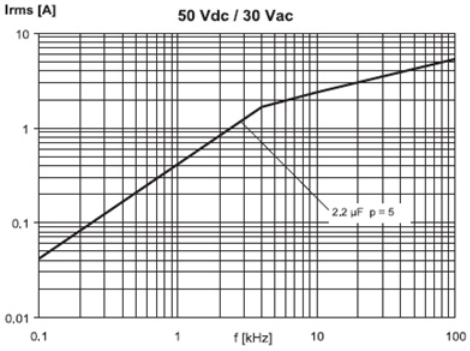


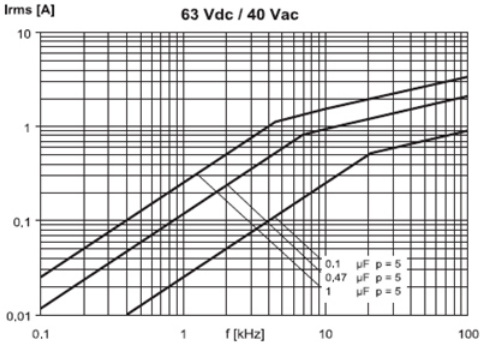


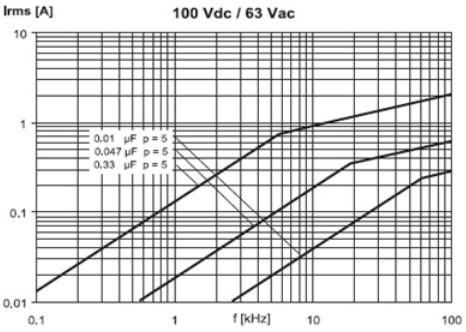


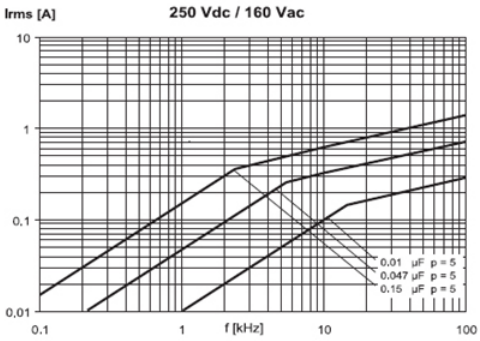
Maximum Current (I_{rms}) vs. Frequency (Sinusoidal Waveform/T ≤ 40°C)

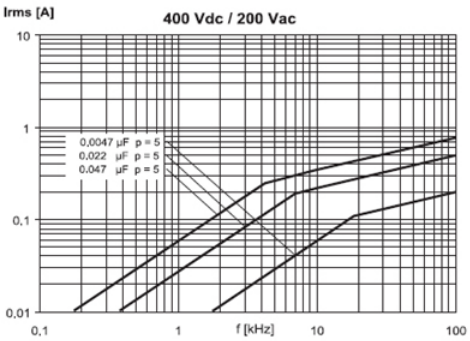
Lead Spacing 5 mm

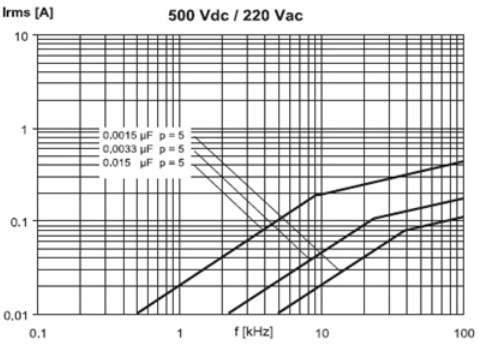


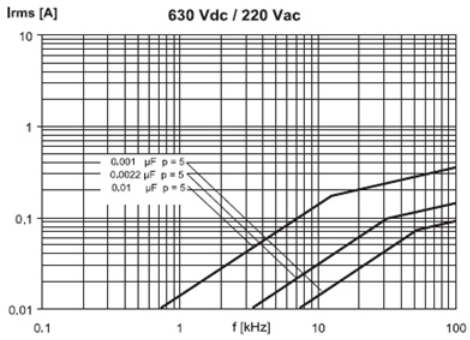












Environmental Test Data

Damp Heat Test	Test Conditions	T = +40°C, RH = 93%, t = 56 days
	Test Criteria	Δ C/C ≤ ±5% Δ tanδ ≤ 0.005 (1 kHz) IR after test 0.5 x IR minimum
Endurance Test	**Test Conditions**	**T = +100°C, U = 1.25 x (0.8 x U_R)**
	Test Criteria	t = 2,000 hours Δ C/C ≤ ±5% Δ tanδ ≤ 0.005 (1 kHz) Δ tanδ ≤ 0.010 (100 kHz) IR after test 0.5 x IR minimum

Environmental Compliance

All KEMET MKTI capacitors are RoHS Compliant.

RoHS Compliant

Table 1 – Ratings & Part Number Reference

VDC	VAC	Cap Value (µF)	Size Code	Max Dimensions in mm			Lead Spacing (p)	dV/dt (V/µs)	Part Number
				B	H	L			
50	30	2.2	JT	6.0	11.0	7.2	5.0	200	F622JT225(1)050(2)
63	40	0.10	JF	2.5	6.5	7.2	5.0	250	F622JF104(1)063(2)
63	40	0.12	JF	2.5	6.5	7.2	5.0	250	F622JF124(1)063(2)
63	40	0.15	JF	2.5	6.5	7.2	5.0	250	F622JF154(1)063(2)
63	40	0.18	JF	2.5	6.5	7.2	5.0	250	F622JF184(1)063(2)
63	40	0.22	JF	2.5	6.5	7.2	5.0	250	F622JF224(1)063(2)
63	40	0.27	JG	3.5	7.5	7.2	5.0	250	F622JG274(1)063(2)
63	40	0.33	JG	3.5	7.5	7.2	5.0	250	F622JG334(1)063(2)
63	40	0.39	JG	3.5	7.5	7.2	5.0	250	F622JG394(1)063(2)
63	40	0.47	JG	3.5	7.5	7.2	5.0	250	F622JG474(1)063(2)
63	40	0.56	JM	4.5	9.5	7.2	5.0	250	F622JM564(1)063(2)
63	40	0.68	JM	4.5	9.5	7.2	5.0	250	F622JM684(1)063(2)
63	40	0.82	JM	4.5	9.5	7.2	5.0	250	F622JM824(1)063(2)
63	40	1.0	JQ	5.0	10.0	7.2	5.0	250	F622JQ105(1)063(2)
63	40	1.2	JT	6.0	11.0	7.2	5.0	250	F622JT125(1)063(2)
63	40	1.5	JT	6.0	11.0	7.2	5.0	250	F622JT155(1)063(2)
100	63	0.0047	JF	2.5	6.5	7.2	5.0	300	F622JF472(1)100(2)
100	63	0.0056	JF	2.5	6.5	7.2	5.0	300	F622JF562(1)100(2)
100	63	0.0068	JF	2.5	6.5	7.2	5.0	300	F622JF682(1)100(2)
100	63	0.0082	JF	2.5	6.5	7.2	5.0	300	F622JF822(1)100(2)
100	63	0.010	JF	2.5	6.5	7.2	5.0	300	F622JF103(1)100(2)
100	63	0.012	JF	2.5	6.5	7.2	5.0	300	F622JF123(1)100(2)
100	63	0.015	JF	2.5	6.5	7.2	5.0	300	F622JF153(1)100(2)
100	63	0.018	JF	2.5	6.5	7.2	5.0	300	F622JF183(1)100(2)
100	63	0.022	JF	2.5	6.5	7.2	5.0	300	F622JF223(1)100(2)
100	63	0.027	JF	2.5	6.5	7.2	5.0	300	F622JF273(1)100(2)
100	63	0.033	JF	2.5	6.5	7.2	5.0	300	F622JF333(1)100(2)
100	63	0.039	JF	2.5	6.5	7.2	5.0	300	F622JF393(1)100(2)
100	63	0.047	JF	2.5	6.5	7.2	5.0	300	F622JF473(1)100(2)
100	63	0.056	JF	2.5	6.5	7.2	5.0	300	F622JF563(1)100(2)
100	63	0.068	JF	2.5	6.5	7.2	5.0	300	F622JF683(1)100(2)
100	63	0.082	JG	3.5	7.5	7.2	5.0	300	F622JG823(1)100(2)
100	63	0.10	JG	3.5	7.5	7.2	5.0	300	F622JG104(1)100(2)
100	63	0.12	JM	4.5	9.5	7.2	5.0	300	F622JM124(1)100(2)
100	63	0.15	JM	4.5	9.5	7.2	5.0	300	F622JM154(1)100(2)
100	63	0.18	JM	4.5	9.5	7.2	5.0	300	F622JM184(1)100(2)
100	63	0.22	JQ	5.0	10.0	7.2	5.0	300	F622JQ224(1)100(2)
100	63	0.27	JT	6.0	11.0	7.2	5.0	300	F622JT274(1)100(2)
100	63	0.33	JT	6.0	11.0	7.2	5.0	300	F622JT334(1)100(2)
100	63	0.39	JT	6.0	11.0	7.2	5.0	300	F622JT394(1)100(2)
100	63	0.47	JT	6.0	11.0	7.2	5.0	300	F622JT474(1)100(2)
250	160	0.0010	JF	2.5	6.5	7.2	5.0	400	F622JF102(1)250(2)
250	160	0.0012	JF	2.5	6.5	7.2	5.0	400	F622JF122(1)250(2)
250	160	0.0015	JF	2.5	6.5	7.2	5.0	400	F622JF152(1)250(2)
250	160	0.0018	JF	2.5	6.5	7.2	5.0	400	F622JF182(1)250(2)
250	160	0.0022	JF	2.5	6.5	7.2	5.0	400	F622JF222(1)250(2)
250	160	0.0027	JF	2.5	6.5	7.2	5.0	400	F622JF272(1)250(2)
250	160	0.0033	JF	2.5	6.5	7.2	5.0	400	F622JF332(1)250(2)
250	160	0.0039	JF	2.5	6.5	7.2	5.0	400	F622JF392(1)250(2)
250	160	0.0047	JF	2.5	6.5	7.2	5.0	400	F622JF472(1)250(2)
250	160	0.0056	JF	2.5	6.5	7.2	5.0	400	F622JF562(1)250(2)
250	160	0.0068	JF	2.5	6.5	7.2	5.0	400	F622JF682(1)250(2)
250	160	0.082	JF	2.5	6.5	7.2	5.0	400	F622JF823(1)250(2)
250	160	0.010	JF	2.5	6.5	7.2	5.0	400	F622JF103(1)250(2)
250	160	0.012	JF	2.5	6.5	7.2	5.0	400	F622JF123(1)250(2)
250	160	0.015	JF	2.5	6.5	7.2	5.0	400	F622JF153(1)250(2)
250	160	0.018	JF	2.5	6.5	7.2	5.0	400	F622JF183(1)250(2)
250	160	0.022	JG	3.5	7.5	7.2	5.0	400	F622JG223(1)250(2)
250	160	0.027	JG	3.5	7.5	7.2	5.0	400	F622JG273(1)250(2)
250	160	0.033	JG	3.5	7.5	7.2	5.0	400	F622JG333(1)250(2)
VDC	VAC	Cap Value (µF)	Size Code	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/µs)	Part Number

(1) K = ±10%, M = ±20%, J = ±5% on request.
(2) Insert lead and packaging code. See table for available options.

Table 1 – Ratings & Part Number Reference cont'd

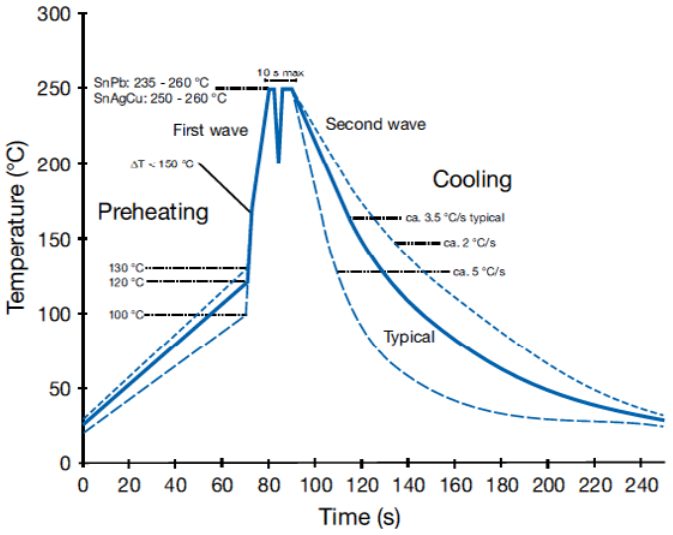
VDC	VAC	Cap Value (µF)	Size Code	Max Dimensions in mm			Lead Spacing (p)	dV/dt (V/µs)	Part Number
				B	H	L			
250	160	0.039	JG	3.5	7.5	7.2	5.0	400	F622JG393(1)250(2)
250	160	0.047	JM	4.5	9.5	7.2	5.0	400	F622JM473(1)250(2)
250	160	0.056	JM	4.5	9.5	7.2	5.0	400	F622JM563(1)250(2)
250	160	0.068	JM	4.5	9.5	7.2	5.0	400	F622JM683(1)250(2)
250	160	0.082	JM	4.5	9.5	7.2	5.0	400	F622JM823(1)250(2)
250	160	0.10	JQ	5.0	10.0	7.2	5.0	400	F622JQ104(1)250(2)
250	160	0.12	JT	6.0	11.0	7.2	5.0	400	F622JT124(1)250(2)
250	160	0.15	JT	6.0	11.0	7.2	5.0	400	F622JT154(1)250(2)
400	200	0.0010	JF	2.5	6.5	7.2	5.0	600	F622JF102(1)400(2)
400	200	0.0012	JF	2.5	6.5	7.2	5.0	600	F622JF122(1)400(2)
400	200	0.0015	JF	2.5	6.5	7.2	5.0	600	F622JF152(1)400(2)
400	200	0.0018	JF	2.5	6.5	7.2	5.0	600	F622JF182(1)400(2)
400	200	0.0022	JF	2.5	6.5	7.2	5.0	600	F622JF222(1)400(2)
400	200	0.0027	JF	2.5	6.5	7.2	5.0	600	F622JF272(1)400(2)
400	200	0.0033	JF	2.5	6.5	7.2	5.0	600	F622JF332(1)400(2)
400	200	0.0039	JF	2.5	6.5	7.2	5.0	600	F622JF392(1)400(2)
400	200	0.0047	JF	2.5	6.5	7.2	5.0	600	F622JF472(1)400(2)
400	200	0.0056	JG	3.5	7.5	7.2	5.0	600	F622JG562(1)400(2)
400	200	0.0068	JG	3.5	7.5	7.2	5.0	600	F622JG682(1)400(2)
400	200	0.0082	JG	3.5	7.5	7.2	5.0	600	F622JG822(1)400(2)
400	200	0.010	JG	3.5	7.5	7.2	5.0	600	F622JG103(1)400(2)
400	200	0.012	JG	3.5	7.5	7.2	5.0	600	F622JG123(1)400(2)
400	200	0.015	JG	3.5	7.5	7.2	5.0	600	F622JG153(1)400(2)
400	200	0.018	JM	4.5	9.5	7.2	5.0	600	F622JM183(1)400(2)
400	200	0.022	JM	4.5	9.5	7.2	5.0	600	F622JM223(1)400(2)
400	200	0.027	JM	4.5	9.5	7.2	5.0	600	F622JM273(1)400(2)
400	200	0.033	JQ	5.0	10.0	7.2	5.0	600	F622JQ333(1)400(2)
400	200	0.039	JQ	5.0	10.0	7.2	5.0	600	F622JQ393(1)400(2)
400	200	0.047	JT	6.0	11.0	7.2	5.0	600	F622JT473(1)400(2)
400	200	0.056	JT	6.0	11.0	7.2	5.0	600	F622JT563(1)400(2)
500	220	0.0010	JF	2.5	6.5	7.2	5.0	700	F622JF102(1)500(2)
500	220	0.0012	JF	2.5	6.5	7.2	5.0	700	F622JF122(1)500(2)
500	220	0.0015	JF	2.5	6.5	7.2	5.0	700	F622JF152(1)500(2)
500	220	0.0018	JF	2.5	6.5	7.2	5.0	700	F622JF182(1)500(2)
500	220	0.0022	JG	3.5	7.5	7.2	5.0	700	F622JG222(1)500(2)
500	220	0.0027	JG	3.5	7.5	7.2	5.0	700	F622JG272(1)500(2)
500	220	0.0033	JG	3.5	7.5	7.2	5.0	700	F622JG332(1)500(2)
500	220	0.0039	JG	3.5	7.5	7.2	5.0	700	F622JG392(1)500(2)
500	220	0.0047	JG	3.5	7.5	7.2	5.0	700	F622JG472(1)500(2)
500	220	0.0056	JM	4.5	9.5	7.2	5.0	700	F622JM562(1)500(2)
500	220	0.0068	JM	4.5	9.5	7.2	5.0	700	F622JM682(1)500(2)
500	220	0.0082	JM	4.5	9.5	7.2	5.0	700	F622JM822(1)500(2)
500	220	0.010	JQ	5.0	10.0	7.2	5.0	700	F622JQ103(1)500(2)
500	220	0.012	JT	6.0	11.0	7.2	5.0	700	F622JT123(1)500(2)
500	220	0.015	JT	6.0	11.0	7.2	5.0	700	F622JT153(1)500(2)
630	220	0.0010	JF	2.5	6.5	7.2	5.0	800	F622JF102(1)630(2)
630	220	0.0012	JF	2.5	6.5	7.2	5.0	800	F622JF122(1)630(2)
630	220	0.0015	JG	3.5	7.5	7.2	5.0	800	F622JG152(1)630(2)
630	220	0.0018	JG	3.5	7.5	7.2	5.0	800	F622JG182(1)630(2)
630	220	0.0022	JG	3.5	7.5	7.2	5.0	800	F622JG222(1)630(2)
630	220	0.0027	JG	3.5	7.5	7.2	5.0	800	F622JG272(1)630(2)
630	220	0.0033	JM	4.5	9.5	7.2	5.0	800	F622JM332(1)630(2)
630	220	0.0039	JM	4.5	9.5	7.2	5.0	800	F622JM392(1)630(2)
630	220	0.0047	JM	4.5	9.5	7.2	5.0	800	F622JM472(1)630(2)
630	220	0.0056	JM	4.5	9.5	7.2	5.0	800	F622JM562(1)630(2)
630	220	0.0068	JQ	5.0	10.0	7.2	5.0	800	F622JQ682(1)630(2)
630	220	0.0082	JT	6.0	11	7.2	5.0	800	F622JT822(1)630(2)
630	220	0.010	JT	6.0	11	7.2	5.0	800	F622JT103(1)630(2)
VDC	VAC	Cap Value (µF)	Size Code	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/µs)	Part Number

(1) K = ±10%, M = ±20%, J = ±5% on request.

(2) Insert lead and packaging code. See table for available options.

Soldering Process

The implementation of the RoHS Directive has required the selection SnAuCu (SAC) alloys or SnCu alloys as primary solder. This has increased the liquidus temperature from that of 183°C for SnPb eutectic alloy to 217°C – 221°C for the new alloys. As a result, the heat stress to components, even in wave soldering, has increased considerably due to higher pre-heat and wave temperatures. Wave soldering can be destructive especially for mechanically small polypropylene capacitors and great care must be taken during soldering. The solder profiles from KEMET are highly recommended. You may also refer to the wave soldering curve from IEC Publication 61760–1 Edition 2. Please consult KEMET with any questions.



Marking

- KEMET's logo
- Series
- Capacitance
- Capacitance tolerance
- Rated voltage
- IEC climatic category
- Passive flammability class
- Manufacturing date code

Packaging Quantities

Size Code	Lead Spacing	Thickness (mm)	Height (mm)	Length (mm)	Bulk Short Leads	Bulk Long Leads	Standard Reel ø 355 mm	Ammo
JF	5	2.5	6.5	7.2	3000	4000	2500	3500
JG		3.5	7.5	7.2	2000	3000	1800	2500
JM		4.5	9.5	7.2	1500	2000	1400	1900
JQ		5.0	10.0	7.2	1000	1500	1200	1700
JT		6	11	7.2	2000	1000	1000	1400
JU		7.2	13	7.2	1500	750	800	1150

PME261 Series Metallized Impregnated Paper, 10.2 – 25.4 mm Lead Spacing, 400 – 1,000 VDC

Overview

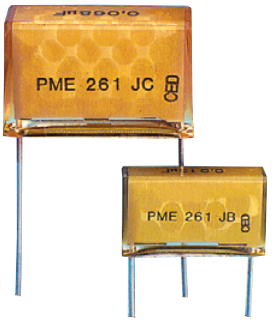
The PME261 Series is constructed of multilayer metallized paper, encapsulated and impregnated in self-extinguishing material meeting the requirements of UL 94 V–0.

Applications

For general use in DC and low frequency pulse applications.

Benefits

- Voltage range: 400 – 1,000 VDC; 220 – 500 VAC
- Capacitance range: 0.001 – 1 µF
- Lead spacing: 10.2 – 25.4 mm
- Capacitance tolerance: ±10%, ±20%, ±5% on request
- Climatic category: 40/70/56, IEC 60068–1
- Tape and reel packaging in accordance with IEC 60286–2
- RoHS Compliant and lead-free terminations
- Operating temperature range of -40˚C to +70˚C in AC applications
- Operating temperature range of -40˚C to +100˚C in DC applications
- Excellent self-healing properties. Ensures long life even when subjected to frequent over-voltages.
- Good resistance to ionization due to impregnated dielectric
- IEC Publication 166 Type 1
- High dV/dt capability
- Approved according to SE–MIL–QPL
- The capacitors meet the most stringent IEC humidity class, 56 days
- The impregnated paper ensures excellent stability giving outstanding reliability properties, especially in applications having continuous operation



Legacy Part Number System

PME261	K	A	5100	K	R30
Series	Rated Voltage (VAC)	Lead Spacing (mm)	Capacitance Code (pF)	Capacitance Tolerance	Lead and Packaging Code
Metallized Paper	K = 220 E = 300 J = 500	A = 10.2 B = 15.2 C = 20.3 E = 25.4	Digits 2 – 4 indicate the first three digits of the capacitance value. First digit indicates the total number of digits in the capacitance value	J = ±5% K = ±10% M = ±20%	See Ordering Options Table

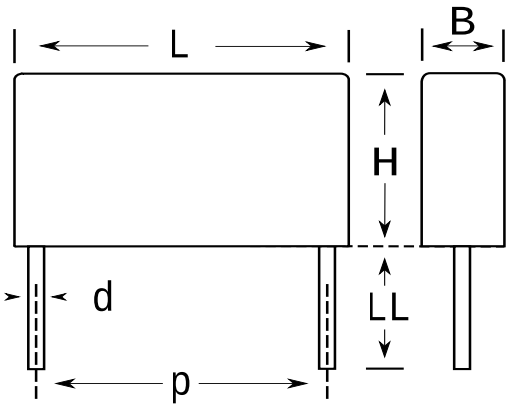
New KEMET Part Number System

P	561	H	E	103	K	220	A
Capacitor Class	Series	Lead Spacing (mm)	Size Code	Capacitance Code (pF)	Capacitance Tolerance	Rated Voltage (VAC)	Lead and Packaging Code
P = Paper	Metallized Paper General Purpose	H = 10.2 Q = 15.2 C = 20.3 E = 25.4	See Dimension Table	First two digits indicate the two most significant digits of the capacitance value in picofarads. The third digit is the number of following zeros.	J = ±5% K = ±10% M = ±20%	220 = 220 300 = 300 500 = 500	See Ordering Options Table

Ordering Options Table

Lead Spacing Nominal (mm)	Type of Leads and Packaging	Lead Length (mm)	KEMET Lead and Packaging Code	Legacy Lead and Packaging Code
10.2	Standard Lead and Packaging Options			
	Bulk (Bag) – Short Leads	6 +0/-1	C	R06
	Bulk (Bag) – Max Length Leads	17 +0/-1	A	R17
	Tape & Reel (Standard Reel)	H_0= 18.5 +/-0.5	L	R19T0
	Other Lead and Packaging Options			
	Tape & Reel (Large Reel)	H_0= 18.5 +/-0.5	P	R19T1
Native 10.2 formed to 7.5	Ammo Pack	H_0= 16.5 +/-0.5	LAF3	R30XA
15.2	Standard Lead and Packaging Options			
	Bulk (Bag) – Short Leads	6 +0/-1	C	R06
	Bulk (Bag) – Max Length Leads	30 +5/-0	A	R30
	Tape & Reel (Standard Reel)	H_0= 18.5 +/-0.5	L	R19T0
	Other Lead and Packaging Options			
	Tape & Reel (Large Reel)	H_0= 18.5 +/-0.5	P	R19T1
20.3	Standard Lead and Packaging Options			
	Bulk (Tray) – Short Leads	6 +0/-1	C	R06
	Bulk (Bag) – Max Length Leads	30 +5/-0	A	R30
	Tape & Reel (Standard Reel)	H_0= 18.5 +/-0.5	L	R19T0
	Other Lead and Packaging Options			
	Tape & Reel (Large Reel)	H_0= 18.5 +/-0.5	P	R19T1
25.4	Standard Lead and Packaging Options			
	Bulk (Tray) – Short Leads	6 +0/-1	C	R06
	Bulk (Bag) – Max Length Leads	30 +5/-0	A	R30

Dimensions – Millimeters



Size Code	p		B		H		L		d	
	Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance
HE	10.2	+/-0.4	3.9	Maximum	7.5	Maximum	13.5	Maximum	0.6	+/-0.05
HL	10.2	+/-0.4	5.1	Maximum	10.5	Maximum	13.5	Maximum	0.6	+/-0.05
QE	15.2	+/-0.4	5.2	Maximum	10.5	Maximum	18.5	Maximum	0.8	+/-0.05
QM	15.2	+/-0.4	7.3	Maximum	13.0	Maximum	18.5	Maximum	0.8	+/-0.05
QP	15.2	+/-0.4	7.8	Maximum	13.5	Maximum	18.5	Maximum	0.8	+/-0.05
CE	20.3	+/-0.4	7.6	Maximum	14.0	Maximum	24.0	Maximum	0.8	+/-0.05
CG	20.3	+/-0.4	8.4	Maximum	14.0	Maximum	24.0	Maximum	0.8	+/-0.05
CJ	20.3	+/-0.4	9.0	Maximum	15.0	Maximum	24.0	Maximum	0.8	+/-0.05
CP	20.3	+/-0.4	11.3	Maximum	16.5	Maximum	24.0	Maximum	0.8	+/-0.05
EH	25.4	+/-0.4	10.6	Maximum	17.3	Maximum	30.5	Maximum	1	+/-0.05
EL	25.4	+/-0.4	15.3	Maximum	22.0	Maximum	30.5	Maximum	1	+/-0.05

Note: See Ordering Options Table for lead length (LL) options.

Performance Characteristics

Rated Voltage V_R (VDC)	400	630	1000
Rated Voltage V_R (VAC)	220	300	500
Capacitance Range (µF)	0.0082 – 1.0	0.001 – 0.15	0.001 – 0.1
Capacitance Tolerance	±10%, ±20%, ±5% on request		
Temperature Range	-40 to +70°C		
	-40 to +100°C		
Climatic Category	40/070/56		
Dissipation Factor tanδ	Maximum Values at +23°C		
	1 kHz		1.3%
Insulation Resistance	Measured at +20°C, According to IEC 60384–2		
	Minimum Values Between Terminals		
	C ≤ 0.33 µF		≥ 12,000 MΩ
	C > 0.33 µF		≥ 4,000 MΩ • µF
	PME261 K measured at 100 VDC after 60 seconds, +23°C		
	PME261 E and J measured at 500 VDC after 60 seconds, +23°C		

Environmental Test Data

Test	IEC Publication	Procedure
Vibration	IEC 60068–2–6 Test Fc	3 directions at 2 hours each 10 – 55 Hz at 0.75 mm or 98 m/s^2
Bump	IEC 60068–2–29 Test Eb	4,000 bumps at 390 m/s^2
Solderability	IEC 60068–2–20 Test Ta	Solder globule method Wetting time for d ≤ 0.8 < 1 second for d > 0.8 < 1.5 seconds
Passive Flammability	IEC 60695–2–2	
Damp Heat Steady State	IEC 60068-2-3 Test Ca	+40°C and 90 – 95% RH, 56 days

Environmental Compliance

All KEMET MKTI capacitors are RoHS Compliant.

RoHS Compliant

Table 1 – Ratings & Part Number Reference

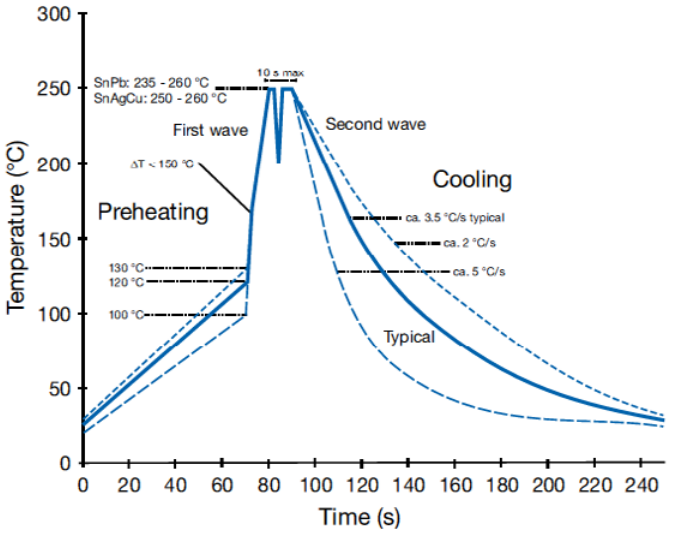
Cap Value (µF)	Max Dimensions in mm			Lead Spacing (p)	dV/dt (V/µs)	New Kemet Part Number	Legacy Part Number
	B	H	L				
0.0082	3.9	7.5	13.5	10.2	2000	P561HE822(1)220(2)	PME261KA4820(1)(2)
0.010	3.9	7.5	13.5	10.2	2000	P561HE103(1)220(2)	PME261KA5100(1)(2)
0.015	5.1	10.5	13.5	10.2	2000	P561HL153(1)220(2)	PME261KA5150(1)(2)
0.022	5.1	10.5	13.5	10.2	2000	P561HL223(1)220(2)	PME261KA5220(1)(2)
0.033	5.2	10.5	18.5	15.2	1600	P561QE333(1)220(2)	PME261KB5330(1)(2)
0.047	5.2	10.5	18.5	15.2	1300	P561QE473(1)220(2)	PME261KB5470(1)(2)
0.068	7.3	13.0	18.5	15.2	1100	P561QM683(1)220(2)	PME261KB5680(1)(2)
0.1	7.3	13.0	18.5	15.2	850	P561QM104(1)220(2)	PME261KB6100(1)(2)
0.15	7.6	14.0	24.0	20.3	700	P561CE154(1)220(2)	PME261KC6150(1)(2)
0.22	8.4	14.0	24.0	20.3	560	P561CG224(1)220(2)	PME261KC6220(1)(2)
0.33	11.3	16.5	24.0	20.3	430	P561CP334(1)220(2)	PME261KC6330(1)(2)
0.47	10.6	17.3	30.5	25.4	370	P561EH474(1)220(2)	PME261KE6470(1)(2)
0.68	15.3	22.0	30.5	25.4	300	P561EL684(1)220(2)	PME261KE6680(1)(2)
1	15.3	22.0	30.5	25.4	220	P561EL105(1)220(2)	PME261KE7100(1)(2)
0.001	3.9	7.5	13.5	10.2	2000	P561HE102(1)300(2)	PME261EA4100(1)(2)
0.0015	3.9	7.5	13.5	10.2	2000	P561HE152(1)300(2)	PME261EA4150(1)(2)
0.0022	3.9	7.5	13.5	10.2	2000	P561HE222(1)300(2)	PME261EA4220(1)(2)
0.0033	3.9	7.5	13.5	10.2	2000	P561HE332(1)300(2)	PME261EA4330(1)(2)
0.0047	3.9	7.5	13.5	10.2	2000	P561HE472(1)300(2)	PME261EA4470(1)(2)
0.0068	3.9	7.5	13.5	10.2	2000	P561HE682(1)300(2)	PME261EA4680(1)(2)
0.01	5.1	10.5	13.5	10.2	2000	P561HL103(1)300(2)	PME261EA5100(1)(2)
0.015	5.1	10.5	13.5	10.2	2000	P561HL153(1)300(2)	PME261EA5150(1)(2)
0.022	5.2	10.5	18.5	15.2	2000	P561QE223(1)300(2)	PME261EB5220(1)(2)
0.033	5.2	10.5	18.5	15.2	2000	P561QE333(1)300(2)	PME261EB5330(1)(2)
0.047	7.3	13.0	18.5	15.2	1600	P561QM473(1)300(2)	PME261EB5470(1)(2)
0.068	7.3	13.0	18.5	15.2	1200	P561QM683(1)300(2)	PME261EB5680(1)(2)
0.1	7.6	14.0	24.0	20.3	900	P561CE104(1)300(2)	PME261EC6100(1)(2)
0.15	9.0	15.0	24.0	20.3	650	P561CJ154(1)300(2)	PME261EC6150(1)(2)
0.001	3.9	7.5	13.5	10.2	2000	P561HE102(1)500(2)	PME261JA4100(1)(2)
0.0015	3.9	7.5	13.5	10.2	2000	P561HE152(1)500(2)	PME261JA4150(1)(2)
0.0022	3.9	7.5	13.5	10.2	2000	P561HE222(1)500(2)	PME261JA4220(1)(2)
0.0033	3.9	7.5	13.5	10.2	2000	P561HE332(1)500(2)	PME261JA4330(1)(2)
0.0047	5.1	10.5	13.5	10.2	2000	P561HL472(1)500(2)	PME261JA4470(1)(2)
0.0068	5.1	10.5	13.5	10.2	2000	P561HL682(1)500(2)	PME261JA4680(1)(2)
0.01	5.2	10.5	18.5	15.2	2000	P561QE103(1)500(2)	PME261JB5100(1)(2)
0.015	5.2	10.5	18.5	15.2	2000	P561QE153(1)500(2)	PME261JB5150(1)(2)
0.022	7.3	13.0	18.5	15.2	2000	P561QM223(1)500(2)	PME261JB5220(1)(2)
0.033	7.8	13.5	18.5	15.2	2000	P561QP333(1)500(2)	PME261JB5330(1)(2)
0.047	7.6	14.0	24.0	20.3	2000	P561CE473(1)500(2)	PME261JC5470(1)(2)
0.068	9.0	15.0	24.0	20.3	1400	P561CJ683(1)500(2)	PME261JC5680(1)(2)
0.1	11.3	16.5	24.0	20.3	950	P561CP104(1)500(2)	PME261JC6100(1)(2)
Cap Value (µF)	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/µs)	New KEMET Part Number	Legacy Part Number

(1) K = ±10%, M = ±20%, J = ±5% on request.

(2) Insert lead and packaging code. See Ordering Options Table for available options.

Soldering Process

The implementation of the RoHS Directive has required the selection SnAuCu (SAC) alloys or SnCu alloys as primary solder. This has increased the liquidus temperature from that of 183°C for SnPb eutectic alloy to 217°C – 221°C for the new alloys. As a result, the heat stress to components, even in wave soldering, has increased considerably due to higher pre-heat and wave temperatures. Wave soldering can be destructive especially for mechanically small polypropylene capacitors and great care must be taken during soldering. The solder profiles from KEMET are highly recommended. You may also refer to the wave soldering curve from IEC Publication 61760–1 Edition 2. Please consult KEMET with any questions.



Marking

- KEMET's logo
- Series
- Capacitance
- Rated voltage AC/DC
- MP for metallized paper
- Manufacturing date code
- IEC climatic category
- Manufacturing plant

Packaging Quantities

Lead Spacing (mm)	Thickness (mm)	Height (mm)	Length (mm)	Bulk Short Leads	Bulk Long Leads	Standard Reel ø 360 mm	Large Reel ø 500 mm	Ammo Formed
10.2	3.9	7.5	13.5	2000	1000	700	1400	800
	4.1	8.2	13.5	2000	1000	600		780
	5.1	10.5	13.5	1600	800	600	1200	630
15.2	5.5	12.5	18	1000	500	600		
	6.5	12.5	18	600	400	400		
	7.5	14.5	18	600	400	400		
	8.5	16	18	400	250	400		
	5.2	10.5	18.5	1000	500	600		
	5.5	11	18.5	1000	500	500		
	6	12.5	18.5	600	400	400		
	7.3	13	18.5	600	400	400	800	
	7.8	13.5	18.5	600	400	400		
	8.5	14.3	18.5	500	300	350		
20.3	7.6	14	24	1500	250	250	500	
	8.4	14	24	1200	200	250	500	
	9	15	24	1500	200	250		
	11.3	16.5	24	1000	150	180	400	
25.4	10.6	16.1	30.5	1000	150			
	10.5	17.3	30.5	1000	100			
	12.1	19	30.5	800	100			
	15.3	22	30.5	600	75			

A50 Series Metallized Polyester Film, Axial, 50 – 1,000 VDC

Overview

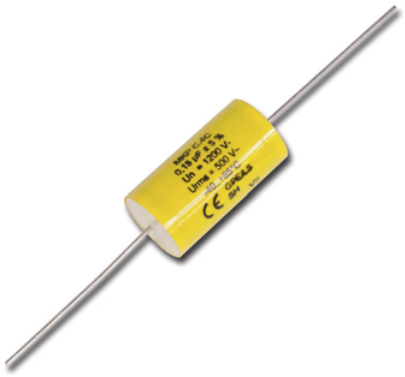
The A50 Series is constructed of metallized wound polyester film and encapsulated in self-extinguishing material meeting the requirements of UL 94 V–0. Protection consists of polyester tape wrapping and thermosetting resin end fill.

Applications

Typical applications include blocking, coupling, decoupling, bypassing and interference suppression in low voltage applications such as automotive. Not for use with the mains.

Benefits

- Voltage range: 50 – 1,000 VDC
- Capacitance range: 0.001 – 10 µF
- Diameter: 5 – 22 mm
- Length: 11 – 33 mm
- Capacitance tolerance: ±5%, ±10%, ±20%
- Climatic category: 55/105/56
- RoHS Compliant and lead-free terminations
- Tape and reel packaging in accordance with IEC 60286–1
- Operating temperature range of -55˚C to +105˚C



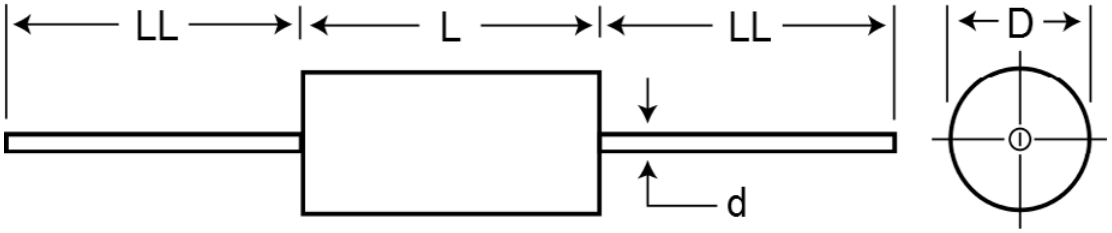
Part Number System

A50	C	F	3470	AA	00	J
Series	Rated Voltage (VDC)	Length (mm)	Capacitance Code (pF)	Lead and Packaging Code	Internal Use	Capacitance Tolerance
Metallized Polyester	C = 50 D = 63 E = 100 I = 250 M = 400 W = 500 P = 630	F = 11 H= 14 K = 20.5 Q = 28 T = 33	Digits 2 – 4 indicate the first three digits of the capacitance value. First digit indicates the number of zeros to be added.	See Ordering Options Table	00, 60 (Standard)	J = ±5% K = ±10% M = ±20%

Ordering Options Table

Type of Leads and Packaging	Lead Length (mm)	Lead and Packaging Code
Standard Lead and Packaging Options		
Bulk (Bag) – Straight Leads	40 +/-5	AA
Tape & Reel (Standard Reel)		26

Dimensions – Millimeters



D		L		d	
Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance
5.0	Maximum	11.0	Maximum	0.6	+/-0.05
5.0	Maximum	14.0	Maximum	0.6	+/-0.05
5.5	Maximum	14.0	Maximum	0.6	+/-0.05
6.0	Maximum	14.0	Maximum	0.6	+/-0.05
6.0	Maximum	20.5	Maximum	0.6	+/-0.05
6.5	Maximum	11.0	Maximum	0.6	+/-0.05
6.5	Maximum	20.5	Maximum	0.6	+/-0.05
6.5	Maximum	14.0	Maximum	0.6	+/-0.05
7.0	Maximum	14.0	Maximum	0.8	+/-0.05
7.0	Maximum	20.5	Maximum	0.8	+/-0.05
7.0	Maximum	28.0	Maximum	0.8	+/-0.05
7.5	Maximum	20.5	Maximum	0.8	+/-0.05
7.5	Maximum	14.0	Maximum	0.8	+/-0.05
8.0	Maximum	14.0	Maximum	0.8	+/-0.05
8.0	Maximum	20.5	Maximum	0.8	+/-0.05
8.0	Maximum	28.0	Maximum	0.8	+/-0.05
8.5	Maximum	20.5	Maximum	0.8	+/-0.05
8.5	Maximum	28.0	Maximum	0.8	+/-0.05
9.0	Maximum	20.5	Maximum	0.8	+/-0.05
9.0	Maximum	28.0	Maximum	0.8	+/-0.05
9.5	Maximum	20.5	Maximum	0.8	+/-0.05
9.5	Maximum	28.0	Maximum	0.8	+/-0.05
10.0	Maximum	20.5	Maximum	0.8	+/-0.05

Note: See Ordering Options Table for lead length (LL) options.

D		L		d	
Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance
10.0	Maximum	33.0	Maximum	0.8	+/-0.05
10.0	Maximum	28.0	Maximum	0.8	+/-0.05
10.5	Maximum	33.0	Maximum	0.8	+/-0.05
10.5	Maximum	28.0	Maximum	0.8	+/-0.05
11.0	Maximum	28.0	Maximum	0.8	+/-0.05
11.0	Maximum	33.0	Maximum	0.8	+/-0.05
11.5	Maximum	33.0	Maximum	0.8	+/-0.05
12.0	Maximum	20.5	Maximum	0.8	+/-0.05
12.0	Maximum	33.0	Maximum	0.8	+/-0.05
12.5	Maximum	33.0	Maximum	0.8	+/-0.05
12.5	Maximum	28.0	Maximum	0.8	+/-0.05
13.0	Maximum	33.0	Maximum	0.8	+/-0.05
13.5	Maximum	33.0	Maximum	0.8	+/-0.05
14.5	Maximum	33.0	Maximum	0.8	+/-0.05
15.0	Maximum	33.0	Maximum	0.8	+/-0.05
15.5	Maximum	33.0	Maximum	0.8	+/-0.05
16.0	Maximum	33.0	Maximum	0.8	+/-0.05
17.5	Maximum	33.0	Maximum	1	+/-0.05
18.5	Maximum	33.0	Maximum	1	+/-0.05
19.0	Maximum	33.0	Maximum	1	+/-0.05
22.0	Maximum	33.0	Maximum	1	+/-0.05

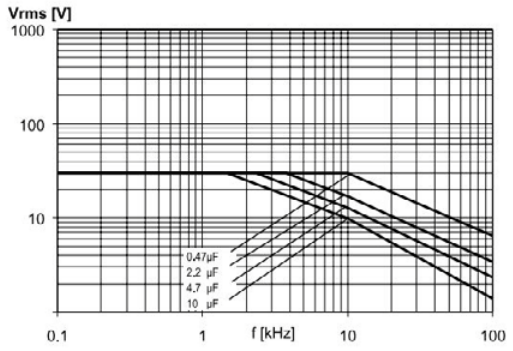
Note: See Ordering Options Table for lead length (LL) options.

Performance Characteristics

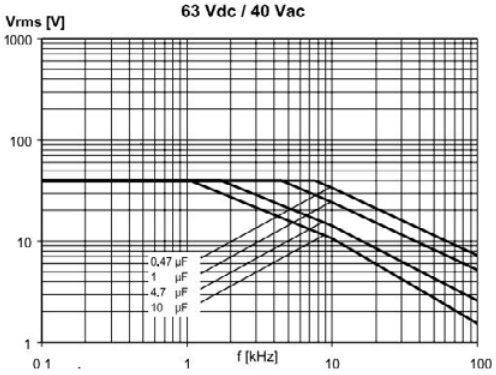
Rated Voltage V_R (VDC)	50	63	100	250	400	630	1000
Rated Voltage V_R (VAC)	30	40	63	160	200	220	250
Capacitance Range (µF)	0.47 – 10.0	0.33 – 10.0	0.1 – 10.0	0.047 – 10.0	0.01 – 3.3	0.001 – 1	0.001 – 0.47
Capacitance Tolerance	±5%, ±10%, ±20%						
Temperature Range	-55°C to 105°C						
Rated Temperature	+85°C						
Voltage Derating	Above +85°C DC and AC voltage derating is 1.25%/°C						
Climatic Category	55/105/56						
Self-Inductance	Maximum 1 nH per 1 mm lead and capacitor length						
Dissipation Factor	Measured at 25°C ±5°C						
		C ≤ 0.1 µF		0.1 µF < C ≤ 1 µF		C > 1 µF	
	1 kHz	0.80%		0.80%		1.00%	
	10 kHz	1.50%		1.50%			
	100 kHz	2.50%					
Insulation Resistance	Minimum Values Between Terminals						
			C ≤ 0.33 µF		C > 0.33 µF		
	V_R ≤ 100 VDC		3750 MΩ		1,000 MΩ • µF		
	V_R > 100 VDC		30,000 MΩ		10,000 MΩ • µF		
Test Voltage Between Terminals	1.6 x V_R applied for 2 seconds at 25°C ±5°C						

Maximum Voltage (V_{rms}) vs. Frequency (Sinusoidal Waveform/T ≤ +40ºC)

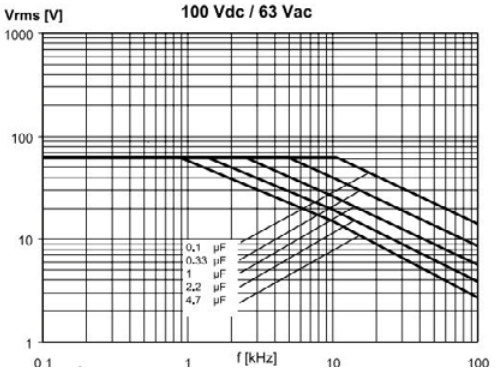
50 Vdc / 30 Vac



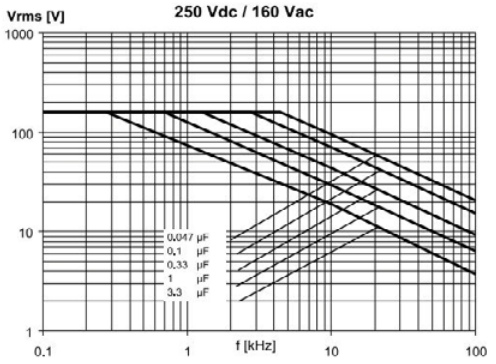
63 Vdc / 40 Vac



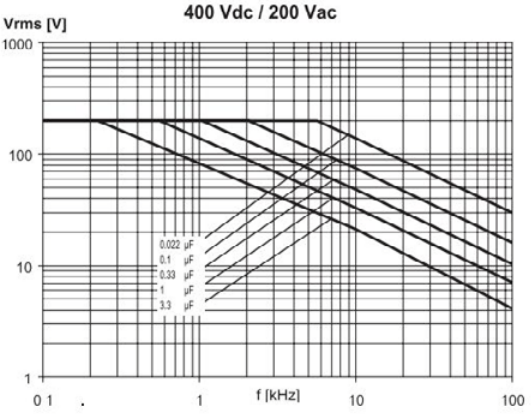
100 Vdc / 63 Vac



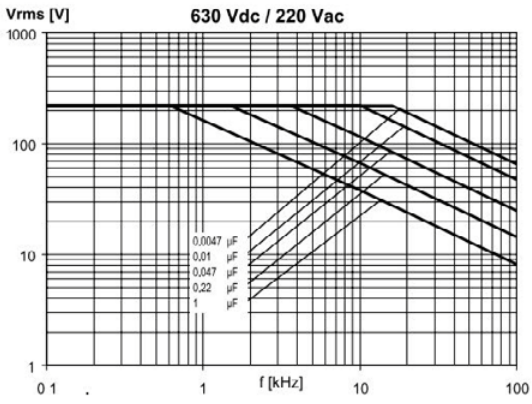
250 Vdc / 160 Vac



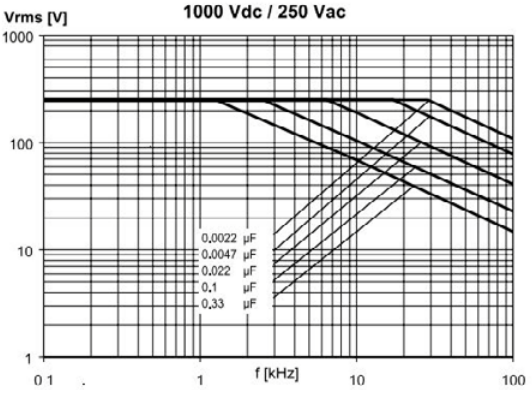
400 Vdc / 200 Vac



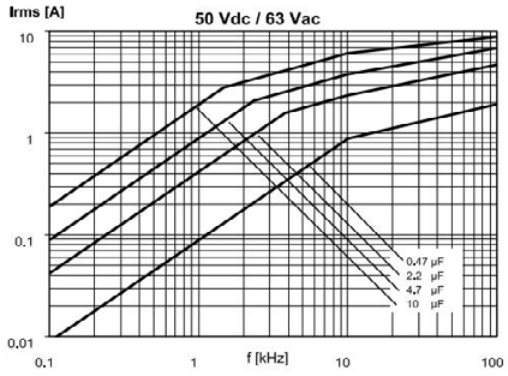
630 Vdc / 220 Vac

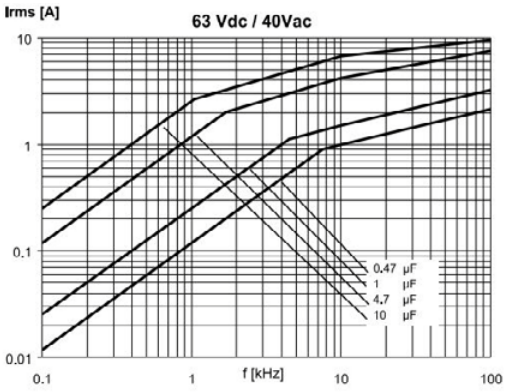


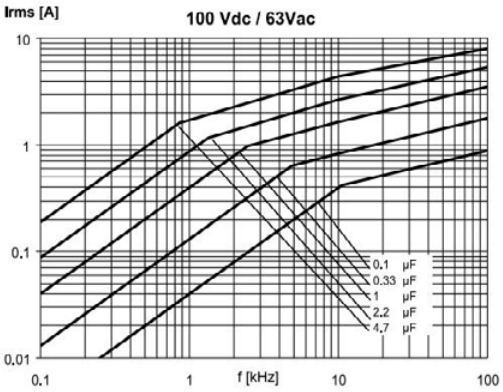
1000 Vdc / 250 Vac

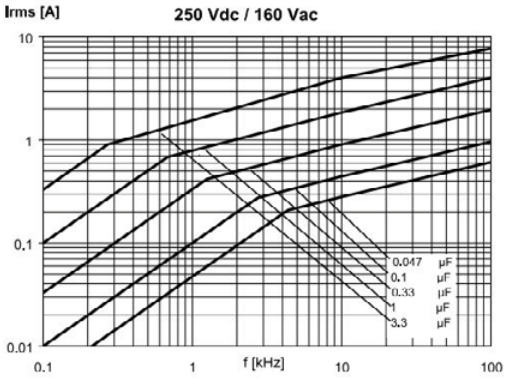


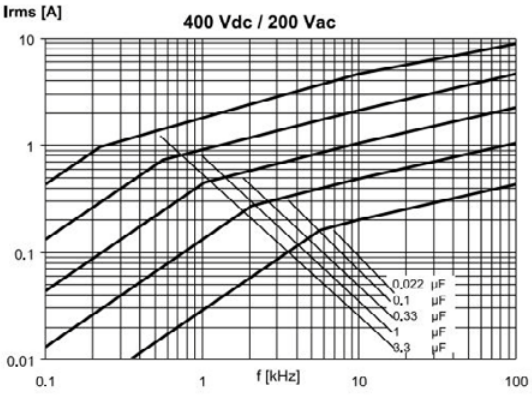
Maximum Current (I_{rms}) vs. Frequency (Sinusoidal Waveform/T ≤ +40ºC)

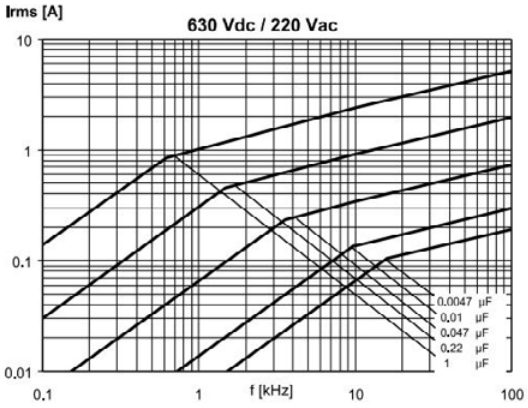


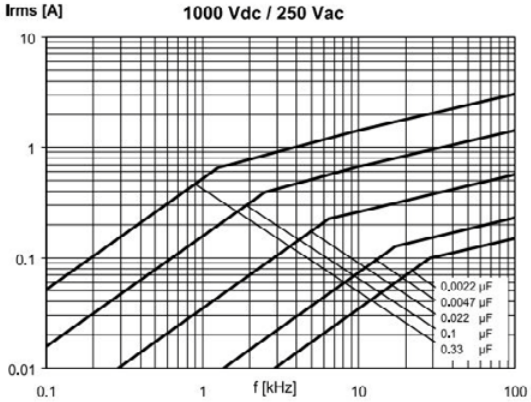












Environmental Test Data

Damp Heat, Steady State	
Test Conditions	
Temperature	+40°C ±2°C
Relative Humidity (RH)	93% ±2%
Test Duration	56 days
Performance	
Capacitance Change	Δ C/C ≤ 5%
DF Change (Δ tgδ)	≤ 50 x 10^{-4} at 1 kHz
Insulation Resistance	≥ 50% of initial limit
Endurance	
Test Conditions	
Temperature	+85°C ±2°C
Test Duration	2,000 hours
Voltage Applied	1.25 x V_R
Performance	
Capacitance Change	Δ C/C ≤ 5%
DF Change (Δ tgδ)	≤ 30 x 10^{-4} at 10 kHz for C ≤ 1 µF
	≤ 20 x 10^{-4} at 1 kHz for C > 1 µF
Insulation Resistance	≥ 50% of initial limit
Resistance to Soldering Heat	
Test Conditions	
Solder Bath Temperature	+260°C ±5°C
Dipping Time (with heat screen)	10 seconds ±1 second
Performance	
Capacitance Change	Δ C/C ≤2%
DF Change (Δ tgδ)	≤ 30 x 10^{-4} at 10 kHz for C ≤ 1 µF
	≤ 20 x 10^{-4} at 1 kHz for C > 1 µF
Insulation Resistance	≥ initial limit

Environmental Compliance

All KEMET pulse capacitors are RoHS Compliant.

RoHS Compliant

Table 1 – Ratings & Part Number Reference

VDC	VAC	Cap Value (µF)	Dimensions in mm		dV/dt (V/µs)	Max K_0 (V^2/µs)	New KEMET Part Number	Legacy Part Number
			D	L				
50	30	0.47	5.0	11.0	4.0	400	50CF3470(1)00(2)	A50CF3470(1)00(2)
50	30	0.68	5.0	11.0	4.0	400	50CF3680(1)00(2)	A50CF3680(1)00(2)
50	30	1.0	6.5	11.0	4.0	400	50CF4100(1)00(2)	A50CF4100(1)00(2)
50	30	1.5	7.0	14.0	4.0	400	50CH4150(1)00(2)	A50CH4150(1)00(2)
50	30	2.2	8.0	14.0	4.0	400	50CH4220(1)00(2)	A50CH4220(1)00(2)
50	30	3.3	7.5	20.5	2.0	200	50CK4330(1)00(2)	A50CK4330(1)00(2)
50	30	4.7	8.5	20.5	2.0	200	50CK4470(1)00(2)	A50CK4470(1)00(2)
50	30	6.8	10.0	20.5	2.0	200	50CK4680(1)00(2)	A50CK4680(1)00(2)
50	30	10.0	12.0	20.5	2.0	200	50CK5100(1)00(2)	A50CK5100(1)00(2)
63	40	0.33	5.0	11.0	4.0	500	50DF3330(1)60(2)	A50DF3330(1)60(2)
63	40	0.47	6.0	14.0	4.0	500	50DH3470(1)60(2)	A50DH3470(1)60(2)
63	40	0.68	6.0	14.0	4.0	500	50DH3680(1)60(2)	A50DH3680(1)60(2)
63	40	1.0	7.0	14.0	4.0	500	50DH4100(1)60(2)	A50DH4100(1)60(2)
63	40	1.5	6.5	20.5	2.0	250	50DK4150(1)60(2)	A50DK4150(1)60(2)
63	40	2.2	8.0	20.5	2.0	250	50DK4220(1)60(2)	A50DK4220(1)60(2)
63	40	3.3	9.5	20.5	2.0	250	50DK4330(1)60(2)	A50DK4330(1)60(2)
63	40	4.7	9.5	28.0	1.5	190	50DQ4470(1)60(2)	A50DQ4470(1)60(2)
63	40	6.8	11.0	28.0	1.5	190	50DQ4680(1)60(2)	A50DQ4680(1)60(2)
63	40	10.0	11.5	33.0	1.0	130	50DT5100(1)60(2)	A50DT5100(1)60(2)
100	63	0.10	5.0	11.0	5.0	1000	50EF3100(1)60(2)	A50EF3100(1)60(2)
100	63	0.15	5.0	11.0	5.0	1000	50EF3150(1)60(2)	A50EF3150(1)60(2)
100	63	0.22	5.0	11.0	5.0	1000	50EF3220(1)60(2)	A50EF3220(1)60(2)
100	63	0.33	6.0	14.0	5.0	1000	50EH3330(1)60(2)	A50EH3330(1)60(2)
100	63	0.47	6.0	14.0	5.0	1000	50EH3470(1)60(2)	A50EH3470(1)60(2)
100	63	0.68	7.0	14.0	5.0	1000	50EH3680(1)60(2)	A50EH3680(1)60(2)
100	63	1.0	7.0	20.5	3.0	600	50EK4100(1)60(2)	A50EK4100(1)60(2)
100	63	1.5	8.0	20.5	3.0	600	50EK4150(1)60(2)	A50EK4150(1)60(2)
100	63	2.2	9.5	20.5	3.0	600	50EK4220(1)60(2)	A50EK4220(1)60(2)
100	63	3.3	9.5	28.0	2.0	400	50EQ4330(1)60(2)	A50EQ4330(1)60(2)
100	63	4.7	10.0	33.0	1.0	300	50ET4470(1)60(2)	A50ET4470(1)60(2)
100	63	6.8	12.0	33.0	1.0	300	50ET4680(1)60(2)	A50ET4680(1)60(2)
100	63	10.0	14.5	33.0	1.0	300	50ET5100(1)60(2)	A50ET5100(1)60(2)
250	160	0.047	5.0	11.0	10.0	5000	50IF2470(1)60(2)	A50IF2470(1)60(2)
250	160	0.068	5.0	11.0	10.0	5000	50IF2680(1)60(2)	A50IF2680(1)60(2)
250	160	0.10	5.5	14.0	10.0	5000	50IH3100(1)60(2)	A50IH3100(1)60(2)
250	160	0.15	5.5	14.0	10.0	5000	50IH3150(1)60(2)	A50IH3150(1)60(2)
250	160	0.22	6.5	14.0	10.0	5000	50IH3220(1)60(2)	A50IH3220(1)60(2)
250	160	0.33	6.0	20.5	7.0	3500	50IK3330(1)60(2)	A50IK3330(1)60(2)
250	160	0.47	7.0	20.5	7.0	3500	50IK3470(1)60(2)	A50IK3470(1)60(2)
250	160	0.68	8.5	20.5	7.0	3500	50IK3680(1)60(2)	A50IK3680(1)60(2)
250	160	1.0	8.5	28.0	4.0	2000	50IQ4100(1)60(2)	A50IQ4100(1)60(2)
250	160	1.5	10.0	28.0	4.0	2000	50IQ4150(1)60(2)	A50IQ4150(1)60(2)
250	160	2.2	11.0	33.0	2.5	1300	50IT4220(1)60(2)	A50IT4220(1)60(2)
250	160	3.3	13.0	33.0	2.5	1300	50IT4330(1)60(2)	A50IT4330(1)60(2)
250	160	4.7	15.5	33.0	2.5	1300	50IT4470(1)60(2)	A50IT4470(1)60(2)
250	160	6.8	18.5	33.0	2.5	1300	50IT4680(1)60(2)	A50IT4680(1)60(2)
250	160	10.0	22.0	33.0	2.5	1300	50IT5100(1)60(2)	A50IT5100(1)60(2)
400	200	0.010	5.0	11.0	13.5	11000	50MF2100(1)60(2)	A50MF2100(1)60(2)
400	200	0.015	5.0	11.0	13.5	11000	50MF2150(1)60(2)	A50MF2150(1)60(2)
400	200	0.022	5.0	11.0	13.5	11000	50MF2220(1)60(2)	A50MF2220(1)60(2)
400	200	0.033	5.0	11.0	13.5	11000	50MF2330(1)60(2)	A50MF2330(1)60(2)
400	200	0.047	6.0	14.0	13.5	11000	50MH2470(1)60(2)	A50MH2470(1)60(2)
400	200	0.068	6.0	14.0	13.5	11000	50MH2680(1)60(2)	A50MH2680(1)60(2)
400	200	0.10	6.5	14.0	13.5	11000	50MH3100(1)60(2)	A50MH3100(1)60(2)
400	200	0.15	6.0	20.5	10.0	8000	50MK3150(1)60(2)	A50MK3150(1)60(2)
400	200	0.22	7.5	20.5	10.0	8000	50MK3220(1)60(2)	A50MK3220(1)60(2)
400	200	0.33	8.5	20.5	10.0	8000	50MK3330(1)60(2)	A50MK3330(1)60(2)
400	200	0.47	8.5	28.0	6.5	5200	50MQ3470(1)60(2)	A50MQ3470(1)60(2)
400	200	0.68	10.0	28.0	6.5	5200	50MQ3680(1)60(2)	A50MQ3680(1)60(2)
400	200	1.0	10.5	33.0	4.0	3200	50MT4100(1)60(2)	A50MT4100(1)60(2)
VDC	VAC	Cap Value (µF)	D (mm)	L (mm)	dV/dt (V/µs)	Max K_0 (V^2/µs)	New KEMET Part Number	Legacy Part Number

(1) Insert lead and packaging code. See Ordering Options Table for available options.
(2) J = 5%, K = 10%, M = 20%.

Roll Over for Order Info.

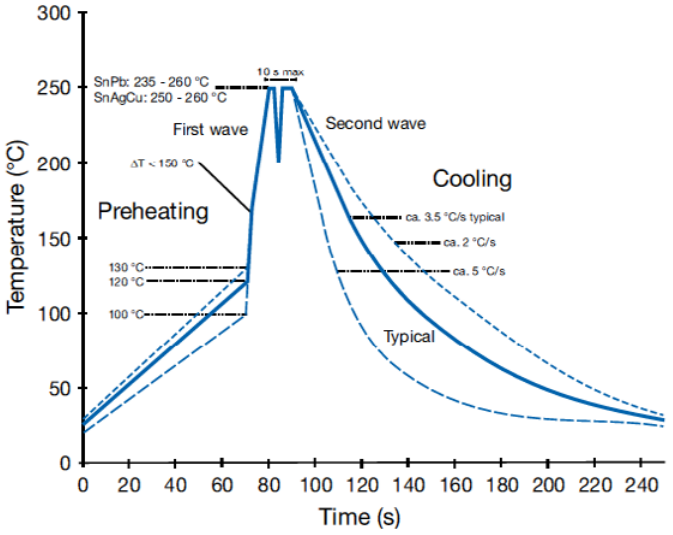
Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Cap Value (µF)	Dimensions in mm		dV/dt (V/µs)	Max K_0 (V^2/µs)	New KEMET Part Number	Legacy Part Number
			D	L				
400	200	1.5	12.5	33.0	4.0	3200	50MT4150(1)60(2)	A50MT4150(1)60(2)
400	200	2.2	15.0	33.0	4.0	3200	50MT4220(1)60(2)	A50MT4220(1)60(2)
400	200	3.3	18.5	33.0	4.0	3200	50MT4330(1)60(2)	A50MT4330(1)60(2)
630	220	0.001	5.0	11.0	20	250000	50PF1100(1)60(2)	A50PF1100(1)60(2)
630	220	0.0015	5.0	11.0	20	250000	50PF1150(1)60(2)	A50PF1150(1)60(2)
630	220	0.0022	5.0	11.0	20	250000	50PF1220(1)60(2)	A50PF1220(1)60(2)
630	220	0.0033	5.0	11.0	20	250000	50PF1330(1)60(2)	A50PF1330(1)60(2)
630	220	0.0047	5.0	11.0	20	250000	50PF1470(1)60(2)	A50PF1470(1)60(2)
630	220	0.0068	5.0	11.0	20	250000	50PF1680(1)60(2)	A50PF1680(1)60(2)
630	220	0.010	5.0	14.0	20	250000	50PH2100(1)60(2)	A50PH2100(1)60(2)
630	220	0.015	5.0	14.0	20	250000	50PH2150(1)60(2)	A50PH2150(1)60(2)
630	220	0.022	6.0	14.0	20	250000	50PH2220(1)60(2)	A50PH2220(1)60(2)
630	220	0.033	6.0	20.5	15	190000	50PK2330(1)60(2)	A50PK2330(1)60(2)
630	220	0.047	6.0	20.5	15	190000	50PK2470(1)60(2)	A50PK2470(1)60(2)
630	220	0.068	7.0	20.5	15	190000	50PK2680(1)60(2)	A50PK2680(1)60(2)
630	220	0.10	7.0	28.0	10	130000	50PQ3100(1)60(2)	A50PQ3100(1)60(2)
630	220	0.15	8.5	28.0	10	130000	50PQ3150(1)60(2)	A50PQ3150(1)60(2)
630	220	0.22	10.0	28.0	10	130000	50PQ3220(1)60(2)	A50PQ3220(1)60(2)
630	220	0.33	10.5	33.0	6	7500	50PT3330(1)60(2)	A50PT3330(1)60(2)
630	220	0.47	12.0	33.0	6	7500	50PT3470(1)60(2)	A50PT3470(1)60(2)
630	220	0.68	14.5	33.0	6	7500	50PT3680(1)60(2)	A50PT3680(1)60(2)
630	220	1.0	17.5	33.0	6	7500	50PT4100(1)60(2)	A50PT4100(1)60(2)
1000	250	0.001	6.5	14.0	50	100000	50QH1100(1)00(2)	A50QH1100(1)00(2)
1000	250	0.0015	6.5	14.0	50	100000	50QH1150(1)00(2)	A50QH1150(1)00(2)
1000	250	0.0022	6.5	14.0	50	100000	50QH1220(1)00(2)	A50QH1220(1)00(2)
1000	250	0.0033	6.5	14.0	50	100000	50QH1330(1)00(2)	A50QH1330(1)00(2)
1000	250	0.0047	7.5	14.0	50	100000	50QH1470(1)00(2)	A50QH1470(1)00(2)
1000	250	0.0068	8.0	14.0	50	100000	50QH1680(1)00(2)	A50QH1680(1)00(2)
1000	250	0.010	7.0	20.5	30	60000	50QK2100(1)00(2)	A50QK2100(1)00(2)
1000	250	0.015	7.5	20.5	30	60000	50QK2150(1)00(2)	A50QK2150(1)00(2)
1000	250	0.022	9.0	20.5	30	60000	50QK2220(1)00(2)	A50QK2220(1)00(2)
1000	250	0.033	8.0	28.0	15	30000	50QQ2330(1)00(2)	A50QQ2330(1)00(2)
1000	250	0.047	9.0	28.0	15	30000	50QQ2470(1)00(2)	A50QQ2470(1)00(2)
1000	250	0.068	10.5	28.0	15	30000	50QQ2680(1)00(2)	A50QQ2680(1)00(2)
1000	250	0.10	12.5	28.0	15	30000	50QQ3100(1)00(2)	A50QQ3100(1)00(2)
1000	250	0.15	13.5	33.0	10	20000	50QT3150(1)00(2)	A50QT3150(1)00(2)
1000	250	0.22	16.0	33.0	10	20000	50QT3220(1)00(2)	A50QT3220(1)00(2)
1000	250	0.33	19.0	33.0	10	20000	50QT3330(1)00(2)	A50QT3330(1)00(2)
1000	250	0.47	22.0	33.0	10	20000	50QT3470(1)00(2)	A50QT3470(1)00(2)
VDC	VAC	Cap Value (µF)	D (mm)	L (mm)	dV/dt (V/µs)	Max K_0 (V^2/µs)	New KEMET Part Number	Legacy Part Number

(1) Insert lead and packaging code. See Ordering Options Table for available options.
(2) J = 5%, K = 10%, M = 20%.

Soldering Process

The implementation of the RoHS Directive has required the selection SnAuCu (SAC) alloys or SnCu alloys as primary solder. This has increased the liquidus temperature from that of 183ºC for SnPb eutectic alloy to 217ºC – 221ºC for the new alloys. As a result, the heat stress to components, even in wave soldering, has increased considerably due to higher pre-heat and wave temperatures. Polypropylene capacitors are especially sensitive to heat (melting point of polypropylene is 160ºC – 170ºC). Wave soldering can be destructive especially for mechanically small polypropylene capacitors and great care must be taken during soldering. The solder profiles from KEMET are highly recommended. You may also refer to the wave soldering curve from IEC Publication 61760–1 Edition 2. Please consult KEMET with any questions.



Marking

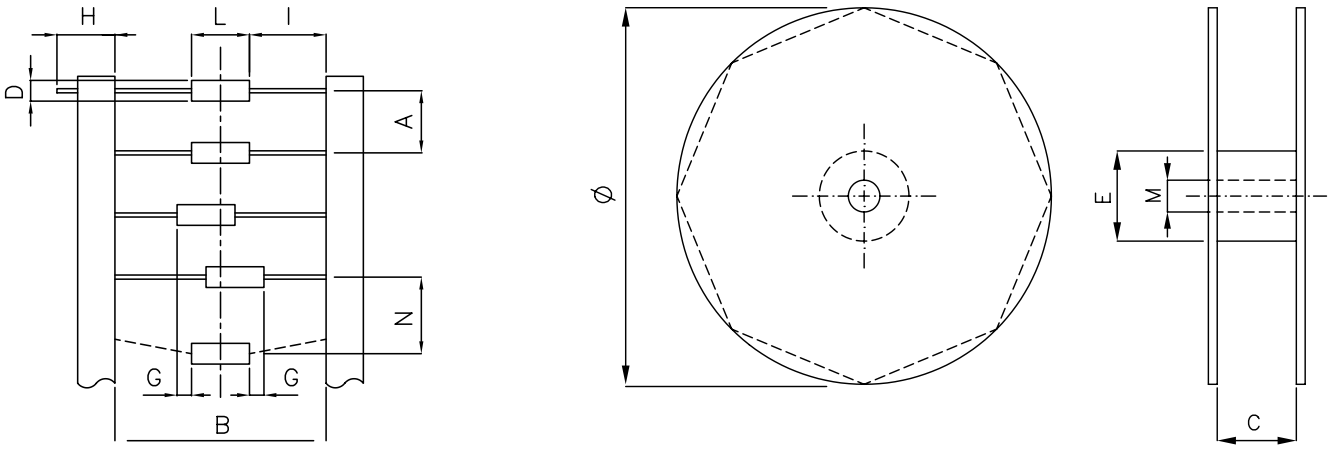
- KEMET's logo
- Series
- Dielectric code MKT
- Capacitance
- Capacitance tolerance
- Rated DC voltage

Packaging Quantities

Diameter	Length	Bulk Long Leads	Standard Reel ø 355 mm
5	11	1500	3000
6.5	11	1200	1300
5	14	1500	3000
5.5	14	1500	1500
6	14	1200	1300
6.5	14	1200	1300
7	14	1500	1000
7.5	14	1500	1000
8	14	1250	900
6	20.5	1500	1300
6.5	20.5	1250	1200
7	20.5	1250	1100
7.5	20.5	1000	1000
8	20.5	1000	900
8.5	20.5	750	800
9	20.5	750	800
9.5	20.5	750	600
10	20.5	750	600
12	20.5	500	400
7	28	750	1000
8	28	500	900
8.5	28	500	800

Diameter	Length	Bulk Long Leads	Standard Reel ø 355 mm
9	28	500	800
9.5	28	500	600
10	28	500	600
10.5	28	500	400
11	28	500	400
12.5	28	300	400
10	33	400	400
10.5	33	400	400
11	33	400	400
11.5	33	400	400
12	33	300	400
12.5	33	300	400
13	33	300	400
13.5	33	300	300
14.5	33	300	300
15	33	300	300
15.5	33	200	250
16	33	200	250
17.5	33	200	200
18.5	33	150	150
19	33	150	150
22	33	100	

Lead Taping & Packaging (IEC 60286–1)



Taping Specification

Description	Symbol	Dimensions (mm)
Component diameter	D	4.5 – 19.5
Body length	L	11 – 33
Component lead spacing	A(1)	See Table 1
Reel core diameter	E	85
Arbor hole diameter	M	30
Reel diameter	ø	355 maximum
Tape width	H	6 ± 0.5/9 ± 1(2)
Body location (lateral deviation)	G	≤ 0.7
Body location (longitudinal deviation)	N	≤ 1.2
Tape spacing	B	See Table 2
Lead length from the component body to the adhesive tape	I	≥ 20
Distance between reel flanges	C	See Table 2

(1) Maximum cumulative feed hole error; 1.5 mm per 6 parts.
(2) 9 ±1 for capacitor with L ≥ 31.5.

Table 1

Dimensions in mm	
Diameter	$A^{\pm 0.5}$
≤ 5	5
5.1 – 9.5	10
9.6 – 14.7	15
14.8 – 19.5	15

Table 2

Dimensions in mm			
Length	Class	$B^{\pm 1.5}$	C
≤ 11	I	52.4	75
14 – 20.5	II	63.6	86
≥ 26	III	73	98

SMR Series Metallized Polyphenylene Sulfide Film, +150°C, 5.0 – 27.5 mm Lead Spacing, 50 – 400 VDC

Overview

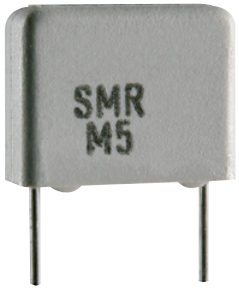
The SMR Series is a metallized polyphenylene sulfide film capacitor with vacuum-evaporated aluminum electrodes. Radial leads of tinned wire are electrically welded to the contact metal layer on the ends of the capacitor winding. The capacitor is encapsulated in self-extinguishing material meeting the requirements of UL 94 V–0.

Applications

Typical applications include automotive and other applications with high ambient temperatures, as well as those requiring high stability and low losses. The capacitor offers excellent sound quality in audio applications.

Benefits

- Voltage range: 50 – 400 VDC; 30 – 200 VAC
- Capacitance range: 0.001 – 22 µF
- Lead spacing: 5 – 27.5 mm
- Capacitance tolerance: ±10%, ±20%, ±2.5% and ±5% on request
- Climatic category: 55/150/56, IEC 60068–1
- Tape and reel packaging in accordance with IEC 60286–2
- RoHS Compliant and lead-free terminations
- Category temperature range -55 to +150°C
- Rated temperature +125°C



Legacy Part Number System

SMR	5	104	K	50	J01	L4	BULK
Series	Lead Spacing (mm)	Capacitance Code (pF)	Capacitance Tolerance	Rated Voltage (VDC)	Size Code	Lead Length	Lead and Packaging Code
Metallized PPS	5 = 5.0 7.5 = 7.5 10 = 10.0 15 = 15.0 22.5 = 22.5 27.5 = 27.5	First two digits indicate the two most significant digits of the capacitance value in picofarads. The third digit is the number of following zeros.	H = ±2.5% J = ±5% K = ±10% M = ±20%	50 = 50 63 = 63 100 = 100 250 = 250 400 = 400	See Dimension Table	Letter "L" followed by lead length in mm	See Ordering Options Table

New KEMET Part Number System

F	211	J	F	104	K	050	C
Capacitor Class	Series	Lead Spacing (mm)	Size Code	Capacitance Code (pF)	Capacitance Tolerance	Rated Voltage (VDC)	Lead and Packaging Code
F = Film	Metallized PPS	J = 5.0 K = 7.5 A = 10.0 B = 15.0 D = 22.5 F = 27.5	See Dimension Table	First two digits indicate the two most significant digits of the capacitance value in picofarads. The third digit is the number of following zeros.	R = ±2.5% J = ±5% K = ±10% M = ±20%	050 = 50 063 = 63 100 = 100 250 = 250 400 = 400	See Ordering Options Table

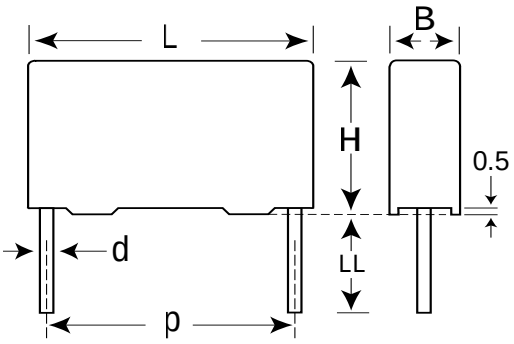
Ordering Options Table

Lead Spacing Nominal (mm)	Type of Leads and Packaging	Lead Length (mm)	KEMET Lead and Packaging Code	Legacy Lead and Packaging Code
5	Standard Lead and Packaging Options			
	Bulk (Bag) – Short Leads	4.0 -0/+2	C	L4BULK
	Bulk (Bag) – Straight Leads	17 -1/+0	A	L17
	Tape & Reel (Standard Reel)	H_0 = 18.5 +/-0.5	L	TR18
	Other Lead and Packaging Options			
	Bulk (Bag) – Max Length Leads	20 -0/+5	ALL0L	L20
	Ammo Pack	H_0 = 18.5 +/-0.5	R	TA18
	Tape & Reel (Large Reel)	H_0 = 18.5 +/-0.5	P	LR18
7.5	Standard Lead and Packaging Options			
	Bulk (Bag) – Short Leads	4.0 -0/+2	C	L4BULK
	Bulk (Bag) – Straight Leads	17 -1/+0	A	L17
	Tape & Reel (Standard Reel)	H_0 = 18.5 +/-0.5	L	TR18
	Other Lead and Packaging Options			
	Bulk (Bag) – Max Length Leads	20 -0/+5	ALL0L	L20
	Ammo Pack	H_0 = 18.5 +/-0.5	R	TA18
	Tape & Reel (Large Reel)	H_0 = 18.5 +/-0.5	P	LR18
	Ammo Pack (P_0 = 15 mm)	H_0 = 18.5 +/-0.5	XLAF1	XA18
10	Standard Lead and Packaging Options			
	Bulk (Bag) – Short Leads	4.0 -0/+2	C	L4BULK
	Bulk (Bag) – Straight Leads	17 -1/+0	A	L17
	Tape & Reel (Standard Reel)	H_0 = 18.5 +/-0.5	L	TR18
	Other Lead and Packaging Options			
	Bulk (Bag) – Max Length Leads	20 -0/+5	ALL0L	L20
	Tape & Reel (Large Reel)	H_0 = 18.5 +/-0.5	P	LR18
Native 10 formed to 7.5	Ammo Pack	H_0 = 18.5 +/-0.5	XLAF1	XA16
	Tape & Reel (Standard Reel)	H_0 = 18.5 +/-0.5	XLTF1	XR18
15	Standard Lead and Packaging Options			
	Bulk (Bag) – Short Leads	4.0 -0/+2	C	L4BULK
	Bulk (Bag) – Straight Leads	17 -1/+0	A	L17
	Tape & Reel (Standard Reel)	H_0 = 18.5 +/-0.5	L	TR18
	Other Lead and Packaging Options			
	Bulk (Bag) – Max Length Leads	25 -0/+5	ALR0L	L25
	Tape & Reel (Large Reel)	H_0 = 18.5 +/-0.5	P	LR18
Native 15 formed to 7.5	Ammo Pack	H_0 = 18.5 +/-0.5	XLAF1	XA16
	Tape & Reel (Standard Reel)	H_0 = 18.5 +/-0.5	XLTF1	XR18

Ordering Options Table cont'd

Lead Spacing Nominal (mm)	Type of Leads and Packaging	Lead Length (mm)	KEMET Lead and Packaging Code	Legacy Lead and Packaging Code
22.5	Standard Lead and Packaging Options			
	Bulk (Tray) – Short Leads	4.0 -0/+2	C	L4TRAY
	Bulk (Tray) – Straight Leads	17 -1/+0	L	L17TRAY
27.5	Standard Lead and Packaging Options			
	Bulk (Tray) – Short Leads	4.0 -0/+2	C	L4TRAY
	Bulk (Tray) – Straight Leads	17 -1/+0	L	L17TRAY

Dimensions – Millimeters



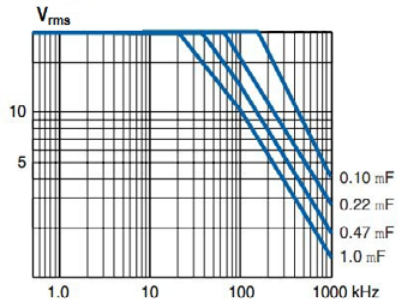
KEMET Size Code	Legacy Size Code	p		B		H		L		d	
		Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance
JF	J01	5	+/-0.4	2.5	Maximum	6.5	Maximum	7.2	Maximum	0.8	+/-0.05
JJ	J02	5	+/-0.4	3.5	Maximum	8	Maximum	7.2	Maximum	0.5	+/-0.05
JL	J03	5	+/-0.4	4.5	Maximum	9	Maximum	7.2	Maximum	0.5	+/-0.05
JQ	J04	5	+/-0.4	5	Maximum	10	Maximum	7.2	Maximum	0.5	+/-0.05
JT	J05	5	+/-0.4	6	Maximum	11	Maximum	7.2	Maximum	0.5	+/-0.05
JU	J06	5	+/-0.4	7.2	Maximum	13	Maximum	7.2	Maximum	0.5	+/-0.05
KG	K01	7.5	+/-0.4	4	Maximum	8	Maximum	10	Maximum	0.6	+/-0.05
KK	K03	7.5	+/-0.4	5	Maximum	11	Maximum	10	Maximum	0.6	+/-0.05
KM	K04	7.5	+/-0.4	6	Maximum	12	Maximum	10.5	Maximum	0.6	+/-0.05
AG	A01	10	+/-0.4	4	Maximum	9	Maximum	13	Maximum	0.6	+/-0.05
AH	A02	10	+/-0.4	4.5	Maximum	10.5	Maximum	13	Maximum	0.6	+/-0.05
AK	A03	10	+/-0.4	5	Maximum	11	Maximum	13	Maximum	0.6	+/-0.05
AP	A04	10	+/-0.4	6	Maximum	12	Maximum	13	Maximum	0.6	+/-0.05
BD	B04	15	+/-0.4	5.5	Maximum	10.5	Maximum	18	Maximum	0.8	+/-0.05
BE	B05	15	+/-0.4	5.5	Maximum	12.5	Maximum	18	Maximum	0.8	+/-0.05
BL	B06	15	+/-0.4	7.5	Maximum	14.5	Maximum	18	Maximum	0.8	+/-0.05
BJ	B10	15	+/-0.4	6.5	Maximum	12.5	Maximum	18	Maximum	0.8	+/-0.05
BQ	B11	15	+/-0.4	8.5	Maximum	16	Maximum	18	Maximum	0.8	+/-0.05
BM	B12	15	+/-0.4	8	Maximum	15	Maximum	18	Maximum	0.8	+/-0.05
BV	B14	15	+/-0.4	9.5	Maximum	17.5	Maximum	18	Maximum	0.8	+/-0.05
DD	D13	22.5	+/-0.4	6.5	Maximum	14.5	Maximum	26	Maximum	0.8	+/-0.05
DH	D14	22.5	+/-0.4	8	Maximum	16	Maximum	26	Maximum	0.8	+/-0.05
DM	D15	22.5	+/-0.4	9	Maximum	18.5	Maximum	26	Maximum	0.8	+/-0.05
DT	D16	22.5	+/-0.4	11	Maximum	21.5	Maximum	26	Maximum	0.8	+/-0.05
DF	D17	22.5	+/-0.4	7	Maximum	16.5	Maximum	26	Maximum	0.8	+/-0.05
DR	D18	22.5	+/-0.4	10.5	Maximum	19	Maximum	26	Maximum	0.8	+/-0.05
FE	F11	27.5	+/-0.4	10.5	Maximum	20.5	Maximum	31.5	Maximum	0.8	+/-0.05
FG	F12	27.5	+/-0.4	11.5	Maximum	22.5	Maximum	31.5	Maximum	0.8	+/-0.05
FM	F13	27.5	+/-0.4	14.5	Maximum	24.5	Maximum	31.5	Maximum	0.8	+/-0.05
FR	F14	27.5	+/-0.4	17.5	Maximum	28	Maximum	31.5	Maximum	0.8	+/-0.05

Note: See Ordering Options Table for lead length (LL) options.

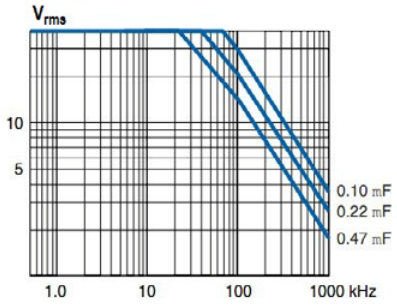
Performance Characteristics

Rated Voltage V_R (VDC)	50	63	100	250	400
Rated Voltage V_R (VAC)	30	40	63	160	200
Capacitance Range (µF)	0.001 – 22	0.001 – 22	0.001 – 12	0.001 – 3.9	0.001 – 1.8
Capacitance Tolerance	±10%, ±20%, ±2.5% and ±5% on request				
Category Temperature Range	-55 to +150°C				
Rated Temperature	+-55 to +125°C				
Voltage Derating	From +125°C, the voltage derating is 2%/°C				
Climatic Category	IEC 60068-1, 55/150/56				
	DIN 40040, FKD				
Test Voltage	1.6 x V_R for 2 seconds				
Reliability	Operational life > 200,000 hours				
	Failure rate < 3 FIT, T = +40°C, V = 0.5 x V_R				
	Failure criteria according to DIN 44122				
Capacitance Drift	Maximum 0.3% after a 2 year storage period at a temperature of +10° to +40°C and a relative humidity of 40 to 60%				
Insulation Resistance	Measured at +20°C According to IEC 60384–1				
	Minimum Values Between Terminals				
		C ≤ 0.33 µF		C > 0.33 µF	
	V_R ≤ 100 V	15,000 MΩ		5,000 MΩ • µF	
	V_R > 100 V	30,000 MΩ		10,000 MΩ • µF	
Dissipation Factor	Maximum Values at +23°C				
Lead Spacing			C ≤ 0.1 µF	0.1 µF < C ≤ 1.0 µF	C > 1.0 µF
SMR 5	1 kHz		0.15%	0.15%	0.15%
	10 kHz		0.25%	0.25%	0.35%
	100 kHz		0.50%	0.60%	
SMR 7.5 to 27.5	1 kHz		0.15%	0.15%	0.15%
	10 kHz		0.25%	0.25%	
	100 kHz		0.60%		

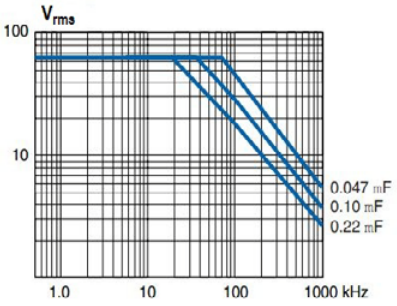
Derating of V_{rms} vs. Frequency, +100°C Ambient Temperature & 20°C Internal Heating, Typical Values



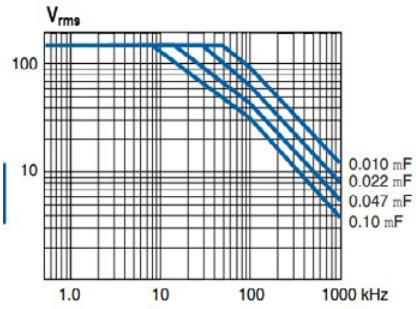
SMR5 50/30



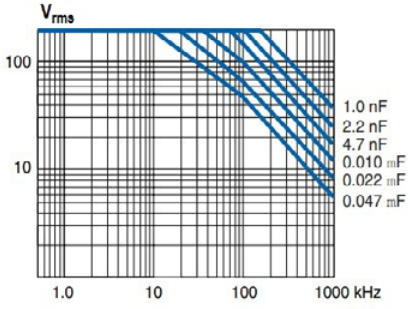
SMR5 63/40



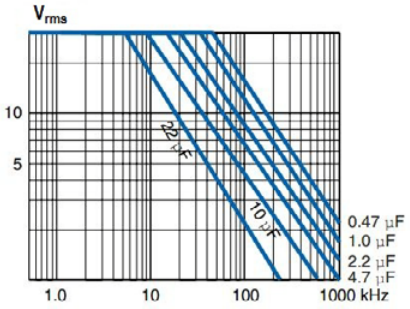
SMR5 100/63



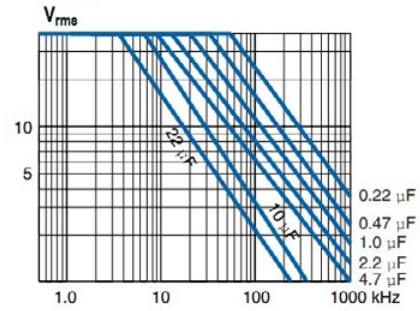
SMR5 250/160



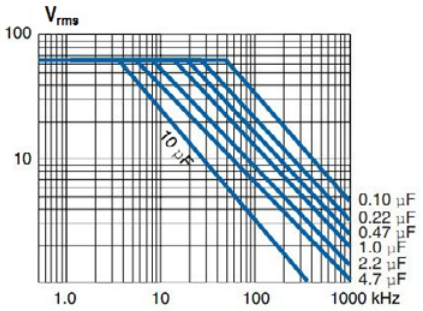
SMR5 400/200



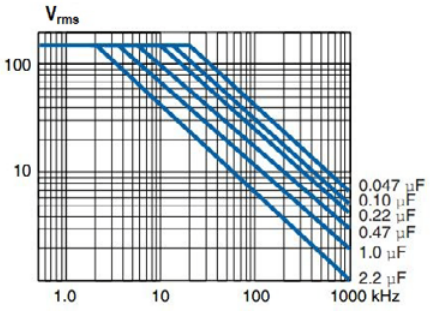
SMR7.5 ... 27.5 50/30



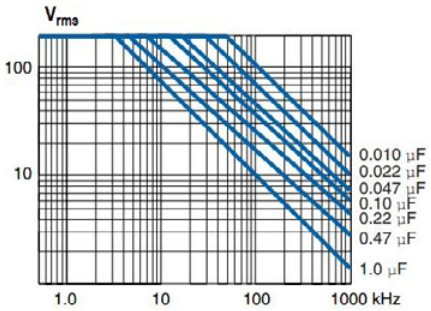
SMR7.5 ... 27.5 63/40



SMR7.5 ... 27.5 100/63



SMR7.5 ... 27.5 250/160



SMR7.5 ... 27.5 400/200

Environmental Test Data

Damp Heat Test	
Test Conditions	T = +40°C, RH = 93%, t = 56 days
Test Criteria	Δ C/C ≤ ± 3%
	Δ tanδ ≤ 0.0025 (1 kHz)
	IR after test 0.5 x IR minimum
Endurance Test	
Test Conditions	T = +125°C, V = 1.25 x (0.5 x V_R)
Test Criteria	t = 2,000 hours
	Δ C/C ≤ ±3%
	Δ tanδ ≤ 0.002 (1 kHz), C > 1 µF
	Δ tanδ ≤ 0.003 (10 kHz), C ≤ 1 µF
	IR after test 0.5 x IR minimum

Environmental Compliance

All KEMET MKTI capacitors are RoHS Compliant.

RoHS Compliant

Table 1 – Ratings & Part Number Reference

VDC	VAC	Cap Value (µF)	Size Code (New/ Legacy)	Max Dimensions in mm			Lead Spacing (p)	dV/dt (V/µs)	New KEMET Part Number	Legacy Part Number
				B	H	L				
50	30	0.001	JF/J01	2.5	6.5	7.2	5	40	F211JF102(1)050(2)	SMR5102(1)50J01(2)
50	30	0.0012	JF/J01	2.5	6.5	7.2	5	40	F211JF122(1)050(2)	SMR5122(1)50J01(2)
50	30	0.0015	JF/J01	2.5	6.5	7.2	5	40	F211JF152(1)050(2)	SMR5152(1)50J01(2)
50	30	0.0018	JF/J01	2.5	6.5	7.2	5	40	F211JF182(1)050(2)	SMR5182(1)50J01(2)
50	30	0.0022	JF/J01	2.5	6.5	7.2	5	40	F211JF222(1)050(2)	SMR5222(1)50J01(2)
50	30	0.0027	JF/J01	2.5	6.5	7.2	5	40	F211JF272(1)050(2)	SMR5272(1)50J01(2)
50	30	0.0033	JF/J01	2.5	6.5	7.2	5	40	F211JF332(1)050(2)	SMR5332(1)50J01(2)
50	30	0.0039	JF/J01	2.5	6.5	7.2	5	40	F211JF392(1)050(2)	SMR5392(1)50J01(2)
50	30	0.0047	JF/J01	2.5	6.5	7.2	5	20	F211JF472(1)050(2)	SMR5472(1)50J01(2)
50	30	0.0056	JF/J01	2.5	6.5	7.2	5	20	F211JF562(1)050(2)	SMR5562(1)50J01(2)
50	30	0.0068	JF/J01	2.5	6.5	7.2	5	20	F211JF682(1)050(2)	SMR5682(1)50J01(2)
50	30	0.0082	JF/J01	2.5	6.5	7.2	5	20	F211JF822(1)050(2)	SMR5822(1)50J01(2)
50	30	0.01	JF/J01	2.5	6.5	7.2	5	20	F211JF103(1)050(2)	SMR5103(1)50J01(2)
50	30	0.012	JF/J01	2.5	6.5	7.2	5	15	F211JF123(1)050(2)	SMR5123(1)50J01(2)
50	30	0.015	JF/J01	2.5	6.5	7.2	5	15	F211JF153(1)050(2)	SMR5153(1)50J01(2)
50	30	0.018	JF/J01	2.5	6.5	7.2	5	15	F211JF183(1)050(2)	SMR5183(1)50J01(2)
50	30	0.022	JF/J01	2.5	6.5	7.2	5	15	F211JF223(1)050(2)	SMR5223(1)50J01(2)
50	30	0.027	JF/J01	2.5	6.5	7.2	5	15	F211JF273(1)050(2)	SMR5273(1)50J01(2)
50	30	0.033	JF/J01	2.5	6.5	7.2	5	15	F211JF333(1)050(2)	SMR5333(1)50J01(2)
50	30	0.039	JF/J01	2.5	6.5	7.2	5	15	F211JF393(1)050(2)	SMR5393(1)50J01(2)
50	30	0.047	JF/J01	2.5	6.5	7.2	5	6	F211JF473(1)050(2)	SMR5473(1)50J01(2)
50	30	0.056	JF/J01	2.5	6.5	7.2	5	6	F211JF563(1)050(2)	SMR5563(1)50J01(2)
50	30	0.068	JF/J01	2.5	6.5	7.2	5	6	F211JF683(1)050(2)	SMR5683(1)50J01(2)
50	30	0.082	JF/J01	2.5	6.5	7.2	5	6	F211JF823(1)050(2)	SMR5823(1)50J01(2)
50	30	0.1	JF/J01	2.5	6.5	7.2	5	6	F211JF104(1)050(2)	SMR5104(1)50J01(2)
50	30	0.12	JF/J01	2.5	6.5	7.2	5	6	F211JF124(1)050(2)	SMR5124(1)50J01(2)
50	30	0.15	JJ/J02	3.5	8	7.2	5	6	F211JJ154(1)050(2)	SMR5154(1)50J02(2)
50	30	0.18	JJ/J02	3.5	8	7.2	5	6	F211JJ184(1)050(2)	SMR5184(1)50J02(2)
50	30	0.22	JJ/J02	3.5	8	7.2	5	6	F211JJ224(1)050(2)	SMR5224(1)50J02(2)
50	30	0.27	JJ/J02	3.5	8	7.2	5	6	F211JJ274(1)050(2)	SMR5274(1)50J02(2)
50	30	0.33	JL/J03	4.5	9	7.2	5	6	F211JL334(1)050(2)	SMR5334(1)50J03(2)
50	30	0.39	JL/J03	4.5	9	7.2	5	6	F211JL394(1)050(2)	SMR5394(1)50J03(2)
50	30	0.47	JQ/J04	5	10	7.2	5	6	F211JQ474(1)050(2)	SMR5474(1)50J04(2)
50	30	0.56	JQ/J04	5	10	7.2	5	6	F211JQ564(1)050(2)	SMR5564(1)50J04(2)
50	30	0.68	JT/J05	6	11	7.2	5	6	F211JT684(1)050(2)	SMR5684(1)50J05(2)
50	30	0.82	JT/J05	6	11	7.2	5	6	F211JT824(1)050(2)	SMR5824(1)50J05(2)
50	30	1	JU/J06	7.2	13	7.2	5	6	F211JU105(1)050(2)	SMR5105(1)50J06(2)
50	30	1.2	JU/J06	7.2	13	7.2	5	6	F211JU125(1)050(2)	SMR5125(1)50J06(2)
50	30	0.001	KG/K01	4	8	10	7.5	30	F211KG102(1)050(2)	SMR7.5102(1)50K01(2)
50	30	0.0012	KG/K01	4	8	10	7.5	30	F211KG122(1)050(2)	SMR7.5122(1)50K01(2)
50	30	0.0015	KG/K01	4	8	10	7.5	30	F211KG152(1)050(2)	SMR7.5152(1)50K01(2)
50	30	0.0018	KG/K01	4	8	10	7.5	30	F211KG182(1)050(2)	SMR7.5182(1)50K01(2)
50	30	0.0022	KG/K01	4	8	10	7.5	30	F211KG222(1)050(2)	SMR7.5222(1)50K01(2)
50	30	0.0027	KG/K01	4	8	10	7.5	30	F211KG272(1)050(2)	SMR7.5272(1)50K01(2)
50	30	0.0033	KG/K01	4	8	10	7.5	30	F211KG332(1)050(2)	SMR7.5332(1)50K01(2)
50	30	0.0039	KG/K01	4	8	10	7.5	30	F211KG392(1)050(2)	SMR7.5392(1)50K01(2)
50	30	0.0047	KG/K01	4	8	10	7.5	30	F211KG472(1)050(2)	SMR7.5472(1)50K01(2)
50	30	0.0056	KG/K01	4	8	10	7.5	30	F211KG562(1)050(2)	SMR7.5562(1)50K01(2)
50	30	0.0068	KG/K01	4	8	10	7.5	30	F211KG682(1)050(2)	SMR7.5682(1)50K01(2)
50	30	0.0082	KG/K01	4	8	10	7.5	30	F211KG822(1)050(2)	SMR7.5822(1)50K01(2)
50	30	0.01	KG/K01	4	8	10	7.5	30	F211KG103(1)050(2)	SMR7.5103(1)50K01(2)
50	30	0.012	KG/K01	4	8	10	7.5	30	F211KG123(1)050(2)	SMR7.5123(1)50K01(2)
50	30	0.015	KG/K01	4	8	10	7.5	30	F211KG153(1)050(2)	SMR7.5153(1)50K01(2)
50	30	0.018	KG/K01	4	8	10	7.5	30	F211KG183(1)050(2)	SMR7.5183(1)50K01(2)
50	30	0.022	KG/K01	4	8	10	7.5	30	F211KG223(1)050(2)	SMR7.5223(1)50K01(2)
50	30	0.027	KG/K01	4	8	10	7.5	20	F211KG273(1)050(2)	SMR7.5273(1)50K01(2)
50	30	0.033	KG/K01	4	8	10	7.5	20	F211KG333(1)050(2)	SMR7.5333(1)50K01(2)
VDC	VAC	Cap Value (µF)	Size Code (New/Legacy)	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/µs)	New KEMET Part Number	Legacy Part Number

(1) H = ±2.5%, J = ±5%, K = ±10%, M = ±20%.

(2) Insert lead and packaging code. See Ordering Options Table for available options.

Roll Over for Order Info.

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Cap Value (µF)	Size Code (New/ Legacy)	Max Dimensions in mm			Lead Spacing (p)	dV/dt (V/µs)	New KEMET Part Number	Legacy Part Number
				B	H	L				
50	30	0.039	KG/K01	4	8	10	7.5	20	F211KG393(1)050(2)	SMR7.5393(1)50K01(2)
50	30	0.047	KG/K01	4	8	10	7.5	20	F211KG473(1)050(2)	SMR7.5473(1)50K01(2)
50	30	0.056	KG/K01	4	8	10	7.5	15	F211KG563(1)050(2)	SMR7.5563(1)50K01(2)
50	30	0.068	KG/K01	4	8	10	7.5	15	F211KG683(1)050(2)	SMR7.5683(1)50K01(2)
50	30	0.082	KG/K01	4	8	10	7.5	15	F211KG823(1)050(2)	SMR7.5823(1)50K01(2)
50	30	0.1	KG/K01	4	8	10	7.5	15	F211KG104(1)050(2)	SMR7.5104(1)50K01(2)
50	30	0.12	KG/K01	4	8	10	7.5	15	F211KG124(1)050(2)	SMR7.5124(1)50K01(2)
50	30	0.15	KG/K01	4	8	10	7.5	10	F211KG154(1)050(2)	SMR7.5154(1)50K01(2)
50	30	0.18	KG/K01	4	8	10	7.5	10	F211KG184(1)050(2)	SMR7.5184(1)50K01(2)
50	30	0.22	KG/K01	4	8	10	7.5	10	F211KG224(1)050(2)	SMR7.5224(1)50K01(2)
50	30	0.27	KG/K01	4	8	10	7.5	10	F211KG274(1)050(2)	SMR7.5274(1)50K01(2)
50	30	0.33	KG/K01	4	8	10	7.5	10	F211KG334(1)050(2)	SMR7.5334(1)50K01(2)
50	30	0.39	KG/K01	4	8	10	7.5	10	F211KG394(1)050(2)	SMR7.5394(1)50K01(2)
50	30	0.47	KK/K03	5	11	10	7.5	10	F211KK474(1)050(2)	SMR7.5474(1)50K03(2)
50	30	0.56	KK/K03	5	11	10	7.5	10	F211KK564(1)050(2)	SMR7.5564(1)50K03(2)
50	30	0.68	KK/K03	5	11	10	7.5	10	F211KK684(1)050(2)	SMR7.5684(1)50K03(2)
50	30	0.82	KK/K03	5	11	10	7.5	10	F211KK824(1)050(2)	SMR7.5824(1)50K03(2)
50	30	1	KM/K04	6	12	10.5	7.5	10	F211KM105(1)050(2)	SMR7.5105(1)50K04(2)
50	30	1.2	KM/K04	6	12	10.5	7.5	10	F211KM125(1)050(2)	SMR7.5125(1)50K04(2)
50	30	0.0027	AG/A01	4	9	13	10	25	F211AG272(1)050(2)	SMR10272(1)50A01(2)
50	30	0.0033	AG/A01	4	9	13	10	25	F211AG332(1)050(2)	SMR10332(1)50A01(2)
50	30	0.0039	AG/A01	4	9	13	10	25	F211AG392(1)050(2)	SMR10392(1)50A01(2)
50	30	0.0047	AG/A01	4	9	13	10	25	F211AG472(1)050(2)	SMR10472(1)50A01(2)
50	30	0.0056	AG/A01	4	9	13	10	25	F211AG562(1)050(2)	SMR10562(1)50A01(2)
50	30	0.0068	AG/A01	4	9	13	10	25	F211AG682(1)050(2)	SMR10682(1)50A01(2)
50	30	0.0082	AG/A01	4	9	13	10	25	F211AG822(1)050(2)	SMR10822(1)50A01(2)
50	30	0.01	AG/A01	4	9	13	10	25	F211AG103(1)050(2)	SMR10103(1)50A01(2)
50	30	0.012	AG/A01	4	9	13	10	25	F211AG123(1)050(2)	SMR10123(1)50A01(2)
50	30	0.015	AG/A01	4	9	13	10	25	F211AG153(1)050(2)	SMR10153(1)50A01(2)
50	30	0.018	AG/A01	4	9	13	10	25	F211AG183(1)050(2)	SMR10183(1)50A01(2)
50	30	0.022	AG/A01	4	9	13	10	25	F211AG223(1)050(2)	SMR10223(1)50A01(2)
50	30	0.027	AG/A01	4	9	13	10	25	F211AG273(1)050(2)	SMR10273(1)50A01(2)
50	30	0.033	AG/A01	4	9	13	10	25	F211AG333(1)050(2)	SMR10333(1)50A01(2)
50	30	0.039	AG/A01	4	9	13	10	15	F211AG393(1)050(2)	SMR10393(1)50A01(2)
50	30	0.047	AG/A01	4	9	13	10	15	F211AG473(1)050(2)	SMR10473(1)50A01(2)
50	30	0.056	AG/A01	4	9	13	10	15	F211AG563(1)050(2)	SMR10563(1)50A01(2)
50	30	0.068	AG/A01	4	9	13	10	15	F211AG683(1)050(2)	SMR10683(1)50A01(2)
50	30	0.082	AG/A01	4	9	13	10	10	F211AG823(1)050(2)	SMR10823(1)50A01(2)
50	30	0.1	AG/A01	4	9	13	10	10	F211AG104(1)050(2)	SMR10104(1)50A01(2)
50	30	0.12	AG/A01	4	9	13	10	10	F211AG124(1)050(2)	SMR10124(1)50A01(2)
50	30	0.15	AG/A01	4	9	13	10	10	F211AG154(1)050(2)	SMR10154(1)50A01(2)
50	30	0.18	AG/A01	4	9	13	10	10	F211AG184(1)050(2)	SMR10184(1)50A01(2)
50	30	0.22	AG/A01	4	9	13	10	10	F211AG224(1)050(2)	SMR10224(1)50A01(2)
50	30	0.27	AG/A01	4	9	13	10	8	F211AG274(1)050(2)	SMR10274(1)50A01(2)
50	30	0.33	AG/A01	4	9	13	10	8	F211AG334(1)050(2)	SMR10334(1)50A01(2)
50	30	0.39	AG/A01	4	9	13	10	8	F211AG394(1)050(2)	SMR10394(1)50A01(2)
50	30	0.47	AG/A01	4	9	13	10	8	F211AG474(1)050(2)	SMR10474(1)50A01(2)
50	30	0.56	AG/A01	4	9	13	10	8	F211AG564(1)050(2)	SMR10564(1)50A01(2)
50	30	0.68	AG/A01	4	9	13	10	8	F211AG684(1)050(2)	SMR10684(1)50A01(2)
50	30	0.82	AH/A02	4.5	10.5	13	10	8	F211AH824(1)050(2)	SMR10824(1)50A02(2)
50	30	1	AK/A03	4.5	10.5	13	10	8	F211AK105(1)050(2)	SMR10105(1)50A03(2)
50	30	1.2	AK/A03	5	11	13	10	8	F211AK125(1)050(2)	SMR10125(1)50A03(2)
50	30	1.5	AP/A04	6	12	13	10	8	F211AP155(1)050(2)	SMR10155(1)50A04(2)
50	30	1.8	AP/A04	6	12	13	10	8	F211AP185(1)050(2)	SMR10185(1)50A04(2)
50	30	2.2	BJ/B10	6.5	12.5	18	15	6	F211BJ225(1)050(2)	SMR15225(1)50B10(2)
50	30	2.7	BL/B06	7.5	14.5	18	15	6	F211BL275(1)050(2)	SMR15275(1)50B06(2)
50	30	3.3	BL/B06	7.5	14.5	18	15	6	F211BL335(1)050(2)	SMR15335(1)50B06(2)
VDC	VAC	Cap Value (µF)	Size Code (New/Legacy)	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/µs)	New KEMET Part Number	Legacy Part Number

(1) H = ±2.5%, J = ±5%, K = ±10%, M = ±20%.

(2) Insert lead and packaging code. See Ordering Options Table for available options.

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Cap Value (µF)	Size Code (New/ Legacy)	Max Dimensions in mm			Lead Spacing (p)	dV/dt (V/µs)	New KEMET Part Number	Legacy Part Number
				B	H	L				
50	30	3.9	BM/B12	8	15	18	15	6	F211BM395(1)050(2)	SMR15395(1)50B12(2)
50	30	4.7	BQ/B11	8.5	16	18	15	6	F211BQ475(1)050(2)	SMR15475(1)50B11(2)
50	30	5.6	BV/B14	9.5	17.5	18	15	6	F211BV565(1)050(2)	SMR15565(1)50B14(2)
50	30	6.8	DH/D14	8	16	26	22.5	3	F211DH685(1)050(2)	SMR22.5685(1)50D14(2)
50	30	8.2	DM/D15	9	18.5	26	22.5	3	F211DM825(1)050(2)	SMR22.5825(1)50D15(2)
50	30	10	DR/D18	10.5	19	26	22.5	3	F211DR106(1)050(2)	SMR22.5106(1)50D18(2)
50	30	12	DT/D16	11	21.5	26	22.5	3	F211DT126(1)050(2)	SMR22.5126(1)50D16(2)
50	30	15	FE/F11	10.5	20.5	31.5	27.5	2	F211FE156(1)050(2)	SMR27.5156(1)50F11(2)
50	30	18	FG/F12	11.5	22.5	31.5	27.5	2	F211FG186(1)050(2)	SMR27.5186(1)50F12(2)
50	30	22	FM/F13	14.5	24.5	31.5	27.5	2	F211FM226(1)050(2)	SMR27.5226(1)50F13(2)
63	40	0.001	JF/J01	2.5	6.5	7.2	5	40	F211JF102(1)063(2)	SMR5102(1)63J01(2)
63	40	0.0012	JF/J01	2.5	6.5	7.2	5	40	F211JF122(1)063(2)	SMR5122(1)63J01(2)
63	40	0.0015	JF/J01	2.5	6.5	7.2	5	40	F211JF152(1)063(2)	SMR5152(1)63J01(2)
63	40	0.0018	JF/J01	2.5	6.5	7.2	5	40	F211JF182(1)063(2)	SMR5182(1)63J01(2)
63	40	0.0022	JF/J01	2.5	6.5	7.2	5	40	F211JF222(1)063(2)	SMR5222(1)63J01(2)
63	40	0.0027	JF/J01	2.5	6.5	7.2	5	40	F211JF272(1)063(2)	SMR5272(1)63J01(2)
63	40	0.0033	JF/J01	2.5	6.5	7.2	5	40	F211JF332(1)063(2)	SMR5332(1)63J01(2)
63	40	0.0039	JF/J01	2.5	6.5	7.2	5	40	F211JF392(1)063(2)	SMR5392(1)63J01(2)
63	40	0.0047	JF/J01	2.5	6.5	7.2	5	20	F211JF472(1)063(2)	SMR5472(1)63J01(2)
63	40	0.0056	JF/J01	2.5	6.5	7.2	5	20	F211JF562(1)063(2)	SMR5562(1)63J01(2)
63	40	0.0068	JF/J01	2.5	6.5	7.2	5	20	F211JF682(1)063(2)	SMR5682(1)63J01(2)
63	40	0.0082	JF/J01	2.5	6.5	7.2	5	20	F211JF822(1)063(2)	SMR5822(1)63J01(2)
63	40	0.01	JF/J01	2.5	6.5	7.2	5	20	F211JF103(1)063(2)	SMR5103(1)63J01(2)
63	40	0.012	JF/J01	2.5	6.5	7.2	5	15	F211JF123(1)063(2)	SMR5123(1)63J01(2)
63	40	0.015	JF/J01	2.5	6.5	7.2	5	15	F211JF153(1)063(2)	SMR5153(1)63J01(2)
63	40	0.018	JF/J01	2.5	6.5	7.2	5	15	F211JF183(1)063(2)	SMR5183(1)63J01(2)
63	40	0.022	JF/J01	2.5	6.5	7.2	5	15	F211JF223(1)063(2)	SMR5223(1)63J01(2)
63	40	0.027	JF/J01	2.5	6.5	7.2	5	15	F211JF273(1)063(2)	SMR5273(1)63J01(2)
63	40	0.033	JF/J01	2.5	6.5	7.2	5	15	F211JF333(1)063(2)	SMR5333(1)63J01(2)
63	40	0.039	JF/J01	2.5	6.5	7.2	5	15	F211JF393(1)063(2)	SMR5393(1)63J01(2)
63	40	0.047	JF/J01	2.5	6.5	7.2	5	6	F211JF473(1)063(2)	SMR5473(1)63J01(2)
63	40	0.056	JF/J01	2.5	6.5	7.2	5	6	F211JF563(1)063(2)	SMR5563(1)63J01(2)
63	40	0.068	JF/J01	2.5	6.5	7.2	5	6	F211JF683(1)063(2)	SMR5683(1)63J01(2)
63	40	0.082	JJ/J02	3.5	8	7.2	5	6	F211JJ823(1)063(2)	SMR5823(1)63J02(2)
63	40	0.1	JJ/J02	3.5	8	7.2	5	6	F211JJ104(1)063(2)	SMR5104(1)63J02(2)
63	40	0.12	JJ/J02	3.5	8	7.2	5	6	F211JJ124(1)063(2)	SMR5124(1)63J02(2)
63	40	0.15	JJ/J02	3.5	8	7.2	5	6	F211JJ154(1)063(2)	SMR5154(1)63J02(2)
63	40	0.18	JL/J03	4.5	9	7.2	5	6	F211JL184(1)063(2)	SMR5184(1)63J03(2)
63	40	0.22	JL/J03	4.5	9	7.2	5	6	F211JL224(1)063(2)	SMR5224(1)63J03(2)
63	40	0.27	JQ/J04	5	10	7.2	5	6	F211JQ274(1)063(2)	SMR5274(1)63J04(2)
63	40	0.33	JQ/J04	5	10	7.2	5	6	F211JQ334(1)063(2)	SMR5334(1)63J04(2)
63	40	0.39	JT/J05	6	11	7.2	5	6	F211JT394(1)063(2)	SMR5394(1)63J05(2)
63	40	0.47	JT/J05	6	11	7.2	5	6	F211JT474(1)063(2)	SMR5474(1)63J05(2)
63	40	0.56	JU/J06	7.2	13	7.2	5	6	F211JU564(1)063(2)	SMR5564(1)63J06(2)
63	40	0.68	JU/J06	7.2	13	7.2	5	6	F211JU684(1)063(2)	SMR5684(1)63J06(2)
63	40	0.001	KG/K01	4	8	10	7.5	30	F211KG102(1)063(2)	SMR7.5102(1)63K01(2)
63	40	0.0012	KG/K01	4	8	10	7.5	30	F211KG122(1)063(2)	SMR7.5122(1)63K01(2)
63	40	0.0015	KG/K01	4	8	10	7.5	30	F211KG152(1)063(2)	SMR7.5152(1)63K01(2)
63	40	0.0018	KG/K01	4	8	10	7.5	30	F211KG182(1)063(2)	SMR7.5182(1)63K01(2)
63	40	0.0022	KG/K01	4	8	10	7.5	30	F211KG222(1)063(2)	SMR7.5222(1)63K01(2)
63	40	0.0027	KG/K01	4	8	10	7.5	30	F211KG272(1)063(2)	SMR7.5272(1)63K01(2)
63	40	0.0033	KG/K01	4	8	10	7.5	30	F211KG332(1)063(2)	SMR7.5332(1)63K01(2)
63	40	0.0039	KG/K01	4	8	10	7.5	30	F211KG392(1)063(2)	SMR7.5392(1)63K01(2)
63	40	0.0047	KG/K01	4	8	10	7.5	30	F211KG472(1)063(2)	SMR7.5472(1)63K01(2)
63	40	0.0056	KG/K01	4	8	10	7.5	30	F211KG562(1)063(2)	SMR7.5562(1)63K01(2)
63	40	0.0068	KG/K01	4	8	10	7.5	30	F211KG682(1)063(2)	SMR7.5682(1)63K01(2)
63	40	0.0082	KG/K01	4	8	10	7.5	30	F211KG822(1)063(2)	SMR7.5822(1)63K01(2)
VDC	VAC	Cap Value (µF)	Size Code (New/Legacy)	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/µs)	New KEMET Part Number	Legacy Part Number

(1) H = ±2.5%, J = ±5%, K = ±10%, M = ±20%.

(2) Insert lead and packaging code. See Ordering Options Table for available options.

Roll Over for Order Info.

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Cap Value (µF)	Size Code (New/ Legacy)	Max Dimensions in mm			Lead Spacing (p)	dV/dt (V/µs)	New KEMET Part Number	Legacy Part Number
				B	H	L				
63	40	0.01	KG/K01	4	8	10	7.5	30	F211KG103(1)063(2)	SMR7.5103(1)63K01(2)
63	40	0.012	KG/K01	4	8	10	7.5	30	F211KG123(1)063(2)	SMR7.5123(1)63K01(2)
63	40	0.015	KG/K01	4	8	10	7.5	30	F211KG153(1)063(2)	SMR7.5153(1)63K01(2)
63	40	0.018	KG/K01	4	8	10	7.5	30	F211KG183(1)063(2)	SMR7.5183(1)63K01(2)
63	40	0.022	KG/K01	4	8	10	7.5	30	F211KG223(1)063(2)	SMR7.5223(1)63K01(2)
63	40	0.027	KG/K01	4	8	10	7.5	20	F211KG273(1)063(2)	SMR7.5273(1)63K01(2)
63	40	0.033	KG/K01	4	8	10	7.5	20	F211KG333(1)063(2)	SMR7.5333(1)63K01(2)
63	40	0.039	KG/K01	4	8	10	7.5	20	F211KG393(1)063(2)	SMR7.5393(1)63K01(2)
63	40	0.047	KG/K01	4	8	10	7.5	20	F211KG473(1)063(2)	SMR7.5473(1)63K01(2)
63	40	0.056	KG/K01	4	8	10	7.5	15	F211KG563(1)063(2)	SMR7.5563(1)63K01(2)
63	40	0.068	KG/K01	4	8	10	7.5	15	F211KG683(1)063(2)	SMR7.5683(1)63K01(2)
63	40	0.082	KG/K01	4	8	10	7.5	15	F211KG823(1)063(2)	SMR7.5823(1)63K01(2)
63	40	0.1	KG/K01	4	8	10	7.5	15	F211KG104(1)063(2)	SMR7.5104(1)63K01(2)
63	40	0.12	KG/K01	4	8	10	7.5	15	F211KG124(1)063(2)	SMR7.5124(1)63K01(2)
63	40	0.15	KG/K01	4	8	10	7.5	10	F211KG154(1)063(2)	SMR7.5154(1)63K01(2)
63	40	0.18	KG/K01	4	8	10	7.5	10	F211KG184(1)063(2)	SMR7.5184(1)63K01(2)
63	40	0.22	KG/K01	4	8	10	7.5	10	F211KG224(1)063(2)	SMR7.5224(1)63K01(2)
63	40	0.27	KG/K01	4	8	10	7.5	10	F211KG274(1)063(2)	SMR7.5274(1)63K01(2)
63	40	0.33	KK/K03	5	11	10	7.5	10	F211KK334(1)063(2)	SMR7.5334(1)63K03(2)
63	40	0.39	KK/K03	5	11	10	7.5	10	F211KK394(1)063(2)	SMR7.5394(1)63K03(2)
63	40	0.47	KK/K03	5	11	10	7.5	10	F211KK474(1)063(2)	SMR7.5474(1)63K03(2)
63	40	0.56	KK/K03	5	11	10	7.5	10	F211KK564(1)063(2)	SMR7.5564(1)63K03(2)
63	40	0.68	KM/K04	6	12	10.5	7.5	10	F211KM684(1)063(2)	SMR7.5684(1)63K04(2)
63	40	0.82	KM/K04	6	12	10.5	7.5	10	F211KM824(1)063(2)	SMR7.5824(1)63K04(2)
63	40	0.0027	AG/A01	4	9	13	10	25	F211AG272(1)063(2)	SMR10272(1)63A01(2)
63	40	0.0033	AG/A01	4	9	13	10	25	F211AG332(1)063(2)	SMR10332(1)63A01(2)
63	40	0.0039	AG/A01	4	9	13	10	25	F211AG392(1)063(2)	SMR10392(1)63A01(2)
63	40	0.0047	AG/A01	4	9	13	10	25	F211AG472(1)063(2)	SMR10472(1)63A01(2)
63	40	0.0056	AG/A01	4	9	13	10	25	F211AG562(1)063(2)	SMR10562(1)63A01(2)
63	40	0.0068	AG/A01	4	9	13	10	25	F211AG682(1)063(2)	SMR10682(1)63A01(2)
63	40	0.0082	AG/A01	4	9	13	10	25	F211AG822(1)063(2)	SMR10822(1)63A01(2)
63	40	0.01	AG/A01	4	9	13	10	25	F211AG103(1)063(2)	SMR10103(1)63A01(2)
63	40	0.012	AG/A01	4	9	13	10	25	F211AG123(1)063(2)	SMR10123(1)63A01(2)
63	40	0.015	AG/A01	4	9	13	10	25	F211AG153(1)063(2)	SMR10153(1)63A01(2)
63	40	0.018	AG/A01	4	9	13	10	25	F211AG183(1)063(2)	SMR10183(1)63A01(2)
63	40	0.022	AG/A01	4	9	13	10	25	F211AG223(1)063(2)	SMR10223(1)63A01(2)
63	40	0.027	AG/A01	4	9	13	10	25	F211AG273(1)063(2)	SMR10273(1)63A01(2)
63	40	0.033	AG/A01	4	9	13	10	25	F211AG333(1)063(2)	SMR10333(1)63A01(2)
63	40	0.039	AG/A01	4	9	13	10	15	F211AG393(1)063(2)	SMR10393(1)63A01(2)
63	40	0.047	AG/A01	4	9	13	10	15	F211AG473(1)063(2)	SMR10473(1)63A01(2)
63	40	0.056	AG/A01	4	9	13	10	15	F211AG563(1)063(2)	SMR10563(1)63A01(2)
63	40	0.068	AG/A01	4	9	13	10	15	F211AG683(1)063(2)	SMR10683(1)63A01(2)
63	40	0.082	AG/A01	4	9	13	10	10	F211AG823(1)063(2)	SMR10823(1)63A01(2)
63	40	0.1	AG/A01	4	9	13	10	10	F211AG104(1)063(2)	SMR10104(1)63A01(2)
63	40	0.12	AG/A01	4	9	13	10	10	F211AG124(1)063(2)	SMR10124(1)63A01(2)
63	40	0.15	AG/A01	4	9	13	10	10	F211AG154(1)063(2)	SMR10154(1)63A01(2)
63	40	0.18	AG/A01	4	9	13	10	10	F211AG184(1)063(2)	SMR10184(1)63A01(2)
63	40	0.22	AG/A01	4	9	13	10	10	F211AG224(1)063(2)	SMR10224(1)63A01(2)
63	40	0.27	AG/A01	4	9	13	10	8	F211AG274(1)063(2)	SMR10274(1)63A01(2)
63	40	0.33	AG/A01	4	9	13	10	8	F211AG334(1)063(2)	SMR10334(1)63A01(2)
63	40	0.39	AG/A01	4	9	13	10	8	F211AG394(1)063(2)	SMR10394(1)63A01(2)
63	40	0.47	AH/A02	4.5	10.5	13	10	8	F211AH474(1)063(2)	SMR10474(1)63A02(2)
63	40	0.56	AH/A02	4.5	10.5	13	10	8	F211AH564(1)063(2)	SMR10564(1)63A02(2)
63	40	0.68	AK/A03	5	11	13	10	8	F211AK684(1)063(2)	SMR10684(1)63A03(2)
63	40	0.82	AP/A04	6	12	13	10	8	F211AP824(1)063(2)	SMR10824(1)63A04(2)
63	40	1	AP/A04	6	12	13	10	8	F211AP105(1)063(2)	SMR10105(1)63A04(2)
63	40	0.68	BD/B04	5.5	10.5	18	15	8	F211BD684(1)063(2)	SMR15684(1)63B04(2)
VDC	VAC	Cap Value (µF)	Size Code (New/Legacy)	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/µs)	New KEMET Part Number	Legacy Part Number

(1) H = ±2.5%, J = ±5%, K = ±10%, M = ±20%.

(2) Insert lead and packaging code. See Ordering Options Table for available options.

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Cap Value (µF)	Size Code (New/ Legacy)	Max Dimensions in mm			Lead Spacing (p)	dV/dt (V/µs)	New KEMET Part Number	Legacy Part Number
				B	H	L				
63	40	0.82	BD/B04	5.5	10.5	18	15	8	F211BD824(1)063(2)	SMR15824(1)63B04(2)
63	40	1	BE/B05	5.5	12.5	18	15	8	F211BE105(1)063(2)	SMR15105(1)63B05(2)
63	40	1.2	BJ/B10	6.5	12.5	18	15	6	F211BJ125(1)063(2)	SMR15125(1)63B10(2)
63	40	1.5	BJ/B10	6.5	12.5	18	15	6	F211BJ155(1)063(2)	SMR15155(1)63B10(2)
63	40	1.8	BL/B06	7.5	14.5	18	15	6	F211BL185(1)063(2)	SMR15185(1)63B06(2)
63	40	2.2	BM/B12	8	15	18	15	6	F211BM225(1)063(2)	SMR15225(1)63B12(2)
63	40	2.7	BQ/B11	8.5	16	18	15	6	F211BQ275(1)063(2)	SMR15275(1)63B11(2)
63	40	3.3	BV/B14	9.5	17.5	18	15	6	F211BV335(1)063(2)	SMR15335(1)63B14(2)
63	40	2.7	DD/D13	6.5	14.5	26	22.5	3	F211DD275(1)063(2)	SMR22.5275(1)63D13(2)
63	40	3.3	DF/D17	7	16.5	26	22.5	3	F211DF335(1)063(2)	SMR22.5335(1)63D17(2)
63	40	3.9	DH/D14	8	16	26	22.5	3	F211DH395(1)063(2)	SMR22.5395(1)63D14(2)
63	40	4.7	DM/D15	9	18.5	26	22.5	3	F211DM475(1)063(2)	SMR22.5475(1)63D15(2)
63	40	5.6	DM/D15	9	18.5	26	22.5	3	F211DM565(1)063(2)	SMR22.5565(1)63D15(2)
63	40	6.8	DR/D18	10.5	19	26	22.5	3	F211DR685(1)063(2)	SMR22.5685(1)63D18(2)
63	40	8.2	DT/D16	11	21.5	26	22.5	3	F211DT825(1)063(2)	SMR22.5825(1)63D16(2)
63	40	10	FG/F12	11.5	22.5	31.5	27.5	2	F211FG106(1)063(2)	SMR27.5106(1)63F12(2)
63	40	12	FM/F13	14.5	24.5	31.5	27.5	2	F211FM126(1)063(2)	SMR27.5126(1)63F13(2)
63	40	15	FM/F13	14.5	24.5	31.5	27.5	2	F211FM156(1)063(2)	SMR27.5156(1)63F13(2)
63	40	18	FR/F14	17.5	28	31.5	27.5	2	F211FR186(1)063(2)	SMR27.5186(1)63F14(2)
63	40	22	FR/F14	17.5	28	31.5	27.5	2	F211FR226(1)063(2)	SMR27.5226(1)63F14(2)
100	63	0.001	JF/J01	2.5	6.5	7.2	5	40	F211JF102(1)100(2)	SMR5102(1)100J01(2)
100	63	0.0012	JF/J01	2.5	6.5	7.2	5	40	F211JF122(1)100(2)	SMR5122(1)100J01(2)
100	63	0.0015	JF/J01	2.5	6.5	7.2	5	40	F211JF152(1)100(2)	SMR5152(1)100J01(2)
100	63	0.0018	JF/J01	2.5	6.5	7.2	5	40	F211JF182(1)100(2)	SMR5182(1)100J01(2)
100	63	0.0022	JF/J01	2.5	6.5	7.2	5	40	F211JF222(1)100(2)	SMR5222(1)100J01(2)
100	63	0.0027	JF/J01	2.5	6.5	7.2	5	40	F211JF272(1)100(2)	SMR5272(1)100J01(2)
100	63	0.0033	JF/J01	2.5	6.5	7.2	5	40	F211JF332(1)100(2)	SMR5332(1)100J01(2)
100	63	0.0039	JF/J01	2.5	6.5	7.2	5	40	F211JF392(1)100(2)	SMR5392(1)100J01(2)
100	63	0.0047	JF/J01	2.5	6.5	7.2	5	20	F211JF472(1)100(2)	SMR5472(1)100J01(2)
100	63	0.0056	JF/J01	2.5	6.5	7.2	5	20	F211JF562(1)100(2)	SMR5562(1)100J01(2)
100	63	0.0068	JF/J01	2.5	6.5	7.2	5	20	F211JF682(1)100(2)	SMR5682(1)100J01(2)
100	63	0.0082	JF/J01	2.5	6.5	7.2	5	20	F211JF822(1)100(2)	SMR5822(1)100J01(2)
100	63	0.01	JF/J01	2.5	6.5	7.2	5	20	F211JF103(1)100(2)	SMR5103(1)100J01(2)
100	63	0.012	JF/J01	2.5	6.5	7.2	5	15	F211JF123(1)100(2)	SMR5123(1)100J01(2)
100	63	0.015	JF/J01	2.5	6.5	7.2	5	15	F211JF153(1)100(2)	SMR5153(1)100J01(2)
100	63	0.018	JF/J01	2.5	6.5	7.2	5	15	F211JF183(1)100(2)	SMR5183(1)100J01(2)
100	63	0.022	JF/J01	2.5	6.5	7.2	5	15	F211JF223(1)100(2)	SMR5223(1)100J01(2)
100	63	0.027	JF/J01	2.5	6.5	7.2	5	15	F211JF273(1)100(2)	SMR5273(1)100J01(2)
100	63	0.033	JF/J01	2.5	6.5	7.2	5	15	F211JF333(1)100(2)	SMR5333(1)100J01(2)
100	63	0.039	JF/J01	2.5	6.5	7.2	5	15	F211JF393(1)100(2)	SMR5393(1)100J01(2)
100	63	0.047	JJ/J02	3.5	8	7.2	5	15	F211JJ473(1)100(2)	SMR5473(1)100J02(2)
100	63	0.056	JL/J03	4.5	9	7.2	5	15	F211JL563(1)100(2)	SMR5563(1)100J03(2)
100	63	0.068	JL/J03	4.5	9	7.2	5	15	F211JL683(1)100(2)	SMR5683(1)100J03(2)
100	63	0.082	JL/J03	4.5	9	7.2	5	15	F211JL823(1)100(2)	SMR5823(1)100J03(2)
100	63	0.1	JL/J03	4.5	9	7.2	5	15	F211JL104(1)100(2)	SMR5104(1)100J03(2)
100	63	0.12	JQ/J04	5	10	7.2	5	15	F211JQ124(1)100(2)	SMR5124(1)100J04(2)
100	63	0.15	JT/J05	6	11	7.2	5	15	F211JT154(1)100(2)	SMR5154(1)100J05(2)
100	63	0.18	JT/J05	6	11	7.2	5	15	F211JT184(1)100(2)	SMR5184(1)100J05(2)
100	63	0.22	JU/J06	7.2	13	7.2	5	15	F211JU224(1)100(2)	SMR5224(1)100J06(2)
100	63	0.27	JU/J06	7.2	13	7.2	5	15	F211JU274(1)100(2)	SMR5274(1)100J06(2)
100	63	0.33	JU/J06	7.2	13	7.2	5	15	F211JU334(1)100(2)	SMR5334(1)100J06(2)
100	63	0.001	KG/K01	4	8	10	7.5	30	F211KG102(1)100(2)	SMR7.5102(1)100K01(2)
100	63	0.0012	KG/K01	4	8	10	7.5	30	F211KG122(1)100(2)	SMR7.5122(1)100K01(2)
100	63	0.0015	KG/K01	4	8	10	7.5	30	F211KG152(1)100(2)	SMR7.5152(1)100K01(2)
100	63	0.0018	KG/K01	4	8	10	7.5	30	F211KG182(1)100(2)	SMR7.5182(1)100K01(2)
100	63	0.0022	KG/K01	4	8	10	7.5	30	F211KG222(1)100(2)	SMR7.5222(1)100K01(2)
100	63	0.0027	KG/K01	4	8	10	7.5	30	F211KG272(1)100(2)	SMR7.5272(1)100K01(2)
VDC	VAC	Cap Value (µF)	Size Code (New/Legacy)	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/µs)	New KEMET Part Number	Legacy Part Number

(1) H = ±2.5%, J = ±5%, K = ±10%, M = ±20%.

(2) Insert lead and packaging code. See Ordering Options Table for available options.

Roll Over for Order Info.

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Cap Value (µF)	Size Code (New/ Legacy)	Max Dimensions in mm			Lead Spacing (p)	dV/dt (V/µs)	New KEMET Part Number	Legacy Part Number
				B	H	L				
100	63	0.0033	KG/K01	4	8	10	7.5	30	F211KG332(1)100(2)	SMR7.5332(1)100K01(2)
100	63	0.0039	KG/K01	4	8	10	7.5	30	F211KG392(1)100(2)	SMR7.5392(1)100K01(2)
100	63	0.0047	KG/K01	4	8	10	7.5	30	F211KG472(1)100(2)	SMR7.5472(1)100K01(2)
100	63	0.0056	KG/K01	4	8	10	7.5	30	F211KG562(1)100(2)	SMR7.5562(1)100K01(2)
100	63	0.0068	KG/K01	4	8	10	7.5	30	F211KG682(1)100(2)	SMR7.5682(1)100K01(2)
100	63	0.0082	KG/K01	4	8	10	7.5	30	F211KG822(1)100(2)	SMR7.5822(1)100K01(2)
100	63	0.01	KG/K01	4	8	10	7.5	30	F211KG103(1)100(2)	SMR7.5103(1)100K01(2)
100	63	0.012	KG/K01	4	8	10	7.5	30	F211KG123(1)100(2)	SMR7.5123(1)100K01(2)
100	63	0.015	KG/K01	4	8	10	7.5	30	F211KG153(1)100(2)	SMR7.5153(1)100K01(2)
100	63	0.018	KG/K01	4	8	10	7.5	30	F211KG183(1)100(2)	SMR7.5183(1)100K01(2)
100	63	0.022	KG/K01	4	8	10	7.5	30	F211KG223(1)100(2)	SMR7.5223(1)100K01(2)
100	63	0.027	KG/K01	4	8	10	7.5	20	F211KG273(1)100(2)	SMR7.5273(1)100K01(2)
100	63	0.033	KG/K01	4	8	10	7.5	20	F211KG333(1)100(2)	SMR7.5333(1)100K01(2)
100	63	0.039	KG/K01	4	8	10	7.5	20	F211KG393(1)100(2)	SMR7.5393(1)100K01(2)
100	63	0.047	KG/K01	4	8	10	7.5	20	F211KG473(1)100(2)	SMR7.5473(1)100K01(2)
100	63	0.056	KG/K01	4	8	10	7.5	15	F211KG563(1)100(2)	SMR7.5563(1)100K01(2)
100	63	0.068	KG/K01	4	8	10	7.5	15	F211KG683(1)100(2)	SMR7.5683(1)100K01(2)
100	63	0.082	KG/K01	4	8	10	7.5	15	F211KG823(1)100(2)	SMR7.5823(1)100K01(2)
100	63	0.1	KG/K01	4	8	10	7.5	15	F211KG104(1)100(2)	SMR7.5104(1)100K01(2)
100	63	0.12	KG/K01	4	8	10	7.5	15	F211KG124(1)100(2)	SMR7.5124(1)100K01(2)
100	63	0.15	KK/K03	5	11	10	7.5	15	F211KK154(1)100(2)	SMR7.5154(1)100K03(2)
100	63	0.18	KK/K03	5	11	10	7.5	15	F211KK184(1)100(2)	SMR7.5184(1)100K03(2)
100	63	0.22	KK/K03	5	11	10	7.5	15	F211KK224(1)100(2)	SMR7.5224(1)100K03(2)
100	63	0.27	KK/K03	5	11	10	7.5	15	F211KK274(1)100(2)	SMR7.5274(1)100K03(2)
100	63	0.33	KM/K04	6	12	10.5	7.5	15	F211KM334(1)100(2)	SMR7.5334(1)100K04(2)
100	63	0.39	KM/K04	6	12	10.5	7.5	15	F211KM394(1)100(2)	SMR7.5394(1)100K04(2)
100	63	0.47	KM/K04	6	12	10.5	7.5	15	F211KM474(1)100(2)	SMR7.5474(1)100K04(2)
100	63	0.0027	AG/A01	4	9	13	10	25	F211AG272(1)100(2)	SMR10272(1)100A01(2)
100	63	0.0033	AG/A01	4	9	13	10	25	F211AG332(1)100(2)	SMR10332(1)100A01(2)
100	63	0.0039	AG/A01	4	9	13	10	25	F211AG392(1)100(2)	SMR10392(1)100A01(2)
100	63	0.0047	AG/A01	4	9	13	10	25	F211AG472(1)100(2)	SMR10472(1)100A01(2)
100	63	0.0056	AG/A01	4	9	13	10	25	F211AG562(1)100(2)	SMR10562(1)100A01(2)
100	63	0.0068	AG/A01	4	9	13	10	25	F211AG682(1)100(2)	SMR10682(1)100A01(2)
100	63	0.0082	AG/A01	4	9	13	10	25	F211AG822(1)100(2)	SMR10822(1)100A01(2)
100	63	0.01	AG/A01	4	9	13	10	25	F211AG103(1)100(2)	SMR10103(1)100A01(2)
100	63	0.012	AG/A01	4	9	13	10	25	F211AG123(1)100(2)	SMR10123(1)100A01(2)
100	63	0.015	AG/A01	4	9	13	10	25	F211AG153(1)100(2)	SMR10153(1)100A01(2)
100	63	0.018	AG/A01	4	9	13	10	25	F211AG183(1)100(2)	SMR10183(1)100A01(2)
100	63	0.022	AG/A01	4	9	13	10	25	F211AG223(1)100(2)	SMR10223(1)100A01(2)
100	63	0.027	AG/A01	4	9	13	10	25	F211AG273(1)100(2)	SMR10273(1)100A01(2)
100	63	0.033	AG/A01	4	9	13	10	25	F211AG333(1)100(2)	SMR10333(1)100A01(2)
100	63	0.039	AG/A01	4	9	13	10	15	F211AG393(1)100(2)	SMR10393(1)100A01(2)
100	63	0.047	AG/A01	4	9	13	10	15	F211AG473(1)100(2)	SMR10473(1)100A01(2)
100	63	0.056	AG/A01	4	9	13	10	15	F211AG563(1)100(2)	SMR10563(1)100A01(2)
100	63	0.068	AG/A01	4	9	13	10	15	F211AG683(1)100(2)	SMR10683(1)100A01(2)
100	63	0.082	AG/A01	4	9	13	10	10	F211AG823(1)100(2)	SMR10823(1)100A01(2)
100	63	0.1	AG/A01	4	9	13	10	10	F211AG104(1)100(2)	SMR10104(1)100A01(2)
100	63	0.12	AG/A01	4	9	13	10	10	F211AG124(1)100(2)	SMR10124(1)100A01(2)
100	63	0.15	AG/A01	4	9	13	10	10	F211AG154(1)100(2)	SMR10154(1)100A01(2)
100	63	0.18	AG/A01	4	9	13	10	10	F211AG184(1)100(2)	SMR10184(1)100A01(2)
100	63	0.22	AG/A01	4	9	13	10	10	F211AG224(1)100(2)	SMR10224(1)100A01(2)
100	63	0.27	AH/A02	4.5	10.5	13	10	10	F211AH274(1)100(2)	SMR10274(1)100A02(2)
100	63	0.33	AK/A03	5	11	13	10	10	F211AK334(1)100(2)	SMR10334(1)100A03(2)
100	63	0.39	AK/A03	5	11	13	10	10	F211AK394(1)100(2)	SMR10394(1)100A03(2)
100	63	0.47	AP/A04	6	12	13	10	10	F211AP474(1)100(2)	SMR10474(1)100A04(2)
100	63	0.56	AP/A04	6	12	13	10	10	F211AP564(1)100(2)	SMR10564(1)100A04(2)
100	63	0.27	BD/B04	5.5	10.5	18	15	8	F211BD274(1)100(2)	SMR15274(1)100B04(2)
VDC	VAC	Cap Value (µF)	Size Code (New/Legacy)	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/µs)	New KEMET Part Number	Legacy Part Number

(1) H = ±2.5%, J = ±5%, K = ±10%, M = ±20%.

(2) Insert lead and packaging code. See Ordering Options Table for available options.

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Cap Value (µF)	Size Code (New/ Legacy)	Max Dimensions in mm			Lead Spacing (p)	dV/dt (V/µs)	New KEMET Part Number	Legacy Part Number
				B	H	L				
100	63	0.33	BD/B04	5.5	10.5	18	15	8	F211BD334(1)100(2)	SMR15334(1)100B04(2)
100	63	0.39	BD/B04	5.5	10.5	18	15	8	F211BD394(1)100(2)	SMR15394(1)100B04(2)
100	63	0.47	BD/B04	5.5	10.5	18	15	8	F211BD474(1)100(2)	SMR15474(1)100B04(2)
100	63	0.56	BE/B05	5.5	12.5	18	15	8	F211BE564(1)100(2)	SMR15564(1)100B05(2)
100	63	0.68	BJ/B10	6.5	12.5	18	15	8	F211BJ684(1)100(2)	SMR15684(1)100B10(2)
100	63	0.82	BL/B06	7.5	14.5	18	15	8	F211BL824(1)100(2)	SMR15824(1)100B06(2)
100	63	1	BL/B06	7.5	14.5	18	15	8	F211BL105(1)100(2)	SMR15105(1)100B06(2)
100	63	1.2	BM/B12	8	15	18	15	8	F211BM125(1)100(2)	SMR15125(1)100B12(2)
100	63	1.5	BQ/B11	8.5	16	18	15	8	F211BQ155(1)100(2)	SMR15155(1)100B11(2)
100	63	1.8	BV/B14	9.5	17.5	18	15	8	F211BV185(1)100(2)	SMR15185(1)100B14(2)
100	63	1.5	DD/D13	6.5	14.5	26	22.5	4	F211DD155(1)100(2)	SMR22.5155(1)100D13(2)
100	63	1.8	DF/D17	7	16.5	26	22.5	4	F211DF185(1)100(2)	SMR22.5185(1)100D17(2)
100	63	2.2	DH/D14	8	16	26	22.5	4	F211DH225(1)100(2)	SMR22.5225(1)100D14(2)
100	63	2.7	DM/D15	9	18.5	26	22.5	4	F211DM275(1)100(2)	SMR22.5275(1)100D15(2)
100	63	3.3	DR/D18	10.5	19	26	22.5	4	F211DR335(1)100(2)	SMR22.5335(1)100D18(2)
100	63	3.9	DR/D18	10.5	19	26	22.5	4	F211DR395(1)100(2)	SMR22.5395(1)100D18(2)
100	63	4.7	DT/D16	11	21.5	26	22.5	4	F211DT475(1)100(2)	SMR22.5475(1)100D16(2)
100	63	5.6	FG/F12	11.5	22.5	31.5	27.5	3	F211FG565(1)100(2)	SMR27.5565(1)100F12(2)
100	63	6.8	FM/F13	14.5	24.5	31.5	27.5	3	F211FM685(1)100(2)	SMR27.5685(1)100F13(2)
100	63	8.2	FM/F13	14.5	24.5	31.5	27.5	3	F211FM825(1)100(2)	SMR27.5825(1)100F13(2)
100	63	10	FR/F14	17.5	28	31.5	27.5	3	F211FR106(1)100(2)	SMR27.5106(1)100F14(2)
100	63	12	FR/F14	17.5	28	31.5	27.5	3	F211FR126(1)100(2)	SMR27.5126(1)100F14(2)
250	160	0.001	JF/J01	2.5	6.5	7.2	5	40	F211JF102(1)250(2)	SMR5102(1)250J01(2)
250	160	0.0012	JF/J01	2.5	6.5	7.2	5	40	F211JF122(1)250(2)	SMR5122(1)250J01(2)
250	160	0.0015	JF/J01	2.5	6.5	7.2	5	40	F211JF152(1)250(2)	SMR5152(1)250J01(2)
250	160	0.0018	JF/J01	2.5	6.5	7.2	5	40	F211JF182(1)250(2)	SMR5182(1)250J01(2)
250	160	0.0022	JF/J01	2.5	6.5	7.2	5	40	F211JF222(1)250(2)	SMR5222(1)250J01(2)
250	160	0.0027	JF/J01	2.5	6.5	7.2	5	40	F211JF272(1)250(2)	SMR5272(1)250J01(2)
250	160	0.0033	JF/J01	2.5	6.5	7.2	5	40	F211JF332(1)250(2)	SMR5332(1)250J01(2)
250	160	0.0039	JF/J01	2.5	6.5	7.2	5	40	F211JF392(1)250(2)	SMR5392(1)250J01(2)
250	160	0.0047	JF/J01	2.5	6.5	7.2	5	20	F211JF472(1)250(2)	SMR5472(1)250J01(2)
250	160	0.0056	JF/J01	2.5	6.5	7.2	5	20	F211JF562(1)250(2)	SMR5562(1)250J01(2)
250	160	0.0068	JF/J01	2.5	6.5	7.2	5	20	F211JF682(1)250(2)	SMR5682(1)250J01(2)
250	160	0.0082	JF/J01	2.5	6.5	7.2	5	20	F211JF822(1)250(2)	SMR5822(1)250J01(2)
250	160	0.01	JF/J01	2.5	6.5	7.2	5	20	F211JF103(1)250(2)	SMR5103(1)250J01(2)
250	160	0.012	JF/J01	2.5	6.5	7.2	5	20	F211JF123(1)250(2)	SMR5123(1)250J01(2)
250	160	0.015	JJ/J02	3.5	8	7.2	5	20	F211JJ153(1)250(2)	SMR5153(1)250J02(2)
250	160	0.018	JJ/J02	3.5	8	7.2	5	20	F211JJ183(1)250(2)	SMR5183(1)250J02(2)
250	160	0.022	JJ/J02	3.5	8	7.2	5	20	F211JJ223(1)250(2)	SMR5223(1)250J02(2)
250	160	0.027	JJ/J02	3.5	8	7.2	5	20	F211JJ273(1)250(2)	SMR5273(1)250J02(2)
250	160	0.033	JL/J03	4.5	9	7.2	5	20	F211JL333(1)250(2)	SMR5333(1)250J03(2)
250	160	0.039	JL/J03	4.5	9	7.2	5	20	F211JL393(1)250(2)	SMR5393(1)250J03(2)
250	160	0.047	JL/J03	4.5	9	7.2	5	20	F211JL473(1)250(2)	SMR5473(1)250J03(2)
250	160	0.056	JQ/J04	5	10	7.2	5	20	F211JQ563(1)250(2)	SMR5563(1)250J04(2)
250	160	0.068	JT/J05	6	11	7.2	5	20	F211JT683(1)250(2)	SMR5683(1)250J05(2)
250	160	0.082	JT/J05	6	11	7.2	5	20	F211JT823(1)250(2)	SMR5823(1)250J05(2)
250	160	0.1	JU/J06	7.2	13	7.2	5	20	F211JU104(1)250(2)	SMR5104(1)250J06(2)
250	160	0.12	JU/J06	7.2	13	7.2	5	20	F211JU124(1)250(2)	SMR5124(1)250J06(2)
250	160	0.001	KG/K01	4	8	10	7.5	30	F211KG102(1)250(2)	SMR7.5102(1)250K01(2)
250	160	0.0012	KG/K01	4	8	10	7.5	30	F211KG122(1)250(2)	SMR7.5122(1)250K01(2)
250	160	0.0015	KG/K01	4	8	10	7.5	30	F211KG152(1)250(2)	SMR7.5152(1)250K01(2)
250	160	0.0018	KG/K01	4	8	10	7.5	30	F211KG182(1)250(2)	SMR7.5182(1)250K01(2)
250	160	0.0022	KG/K01	4	8	10	7.5	30	F211KG222(1)250(2)	SMR7.5222(1)250K01(2)
250	160	0.0027	KG/K01	4	8	10	7.5	30	F211KG272(1)250(2)	SMR7.5272(1)250K01(2)
250	160	0.0033	KG/K01	4	8	10	7.5	30	F211KG332(1)250(2)	SMR7.5332(1)250K01(2)
250	160	0.0039	KG/K01	4	8	10	7.5	30	F211KG392(1)250(2)	SMR7.5392(1)250K01(2)
250	160	0.0047	KG/K01	4	8	10	7.5	30	F211KG472(1)250(2)	SMR7.5472(1)250K01(2)
VDC	VAC	Cap Value (µF)	Size Code (New/Legacy)	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/µs)	New KEMET Part Number	Legacy Part Number

(1) H = ±2.5%, J = ±5%, K = ±10%, M = ±20%.

(2) Insert lead and packaging code. See Ordering Options Table for available options.

Roll Over for Order Info.

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Cap Value (µF)	Size Code (New/ Legacy)	Max Dimensions in mm			Lead Spacing (p)	dV/dt (V/µs)	New KEMET Part Number	Legacy Part Number
				B	H	L				
250	160	0.0056	KG/K01	4	8	10	7.5	30	F211KG562(1)250(2)	SMR7.5562(1)250K01(2)
250	160	0.0068	KG/K01	4	8	10	7.5	30	F211KG682(1)250(2)	SMR7.5682(1)250K01(2)
250	160	0.0082	KG/K01	4	8	10	7.5	30	F211KG822(1)250(2)	SMR7.5822(1)250K01(2)
250	160	0.01	KG/K01	4	8	10	7.5	30	F211KG103(1)250(2)	SMR7.5103(1)250K01(2)
250	160	0.012	KG/K01	4	8	10	7.5	30	F211KG123(1)250(2)	SMR7.5123(1)250K01(2)
250	160	0.015	KG/K01	4	8	10	7.5	30	F211KG153(1)250(2)	SMR7.5153(1)250K01(2)
250	160	0.018	KG/K01	4	8	10	7.5	30	F211KG183(1)250(2)	SMR7.5183(1)250K01(2)
250	160	0.022	KG/K01	4	8	10	7.5	30	F211KG223(1)250(2)	SMR7.5223(1)250K01(2)
250	160	0.027	KG/K01	4	8	10	7.5	20	F211KG273(1)250(2)	SMR7.5273(1)250K01(2)
250	160	0.033	KG/K01	4	8	10	7.5	20	F211KG333(1)250(2)	SMR7.5333(1)250K01(2)
250	160	0.039	KG/K01	4	8	10	7.5	20	F211KG393(1)250(2)	SMR7.5393(1)250K01(2)
250	160	0.047	KG/K01	4	8	10	7.5	20	F211KG473(1)250(2)	SMR7.5473(1)250K01(2)
250	160	0.056	KK/K03	5	11	10	7.5	20	F211KK563(1)250(2)	SMR7.5563(1)250K03(2)
250	160	0.068	KK/K03	5	11	10	7.5	20	F211KK683(1)250(2)	SMR7.5683(1)250K03(2)
250	160	0.082	KK/K03	5	11	10	7.5	20	F211KK823(1)250(2)	SMR7.5823(1)250K03(2)
250	160	0.1	KK/K03	5	11	10	7.5	20	F211KK104(1)250(2)	SMR7.5104(1)250K03(2)
250	160	0.12	KM/K04	6	12	10.5	7.5	20	F211KM124(1)250(2)	SMR7.5124(1)250K04(2)
250	160	0.15	KM/K04	6	12	10.5	7.5	20	F211KM154(1)250(2)	SMR7.5154(1)250K04(2)
250	160	0.0027	AG/A01	4	9	13	10	25	F211AG272(1)250(2)	SMR10272(1)250A01(2)
250	160	0.0033	AG/A01	4	9	13	10	25	F211AG332(1)250(2)	SMR10332(1)250A01(2)
250	160	0.0039	AG/A01	4	9	13	10	25	F211AG392(1)250(2)	SMR10392(1)250A01(2)
250	160	0.0047	AG/A01	4	9	13	10	25	F211AG472(1)250(2)	SMR10472(1)250A01(2)
250	160	0.0056	AG/A01	4	9	13	10	25	F211AG562(1)250(2)	SMR10562(1)250A01(2)
250	160	0.0068	AG/A01	4	9	13	10	25	F211AG682(1)250(2)	SMR10682(1)250A01(2)
250	160	0.0082	AG/A01	4	9	13	10	25	F211AG822(1)250(2)	SMR10822(1)250A01(2)
250	160	0.01	AG/A01	4	9	13	10	15	F211AG103(1)250(2)	SMR10103(1)250A01(2)
250	160	0.012	AG/A01	4	9	13	10	15	F211AG123(1)250(2)	SMR10123(1)250A01(2)
250	160	0.015	AG/A01	4	9	13	10	15	F211AG153(1)250(2)	SMR10153(1)250A01(2)
250	160	0.018	AG/A01	4	9	13	10	15	F211AG183(1)250(2)	SMR10183(1)250A01(2)
250	160	0.022	AG/A01	4	9	13	10	15	F211AG223(1)250(2)	SMR10223(1)250A01(2)
250	160	0.027	AG/A01	4	9	13	10	15	F211AG273(1)250(2)	SMR10273(1)250A01(2)
250	160	0.033	AG/A01	4	9	13	10	15	F211AG333(1)250(2)	SMR10333(1)250A01(2)
250	160	0.039	AG/A01	4	9	13	10	15	F211AG393(1)250(2)	SMR10393(1)250A01(2)
250	160	0.047	AG/A01	4	9	13	10	15	F211AG473(1)250(2)	SMR10473(1)250A01(2)
250	160	0.056	AG/A01	4	9	13	10	15	F211AG563(1)250(2)	SMR10563(1)250A01(2)
250	160	0.068	AG/A01	4	9	13	10	15	F211AG683(1)250(2)	SMR10683(1)250A01(2)
250	160	0.082	AH/A02	4.5	10.5	13	10	15	F211AH823(1)250(2)	SMR10823(1)250A02(2)
250	160	0.1	AH/A02	4.5	10.5	13	10	15	F211AH104(1)250(2)	SMR10104(1)250A02(2)
250	160	0.12	AK/A03	5	11	13	10	15	F211AK124(1)250(2)	SMR10124(1)250A03(2)
250	160	0.15	AP/A04	6	12	13	10	15	F211AP154(1)250(2)	SMR10154(1)250A04(2)
250	160	0.18	AP/A04	6	12	13	10	15	F211AP184(1)250(2)	SMR10184(1)250A04(2)
250	160	0.1	BD/B04	5.5	10.5	18	15	10	F211BD104(1)250(2)	SMR15104(1)250B04(2)
250	160	0.12	BD/B04	5.5	10.5	18	15	10	F211BD124(1)250(2)	SMR15124(1)250B04(2)
250	160	0.15	BD/B04	5.5	10.5	18	15	10	F211BD154(1)250(2)	SMR15154(1)250B04(2)
250	160	0.18	BE/B05	5.5	12.5	18	15	10	F211BE184(1)250(2)	SMR15184(1)250B05(2)
250	160	0.22	BJ/B10	6.5	12.5	18	15	10	F211BJ224(1)250(2)	SMR15224(1)250B10(2)
250	160	0.27	BL/B06	7.5	14.5	18	15	10	F211BL274(1)250(2)	SMR15274(1)250B06(2)
250	160	0.33	BL/B06	7.5	14.5	18	15	10	F211BL334(1)250(2)	SMR15334(1)250B06(2)
250	160	0.39	BM/B12	8	15	18	15	10	F211BM394(1)250(2)	SMR15394(1)250B12(2)
250	160	0.47	BQ/B11	8.5	16	18	15	10	F211BQ474(1)250(2)	SMR15474(1)250B11(2)
250	160	0.56	BV/B14	9.5	17.5	18	15	10	F211BV564(1)250(2)	SMR15564(1)250B14(2)
250	160	0.47	DD/D13	6.5	14.5	26	22.5	8	F211DD474(1)250(2)	SMR22.5474(1)250D13(2)
250	160	0.56	DF/D17	7	16.5	26	22.5	8	F211DF564(1)250(2)	SMR22.5564(1)250D17(2)
250	160	0.68	DF/D17	7	16.5	26	22.5	8	F211DF684(1)250(2)	SMR22.5684(1)250D17(2)
250	160	0.82	DM/D15	9	18.5	26	22.5	8	F211DM824(1)250(2)	SMR22.5824(1)250D15(2)
250	160	1	DM/D15	9	18.5	26	22.5	8	F211DM105(1)250(2)	SMR22.5105(1)250D15(2)
250	160	1.2	DR/D18	10.5	19	26	22.5	8	F211DR125(1)250(2)	SMR22.5125(1)250D18(2)
VDC	VAC	Cap Value (µF)	Size Code (New/Legacy)	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/µs)	New KEMET Part Number	Legacy Part Number

(1) H = ±2.5%, J = ±5%, K = ±10%, M = ±20%.

(2) Insert lead and packaging code. See Ordering Options Table for available options.

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Cap Value (µF)	Size Code (New/ Legacy)	Max Dimensions in mm			Lead Spacing (p)	dV/dt (V/µs)	New KEMET Part Number	Legacy Part Number
				B	H	L				
250	160	1.5	DT/D16	11	21.5	26	22.5	8	F211DT155(1)250(2)	SMR22.5155(1)250D16(2)
250	160	1.5	FE/F11	10.5	20.5	31.5	27.5	6	F211FE155(1)250(2)	SMR27.5155(1)250F11(2)
250	160	1.8	FE/F11	10.5	20.5	31.5	27.5	6	F211FE185(1)250(2)	SMR27.5185(1)250F11(2)
250	160	2.2	FG/F12	11.5	22.5	31.5	27.5	6	F211FG225(1)250(2)	SMR27.5225(1)250F12(2)
250	160	2.7	FM/F13	14.5	24.5	31.5	27.5	6	F211FM275(1)250(2)	SMR27.5275(1)250F13(2)
250	160	3.3	FR/F14	17.5	28	31.5	27.5	6	F211FR335(1)250(2)	SMR27.5335(1)250F14(2)
250	160	3.9	FR/F14	17.5	28	31.5	27.5	6	F211FR395(1)250(2)	SMR27.5395(1)250F14(2)
400	200	0.001	JF/J01	2.5	6.5	7.2	5	40	F211JF102(1)400(2)	SMR5102(1)400J01(2)
400	200	0.0012	JF/J01	2.5	6.5	7.2	5	40	F211JF122(1)400(2)	SMR5122(1)400J01(2)
400	200	0.0015	JF/J01	2.5	6.5	7.2	5	40	F211JF152(1)400(2)	SMR5152(1)400J01(2)
400	200	0.0018	JF/J01	2.5	6.5	7.2	5	40	F211JF182(1)400(2)	SMR5182(1)400J01(2)
400	200	0.0022	JF/J01	2.5	6.5	7.2	5	40	F211JF222(1)400(2)	SMR5222(1)400J01(2)
400	200	0.0027	JF/J01	2.5	6.5	7.2	5	40	F211JF272(1)400(2)	SMR5272(1)400J01(2)
400	200	0.0033	JF/J01	2.5	6.5	7.2	5	40	F211JF332(1)400(2)	SMR5332(1)400J01(2)
400	200	0.0039	JF/J01	2.5	6.5	7.2	5	40	F211JF392(1)400(2)	SMR5392(1)400J01(2)
400	200	0.0047	JJ/J02	3.5	8	7.2	5	40	F211JJ472(1)400(2)	SMR5472(1)400J02(2)
400	200	0.0056	JJ/J02	3.5	8	7.2	5	40	F211JJ562(1)400(2)	SMR5562(1)400J02(2)
400	200	0.0068	JJ/J02	3.5	8	7.2	5	40	F211JJ682(1)400(2)	SMR5682(1)400J02(2)
400	200	0.0082	JJ/J02	3.5	8	7.2	5	40	F211JJ822(1)400(2)	SMR5822(1)400J02(2)
400	200	0.01	JJ/J02	3.5	8	7.2	5	40	F211JJ103(1)400(2)	SMR5103(1)400J02(2)
400	200	0.012	JJ/J02	3.5	8	7.2	5	40	F211JJ123(1)400(2)	SMR5123(1)400J02(2)
400	200	0.015	JL/J03	4.5	9	7.2	5	40	F211JL153(1)400(2)	SMR5153(1)400J03(2)
400	200	0.018	JL/J03	4.5	9	7.2	5	40	F211JL183(1)400(2)	SMR5183(1)400J03(2)
400	200	0.022	JQ/J04	5	10	7.2	5	40	F211JQ223(1)400(2)	SMR5223(1)400J04(2)
400	200	0.027	JQ/J04	5	10	7.2	5	40	F211JQ273(1)400(2)	SMR5273(1)400J04(2)
400	200	0.033	JT/J05	6	11	7.2	5	40	F211JT333(1)400(2)	SMR5333(1)400J05(2)
400	200	0.039	JT/J05	6	11	7.2	5	40	F211JT393(1)400(2)	SMR5393(1)400J05(2)
400	200	0.047	JU/J06	7.2	13	7.2	5	40	F211JU473(1)400(2)	SMR5473(1)400J06(2)
400	200	0.056	JU/J06	7.2	13	7.2	5	40	F211JU563(1)400(2)	SMR5563(1)400J06(2)
400	200	0.001	KG/K01	4	8	10	7.5	30	F211KG102(1)400(2)	SMR7.5102(1)400K01(2)
400	200	0.0012	KG/K01	4	8	10	7.5	30	F211KG122(1)400(2)	SMR7.5122(1)400K01(2)
400	200	0.0015	KG/K01	4	8	10	7.5	30	F211KG152(1)400(2)	SMR7.5152(1)400K01(2)
400	200	0.0018	KG/K01	4	8	10	7.5	30	F211KG182(1)400(2)	SMR7.5182(1)400K01(2)
400	200	0.0022	KG/K01	4	8	10	7.5	30	F211KG222(1)400(2)	SMR7.5222(1)400K01(2)
400	200	0.0027	KG/K01	4	8	10	7.5	30	F211KG272(1)400(2)	SMR7.5272(1)400K01(2)
400	200	0.0033	KG/K01	4	8	10	7.5	30	F211KG332(1)400(2)	SMR7.5332(1)400K01(2)
400	200	0.0039	KG/K01	4	8	10	7.5	30	F211KG392(1)400(2)	SMR7.5392(1)400K01(2)
400	200	0.0047	KG/K01	4	8	10	7.5	30	F211KG472(1)400(2)	SMR7.5472(1)400K01(2)
400	200	0.0056	KG/K01	4	8	10	7.5	30	F211KG562(1)400(2)	SMR7.5562(1)400K01(2)
400	200	0.0068	KG/K01	4	8	10	7.5	30	F211KG682(1)400(2)	SMR7.5682(1)400K01(2)
400	200	0.0082	KG/K01	4	8	10	7.5	30	F211KG822(1)400(2)	SMR7.5822(1)400K01(2)
400	200	0.01	KG/K01	4	8	10	7.5	30	F211KG103(1)400(2)	SMR7.5103(1)400K01(2)
400	200	0.012	KG/K01	4	8	10	7.5	30	F211KG123(1)400(2)	SMR7.5123(1)400K01(2)
400	200	0.015	KG/K01	4	8	10	7.5	30	F211KG153(1)400(2)	SMR7.5153(1)400K01(2)
400	200	0.018	KG/K01	4	8	10	7.5	30	F211KG183(1)400(2)	SMR7.5183(1)400K01(2)
400	200	0.022	KG/K01	4	8	10	7.5	30	F211KG223(1)400(2)	SMR7.5223(1)400K01(2)
400	200	0.027	KK/K03	5	11	10	7.5	30	F211KK273(1)400(2)	SMR7.5273(1)400K03(2)
400	200	0.033	KK/K03	5	11	10	7.5	30	F211KK333(1)400(2)	SMR7.5333(1)400K03(2)
400	200	0.039	KK/K03	5	11	10	7.5	30	F211KK393(1)400(2)	SMR7.5393(1)400K03(2)
400	200	0.047	KK/K03	5	11	10	7.5	30	F211KK473(1)400(2)	SMR7.5473(1)400K03(2)
400	200	0.056	KM/K04	6	12	10.5	7.5	30	F211KM563(1)400(2)	SMR7.5563(1)400K04(2)
400	200	0.068	KM/K04	6	12	10.5	7.5	30	F211KM683(1)400(2)	SMR7.5683(1)400K04(2)
400	200	0.0027	AG/A01	4	9	13	10	25	F211AG272(1)400(2)	SMR10272(1)400A01(2)
400	200	0.0033	AG/A01	4	9	13	10	25	F211AG332(1)400(2)	SMR10332(1)400A01(2)
400	200	0.0039	AG/A01	4	9	13	10	25	F211AG392(1)400(2)	SMR10392(1)400A01(2)
400	200	0.0047	AG/A01	4	9	13	10	25	F211AG472(1)400(2)	SMR10472(1)400A01(2)
400	200	0.0068	AG/A01	4	9	13	10	25	F211AG682(1)400(2)	SMR10682(1)400A01(2)
VDC	VAC	Cap Value (µF)	Size Code (New/Legacy)	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/µs)	New KEMET Part Number	Legacy Part Number

(1) H = ±2.5%, J = ±5%, K = ±10%, M = ±20%.

(2) Insert lead and packaging code. See Ordering Options Table for available options.

Roll Over for Order Info.

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Cap Value (µF)	Size Code (New/Legacy)	Max Dimensions in mm			Lead Spacing (p)	dV/dt (V/µs)	New KEMET Part Number	Legacy Part Number
				B	H	L				
400	200	0.12	BL/B06	7.5	14.5	18	15	15	F211BL124(1)400(2)	SMR15124(1)400B06(2)
400	200	0.15	BL/B06	7.5	14.5	18	15	15	F211BL154(1)400(2)	SMR15154(1)400B06(2)
400	200	0.18	BM/B12	8	15	18	15	15	F211BM184(1)400(2)	SMR15184(1)400B12(2)
400	200	0.22	BQ/B11	8.5	16	18	15	15	F211BQ224(1)400(2)	SMR15224(1)400B11(2)
400	200	0.27	BV/B14	9.5	17.5	18	15	15	F211BV274(1)400(2)	SMR15274(1)400B14(2)
400	200	0.15	DD/D13	6.5	14.5	26	22.5	10	F211DD154(1)400(2)	SMR22.5154(1)400D13(2)
400	200	0.18	DD/D13	6.5	14.5	26	22.5	10	F211DD184(1)400(2)	SMR22.5184(1)400D13(2)
400	200	0.22	DD/D13	6.5	14.5	26	22.5	10	F211DD224(1)400(2)	SMR22.5224(1)400D13(2)
400	200	0.27	DF/D17	7	16.5	26	22.5	10	F211DF274(1)400(2)	SMR22.5274(1)400D17(2)
400	200	0.33	DH/D14	8	16	26	22.5	10	F211DH334(1)400(2)	SMR22.5334(1)400D14(2)
400	200	0.39	DM/D15	9	18.5	26	22.5	10	F211DM394(1)400(2)	SMR22.5394(1)400D15(2)
400	200	0.47	DM/D15	9	18.5	26	22.5	10	F211DM474(1)400(2)	SMR22.5474(1)400D15(2)
400	200	0.56	DR/D18	10.5	19	26	22.5	10	F211DR564(1)400(2)	SMR22.5564(1)400D18(2)
400	200	0.68	DT/D16	11	21.5	26	22.5	10	F211DT684(1)400(2)	SMR22.5684(1)400D16(2)
400	200	0.47	FE/F11	10.5	20.5	31.5	27.5	8	F211FE474(1)400(2)	SMR27.5474(1)400F11(2)
400	200	0.56	FE/F11	10.5	20.5	31.5	27.5	8	F211FE564(1)400(2)	SMR27.5564(1)400F11(2)
400	200	0.68	FE/F11	10.5	20.5	31.5	27.5	8	F211FE684(1)400(2)	SMR27.5684(1)400F11(2)
400	200	0.82	FG/F12	11.5	22.5	31.5	27.5	8	F211FG824(1)400(2)	SMR27.5824(1)400F12(2)
400	200	1	FG/F12	11.5	22.5	31.5	27.5	8	F211FG105(1)400(2)	SMR27.5105(1)400F12(2)
400	200	1.2	FM/F13	14.5	24.5	31.5	27.5	8	F211FM125(1)400(2)	SMR27.5125(1)400F13(2)
400	200	1.5	FR/F14	17.5	28	31.5	27.5	8	F211FR155(1)400(2)	SMR27.5155(1)400F14(2)
400	200	1.8	FR/F14	17.5	28	31.5	27.5	8	F211FR185(1)400(2)	SMR27.5185(1)400F14(2)
VDC	VAC	Cap Value (µF)	Size Code (New/ Legacy)	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/µs)	New KEMET Part Number	Legacy Part Number

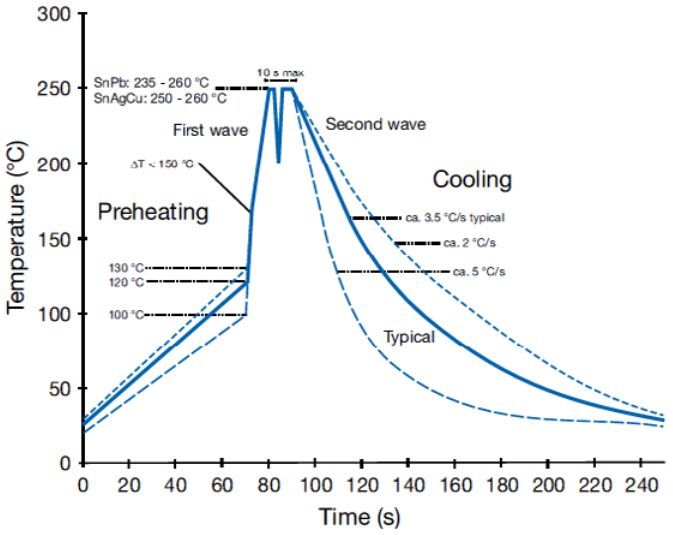
(1) H = ±2.5%, J = ±5%, K = ±10%, M = ±20%.

(2) Insert lead and packaging code. See Ordering Options Table for available options.

Roll Over for Order Info.

Soldering Process

The implementation of the RoHS Directive has required the selection SnAuCu (SAC) alloys or SnCu alloys as primary solder. This has increased the liquidus temperature from that of 183°C for SnPb eutectic alloy to 217°C – 221°C for the new alloys. As a result, the heat stress to components, even in wave soldering, has increased considerably due to higher pre-heat and wave temperatures. Wave soldering can be destructive especially for mechanically small polypropylene capacitors and great care must be taken during soldering. The solder profiles from KEMET are highly recommended. You may also refer to the wave soldering curve from IEC Publication 61760–1 Edition 2. Please consult KEMET with any questions.



Marking

- Capacitance
- Tolerance code
- Rated voltage
- Capacitor family code SMR
- Manufacturing date code

Packaging Quantities

KEMET Size Code	Legacy Size Code	Lead Spacing	Thickness (mm)	Height (mm)	Length (mm)	Bulk Short Leads	Bulk Long Leads	Standard Reel ø 360 mm	Large Reel ø 500 mm	Ammo	Standard Reel Formed	Ammo Formed
JF	J01	5	2.5	6.5	7.2	2000	2000	2500	5000	3000		
JJ	J02		3.5	8	7.2	2000	2000	2000	4000	2000		
JL	J03		4.5	9	7.2	1000	1000	1500	3000	1700		
JQ	J04		5	10	7.2	1000	1000	1300	2600	1500		
JT	J05		6	11	7.2	1000	1000	1000	2000	1200		
JU	J06		7.2	13	7.2	1000	1000	800	1600			
JH	J11		4.5	6	7.2	1000	1000	1500	3000	1700		
JK	J12		5.5	7	7.2	1000	1000	1200	2400	1300		
JR	J13		6.5	8	7.2	1000	1000	900	1800	1100		
KE	K00	7.5	2.5	6	10	2000	2000	2500	5000	3000		
KG	K01		4	8	10	1000	1000	1700	3400	1900		
KK	K03		5	11	10	1000	1000	1300	2600	1500		1200
KM	K04		6	12	10	1000	1000	1000	2000	1200		

Packaging Quantities cont'd

KEMET Size Code	Legacy Size Code	Lead Spacing	Thickness (mm)	Height (mm)	Length (mm)	Bulk Short Leads	Bulk Long Leads	Standard Reel ø 360 mm	Large Reel ø 500 mm	Ammo	Standard Reel Formed	Ammo Formed
AG	A01	10	4	9	13	1000	1000	900	1800			780
AH	A02		4.5	10.5	13	1000	1000	800	1600			
AK	A03		5	11	13	800	800	700	1400			
AP	A04		6	12	13	600	600	500	1000			520
AL	A05		9.5	7.5	13	600	600	350	700			
AE	A06		4	8	13	1000	1000	900	1800			
BD	B04	15	5.5	10.5	18	1000	800	600	1200		550	570
BE	B05		5.5	12.5	18	1000	800	600	1200		550	570
BL	B06		7.5	14.5	18	800	400	400	800		350	378
BJ	B10		6.5	12.5	18	1000	600	500	1000		450	480
BQ	B11		8.5	16	18	600	400	400	800		350	324
BM	B12		8	15	18	600	400	400	800		350	351
BV	B14		9.5	17.5	18	500	300	350	700		250	297
BG	B15		6	12	18	1000	800	500	1000		450	520
BY	B16		11	19	18	450	250	300	600		250	252
BU	B17		13	12.5	18	400	300	250	500		200	216
DD	D13	22.5	6.5	14.5	26.5	234		300	600			
DH	D14		8	16	26.5	186		250	500			
DM	D15		9	18.5	26.5	308		250	500			
DT	D16		11	21.5	26.5	253		200	400			
DF	D17		7	16.5	26.5	216		300	600			
DR	D18		10.5	19	26.5	264		200	400			
DY	D19		15.5	24.5	26.5	176		110	250			
DW	D20		13.5	23	26.5	209		160	300			
FK	F03	27.5	13.5	23	31.5	171			250			
FE	F11		10.5	20.5	31.5	216			350			
FG	F12		11.5	22.5	31.5	198			300			
FM	F13		14.5	24.5	31.5	153			250			
FR	F14		17.5	28	31.5	126						
FS	F15		19	29	31.5	117						
FV	F16		21	30	31.5	108						
FH	F17		21	12.5	31.5	108						
FT	F18		31	18.5	31.5	72						
FQ	F19		27.5	16	31.5	81						

MDK Series Metallized Polyester Film, Dual In-Line, low ESR/ESL, 50 – 630 VDC

Overview

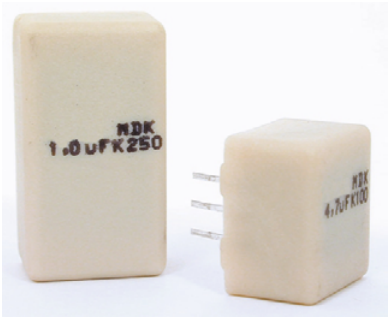
Dual in-line (DIL) metallized polyester (PET) film capacitor. Encapsulation in self-extinguishing material meeting the requirements of UL 94 V–0.

Applications

Typical applications include high frequency switched-mode power supplies, DC/DC converters and input/output filtering.

Benefits

- Rated voltage: 50 – 630 VDC
- Rated voltage: 30 – 220 VAC
- Capacitance range: 0.033 – 15 µF
- Capacitance tolerance: ±5%, ±10%, other tolerances on request
- Climatic category: 55/125/56
- RoHS Compliant and lead-free terminations
- Operating temperature range of -55˚C to +125˚C



Legacy Part Number System

MDK	10	333	K	50	A52	P3	TUBE
Series	Lead Spacing (mm)	Capacitance Code (pF)	Capacitance Tolerance	Rated Voltage (VDC)	Size Code	Number of Leads per Side	Packaging Code
Dual In-Line, Metallized Polyester	10 15	First two digits indicate the two most significant digits of the capacitance value in picofarads. The third digit is the number of following zeros.	J = ±5 K = ±10% Other tolerances on request	50 100 250 400 630	See Dimension Table	P3 = 3 leads P4 = 4 leads P5 = 5 leads P7 = 7 leads P8 = 8 leads	See Ordering Options Table

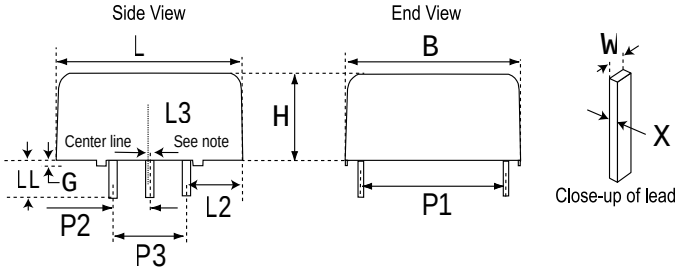
New KEMET Part Number System

F	68	3	A	A	333	K	050	T
Capacitor Class	Series	Number of Leads per Side	Lead Spacing (mm)	Size Code	Capacitance Code (pF)	Capacitance Tolerance	Rated Voltage (VDC)	Packaging Code
F = Film	Dual In-Line, Metallized Polyester	3 = 3 leads 4 = 4 leads 5 = 5 leads 7 = 7 leads 8 = 8 leads	A = 10 B = 15	A = Standard box size	First two digits indicate the two most significant digits of the capacitance value in picofarads. The third digit is the number of following zeros.	J = ±5 K = ±10% Other tolerances on request	050 = 50 100 = 100 250 = 250 400 = 400 630 = 630	See Ordering Options Table

Ordering Options Table

Packaging Type	KEMET Packaging Code	Legacy Packaging Code
Standard Packaging Options		
Bulk (Tube)	T	TUBE
Case Size A53 Tape & Reel (Standard Reel)	VV687	TR32

Dimensions – Millimeters



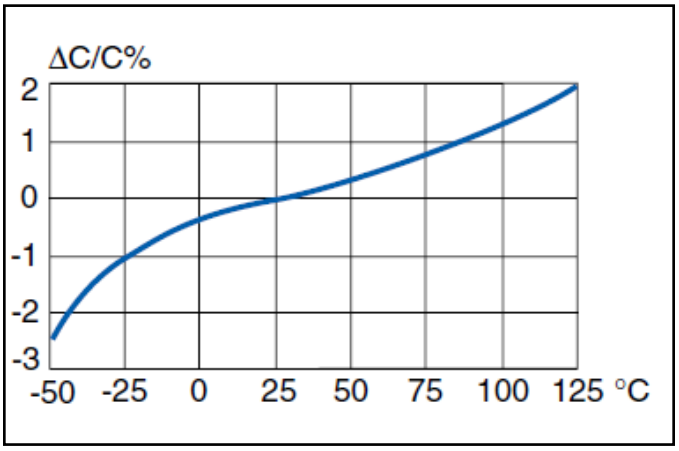
Legacy Size Code	Leads per Side	P1	P2	P3(1)	B	H	L	H1	L2	L3(2)	W	X	Y	Z	LL
		+/-0.2	+/-0.2	+/-0.2	+/-0.2	+/-0.2	+/-0.2	+/-0.4	+/-0.2	Maximum	+/-0.05	+/-0.05	+/-0.2	Nominal	+/-0.2
A52	3	10.0	2.54	5.08	12.2	6.05	11.0	7.75	2.96	0.2	0.5	0.35	1.5	0.25	1.7
A53	3	10.0	2.54	5.08	12.7	9.0	14.0	10.5	4.46	0.2	0.5	0.35	1.5	0	1.5
A54	3	10.0	2.54	5.08	12.2	6.05	13.5	7.75	4.21	0.2	0.5	0.35	1.5	0.25	1.7
A55	3	10.0	2.54	5.08	12.2	6.05	16.5	7.75	5.71	0.2	0.5	0.35	1.5	0.25	1.7
B53	3	15.0	2.54	5.08	16.5	6.05	11.0	7.75	2.96	0.2	0.5	0.35	1.5	0.6	1.7
B55	3	15.0	2.54	5.08	16.5	6.05	12.2	7.75	3.56	0.2	0.5	0.35	1.5	0.6	1.7
A53	4	10.0	2.54	7.62	12.7	9.0	14.0	10.5	3.19	0.2	0.5	0.35	1.5	0	1.5
A54	4	10.0	2.54	7.62	12.2	6.05	13.5	7.75	2.94	0.2	0.5	0.35	1.5	0.25	1.7
A55	4	10.0	2.54	7.62	12.2	6.05	16.5	7.75	4.44	0.2	0.5	0.35	1.5	0.25	1.7
B55	4	15.0	2.54	7.62	16.5	6.05	12.2	7.75	2.29	0.2	0.5	0.35	1.5	0.6	1.7
A55	5	10.0	2.54	10.16	12.2	6.05	16.5	7.75	3.17	0.2	0.5	0.35	1.5	0.25	1.7
A57	7	10.0	2.54	15.24	12.7	9.0	23.0	10.7	3.88	0.2	0.5	0.35	1.5	0	1.7
A58	7	10.0	2.54	15.24	12.7	11.0	23.0	12.5	3.88	0.2	0.5	0.35	1.5	0	1.5
A57	8	10.0	2.54	17.78	12.7	9.0	23.0	10.7	2.61	0.2	0.5	0.35	1.5	0	1.7
A58	8	10.0	2.54	17.78	12.7	11.0	23.0	12.5	2.61	0.2	0.5	0.35	1.5	0	1.5

Drawing shows MDK with three leads per side. Similar dimensional requirements apply to the 4, 5, 7, and 8 leads per side configurations.
(1) P3 represents the cumulative tolerance of all leads.
(2) L3 represents the extent to which the center line of the leads misaligns with the center line of the body. Dimension shown is the maximum such misalignment allowed.

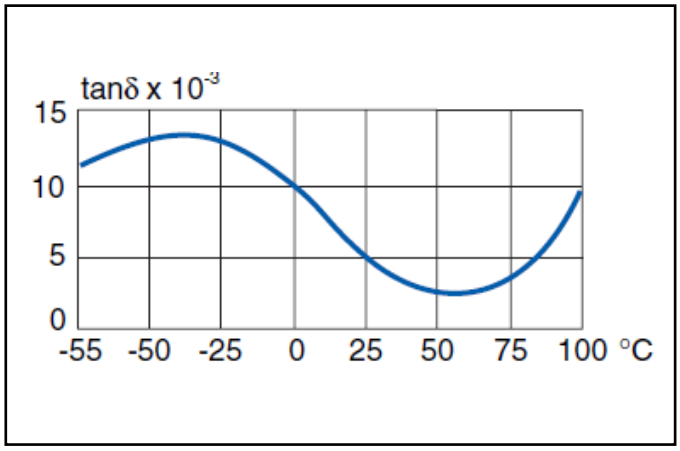
Performance Characteristics

Rated Voltage (VDC)	50	100	250	400	630
Rated Voltage (VAC)	30	63	160	200	220
Capacitance Range (µF)	0.033 – 15	0.033 – 10	0.033 – 1.5	0.033 – 0.47	0.033 – 0.18
Capacitance Tolerance	±5%, ±10%, other tolerances on request				
Category Temperature Range	-55°C to +125°C				
Rated Temperature	+85°C				
Voltage Derating	The rated voltage is decreased with 1.25%/°C from +85°C				
Climatic Category	55/125/56				
Test Voltage	1.6 x V_R, 60 seconds				
Insulation Resistance	Measured at +20°C according to IEC 60384–2				
	Minimum Value Between Terminals				
		C ≤ 0.33 µF		C > 0.33 µF	
	V_R ≤ 100	15,000 MΩ		5,000 MΩ • µF	
	V_R > 100	30,000 MΩ		10,000 MΩ • µF	
Dissipation Factor	Maximum Values at +23°C				
		C ≤ 0.1 µF	0.1 < C < 3.3 µF	3.3 ≤ C ≤ 10 µF	C > 10 µF
	1 kHz	0.8%	0.8%	0.8%	0.8%
	10 kHz	1.5%	1.5%	1.5%	2.0%
	100 kHz	2.5%	5.0%		
Self Inductance	Approximately 4 nH				

Typical Capacitance vs. Temperature at 1 kHz



Typical Dissipation Factor vs. Temperature at 1 kHz



Maximum RMS Voltage V_{rms} (V) vs. Frequency

Value	Rated Voltage	Case Size	1 kHz	10 kHz	100 kHz	500 kHz	1 MHz
1.0 µF	250 V	A57	150.0	36.0	9.2	2.9	1.3
2.2 µF	100 V	A52	50.0	25.0	5.0	1.2	0.6
3.9 µF	100 V	A52	50.0	18.0	4.0	1.0	0.3
4.7 µF	100 V	A54	50.0	16.0	3.5	0.7	0.2
6.8 µF	100 V	A57	50.0	15.5	2.2	0.5	0.2
10 µF	100 V	A58	50.0	15.0	2.0	0.4	0.2

Maximum RMS Current I_{rms} (A) vs. Frequency

Value	Rated Voltage	Case Size	1 kHz	10 kHz	100 kHz	500 kHz	1 MHz
1.0 µF	250 V	A57	1.0	2.2	5.5	9.0	10.0
2.2 µF	100 V	A52	1.5	2.3	6.0	7.5	10.0
3.9 µF	100 V	A52	2.0	4.0	10.0	11.0	11.5
4.7 µF	100 V	A54	2.0	4.5	10.0	12.5	12.5
6.8 µF	100 V	A57	3.0	6.0	11.0	13.0	13.5
10 µF	100 V	A58	4.0	9.0	13.0	14.0	14.5

Environmental Compliance

All KEMET surface mount capacitors are RoHS Compliant.

RoHS Compliant

Table 1 – Ratings & Part Number Reference

VDC	VAC	Cap Value (µF)	Size Code (New/Legacy)	Dimensions in mm			Lead Spacing (p)	ESR 500 kHz (mΩ)	New KEMET Part Number	Legacy Part Number
				B	H	L				
50	30	0.033	AA/A52	12.2	6.05	11.0	10	390	F683AA333(1)050T	MDK10333(1)50A52P3TUBE
50	30	0.039	AA/A52	12.2	6.05	11.0	10	330	F683AA393(1)050T	MDK10393(1)50A52P3TUBE
50	30	0.047	AA/A52	12.2	6.05	11.0	10	270	F683AA473(1)050T	MDK10473(1)50A52P3TUBE
50	30	0.056	AA/A52	12.2	6.05	11.0	10	230	F683AA563(1)050T	MDK10563(1)50A52P3TUBE
50	30	0.068	AA/A52	12.2	6.05	11.0	10	190	F683AA683(1)050T	MDK10683(1)50A52P3TUBE
50	30	0.082	AA/A52	12.2	6.05	11.0	10	160	F683AA823(1)050T	MDK10823(1)50A52P3TUBE
50	30	0.10	AA/A52	12.2	6.05	11.0	10	130	F683AA104(1)050T	MDK10104(1)50A52P3TUBE
50	30	0.12	AA/A52	12.2	6.05	11.0	10	110	F683AA124(1)050T	MDK10124(1)50A52P3TUBE
50	30	0.15	AA/A52	12.2	6.05	11.0	10	85	F683AA154(1)050T	MDK10154(1)50A52P3TUBE
50	30	0.18	AA/A52	12.2	6.05	11.0	10	70	F683AA184(1)050T	MDK10184(1)50A52P3TUBE
50	30	0.22	AA/A52	12.2	6.05	11.0	10	58	F683AA224(1)050T	MDK10224(1)50A52P3TUBE
50	30	0.27	AA/A52	12.2	6.05	11.0	10	47	F683AA274(1)050T	MDK10274(1)50A52P3TUBE
50	30	0.33	AA/A52	12.2	6.05	11.0	10	39	F683AA334(1)050T	MDK10334(1)50A52P3TUBE
50	30	0.39	AA/A52	12.2	6.05	11.0	10	33	F683AA394(1)050T	MDK10394(1)50A52P3TUBE
50	30	0.47	AA/A52	12.2	6.05	11.0	10	30	F683AA474(1)050T	MDK10474(1)50A52P3TUBE
50	30	0.56	AA/A52	12.2	6.05	11.0	10	26	F683AA564(1)050T	MDK10564(1)50A52P3TUBE
50	30	0.68	AA/A52	12.2	6.05	11.0	10	21	F683AA684(1)050T	MDK10684(1)50A52P3TUBE
50	30	0.82	AA/A52	12.2	6.05	11.0	10	18	F683AA824(1)050T	MDK10824(1)50A52P3TUBE
50	30	1.0	AA/A52	12.2	6.05	11.0	10	15	F683AA105(1)050T	MDK10105(1)50A52P3TUBE
50	30	1.2	AA/A52	12.2	6.05	11.0	10	14	F683AA125(1)050T	MDK10125(1)50A52P3TUBE
50	30	1.5	AA/A52	12.2	6.05	11.0	10	13	F683AA155(1)050T	MDK10155(1)50A52P3TUBE
50	30	1.8	AA/A52	12.2	6.05	11.0	10	12	F683AA185(1)050T	MDK10185(1)50A52P3TUBE
50	30	2.2	AA/A52	12.2	6.05	11.0	10	11	F683AA225(1)050T	MDK10225(1)50A52P3TUBE
50	30	2.7	AA/A52	12.2	6.05	11.0	10	10	F683AA275(1)050T	MDK10275(1)50A52P3TUBE
50	30	3.3	AA/A52	12.2	6.05	11.0	10	8	F683AA335(1)050T	MDK10335(1)50A52P3TUBE
50	30	3.9	AA/A52	12.2	6.05	11.0	10	7	F683AA395(1)050T	MDK10395(1)50A52P3TUBE
50	30	4.7	AA/A52	12.2	6.05	11.0	10	6	F683AA475(1)050T	MDK10475(1)50A52P3TUBE
50	30	5.6	AA/A54	12.2	6.05	13.5	10	5	F68(2)AA565(1)050T	MDK10565(1)50A54P(2)TUBE
50	30	6.8	AA/A55	12.2	6.05	16.5	10	5	F68(3)AA685(1)050T	MDK10685(1)50A55P(3)TUBE
50	30	8.2	AA/A57	12.7	9.0	23.0	10	4	F68(4)AA825(1)050T	MDK10825(1)50A57P(4)TUBE
50	30	10	AA/A57	12.7	9.0	23.0	10	3	F68(4)AA106(1)050T	MDK10106(1)50A57P(4)TUBE
50	30	12	AA/A58	12.7	11.0	23.0	10	3	F68(4)AA126(1)050T	MDK10126(1)50A58P(4)TUBE
50	30	15	AA/A58	12.7	11.0	23.0	10	3	F68(4)AA156(1)050T	MDK10156(1)50A58P(4)TUBE
50	30	0.033	BA/B53	16.5	6.05	11.0	15	390	F683BA333(1)050T	MDK15333(1)50B53P3TUBE
50	30	0.039	BA/B53	16.5	6.05	11.0	15	330	F683BA393(1)050T	MDK15393(1)50B53P3TUBE
50	30	0.047	BA/B53	16.5	6.05	11.0	15	270	F683BA473(1)050T	MDK15473(1)50B53P3TUBE
50	30	0.056	BA/B53	16.5	6.05	11.0	15	230	F683BA563(1)050T	MDK15563(1)50B53P3TUBE
50	30	0.068	BA/B53	16.5	6.05	11.0	15	190	F683BA683(1)050T	MDK15683(1)50B53P3TUBE
50	30	0.082	BA/B53	16.5	6.05	11.0	15	160	F683BA823(1)050T	MDK15823(1)50B53P3TUBE
50	30	0.10	BA/B53	16.5	6.05	11.0	15	130	F683BA104(1)050T	MDK15104(1)50B53P3TUBE
50	30	0.12	BA/B53	16.5	6.05	11.0	15	110	F683BA124(1)050T	MDK15124(1)50B53P3TUBE
50	30	0.15	BA/B53	16.5	6.05	11.0	15	85	F683BA154(1)050T	MDK15154(1)50B53P3TUBE
50	30	0.18	BA/B53	16.5	6.05	11.0	15	70	F683BA184(1)050T	MDK15184(1)50B53P3TUBE
50	30	0.22	BA/B53	16.5	6.05	11.0	15	58	F683BA224(1)050T	MDK15224(1)50B53P3TUBE
50	30	0.27	BA/B53	16.5	6.05	11.0	15	47	F683BA274(1)050T	MDK15274(1)50B53P3TUBE
50	30	0.33	BA/B53	16.5	6.05	11.0	15	39	F683BA334(1)050T	MDK15334(1)50B53P3TUBE
50	30	0.39	BA/B53	16.5	6.05	11.0	15	39	F683BA394(1)050T	MDK15394(1)50B53P3TUBE
50	30	0.47	BA/B53	16.5	6.05	11.0	15	30	F683BA474(1)050T	MDK15474(1)50B53P3TUBE
50	30	0.56	BA/B53	16.5	6.05	11.0	15	26	F683BA564(1)050T	MDK15564(1)50B53P3TUBE
50	30	0.68	BA/B53	16.5	6.05	11.0	15	21	F683BA684(1)050T	MDK15684(1)50B53P3TUBE
50	30	0.82	BA/B53	16.5	6.05	11.0	15	18	F683BA824(1)050T	MDK15824(1)50B53P3TUBE
50	30	1.0	BA/B53	16.5	6.05	11.0	15	15	F683BA105(1)050T	MDK15105(1)50B53P3TUBE
50	30	1.2	BA/B53	16.5	6.05	11.0	15	15	F683BA125(1)050T	MDK15125(1)50B53P3TUBE
50	30	1.5	BA/B53	16.5	6.05	11.0	15	13	F683BA155(1)050T	MDK15155(1)50B53P3TUBE
50	30	1.8	BA/B53	16.5	6.05	11.0	15	13	F683BA185(1)050T	MDK15185(1)50B53P3TUBE
50	30	2.2	BA/B53	16.5	6.05	11.0	15	11	F683BA225(1)050T	MDK15225(1)50B53P3TUBE
50	30	2.7	BA/B53	16.5	6.05	11.0	15	11	F683BA275(1)050T	MDK15275(1)50B53P3TUBE
50	30	3.3	BA/B53	16.5	6.05	11.0	15	8	F683BA335(1)050T	MDK15335(1)50B53P3TUBE
50	30	3.9	BA/B53	16.5	6.05	11.0	15	8	F683BA395(1)050T	MDK15395(1)50B53P3TUBE
VDC	VAC	Cap Value (µF)	Size Code (New/ Legacy)	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	ESR 500 kHz (mΩ)	New KEMET Part Number	Legacy Part Number

(1) J = ±5%, K = ±10%, other tolerances on request.
(2) = Number of leads per side, 3 or 4.
(3) = Number of leads per side, 3, 4 or 5.
(4) = Number of leads per side, 7 or 8.

Roll Over for Order Info.

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Cap Value (µF)	Size Code (New/Legacy)	Dimensions in mm			Lead Spacing (p)	ESR 500 kHz (mΩ)	New KEMET Part Number	Legacy Part Number
				B	H	L				
50	30	4.7	BA/B53	16.5	6.05	11.0	15	6	F683BA475(1)050T	MDK15475(1)50B53P3TUBE
50	30	5.6	BA/B53	16.5	6.05	11.0	15	5	F683BA565(1)050T	MDK15565(1)50B53P3TUBE
50	30	6.8	BA/B53	16.5	6.05	11.0	15	5	F683BA685(1)050T	MDK15685(1)50B53P3TUBE
100	63	0.033	AA/A52	12.2	6.05	11.0	10	390	F683AA333(1)100T	MDK10333(1)100A52P3TUBE
100	63	0.039	AA/A52	12.2	6.05	11.0	10	330	F683AA393(1)100T	MDK10393(1)100A52P3TUBE
100	63	0.047	AA/A52	12.2	6.05	11.0	10	270	F683AA473(1)100T	MDK10473(1)100A52P3TUBE
100	63	0.056	AA/A52	12.2	6.05	11.0	10	230	F683AA563(1)100T	MDK10563(1)100A52P3TUBE
100	63	0.068	AA/A52	12.2	6.05	11.0	10	190	F683AA683(1)100T	MDK10683(1)100A52P3TUBE
100	63	0.082	AA/A52	12.2	6.05	11.0	10	160	F683AA823(1)100T	MDK10823(1)100A52P3TUBE
100	63	0.10	AA/A52	12.2	6.05	11.0	10	130	F683AA104(1)100T	MDK10104(1)100A52P3TUBE
100	63	0.12	AA/A52	12.2	6.05	11.0	10	110	F683AA124(1)100T	MDK10124(1)100A52P3TUBE
100	63	0.15	AA/A52	12.2	6.05	11.0	10	85	F683AA154(1)100T	MDK10154(1)100A52P3TUBE
100	63	0.18	AA/A52	12.2	6.05	11.0	10	70	F683AA184(1)100T	MDK10184(1)100A52P3TUBE
100	63	0.22	AA/A52	12.2	6.05	11.0	10	58	F683AA224(1)100T	MDK10224(1)100A52P3TUBE
100	63	0.27	AA/A52	12.2	6.05	11.0	10	47	F683AA274(1)100T	MDK10274(1)100A52P3TUBE
100	63	0.33	AA/A52	12.2	6.05	11.0	10	39	F683AA334(1)100T	MDK10334(1)100A52P3TUBE
100	63	0.39	AA/A52	12.2	6.05	11.0	10	33	F683AA394(1)100T	MDK10394(1)100A52P3TUBE
100	63	0.47	AA/A52	12.2	6.05	11.0	10	30	F683AA474(1)100T	MDK10474(1)100A52P3TUBE
100	63	0.56	AA/A52	12.2	6.05	11.0	10	26	F683AA564(1)100T	MDK10564(1)100A52P3TUBE
100	63	0.68	AA/A52	12.2	6.05	11.0	10	21	F683AA684(1)100T	MDK10684(1)100A52P3TUBE
100	63	0.82	AA/A52	12.2	6.05	11.0	10	18	F683AA824(1)100T	MDK10824(1)100A52P3TUBE
100	63	1.0	AA/A52	12.2	6.05	11.0	10	15	F683AA105(1)100T	MDK10105(1)100A52P3TUBE
100	63	1.2	AA/A52	12.2	6.05	11.0	10	14	F683AA125(1)100T	MDK10125(1)100A52P3TUBE
100	63	1.5	AA/A52	12.2	6.05	11.0	10	13	F683AA155(1)100T	MDK10155(1)100A52P3TUBE
100	63	1.8	AA/A52	12.2	6.05	11.0	10	12	F683AA185(1)100T	MDK10185(1)100A52P3TUBE
100	63	2.2	AA/A52	12.2	6.05	11.0	10	11	F683AA225(1)100T	MDK10225(1)100A52P3TUBE
100	35	2.7	AA/A52	12.2	6.05	11.0	10	10	F683AA275(1)100T	MDK10275(1)100A52P3TUBE
100	35	3.3	AA/A52	12.2	6.05	11.0	10	8	F683AA335(1)100T	MDK10335(1)100A52P3TUBE
100	35	3.9	AA/A52	12.2	6.05	11.0	10	7	F683AA395(1)100T	MDK10395(1)100A52P3TUBE
100	35	4.7	AA/A54	12.2	6.05	13.5	10	6	F68(2)AA475(1)100T	MDK10475(1)100A54P(2)TUBE
100	35	4.7	AA/A53	12.7	9.0	14.0	10	6	F68(2)AA475(1)100VV687	MDK10475(1)100A53P(2)TR32
100	35	5.6	AA/A55	12.2	6.05	16.5	10	5	F68(3)AA565(1)100T	MDK10565(1)100A55P(3)TUBE
100	63	6.8	AA/A57	12.7	9.0	23.0	10	5	F68(4)AA685(1)100T	MDK10685(1)100A57P(4)TUBE
100	63	8.2	AA/A58	12.7	11.0	23.0	10	4	F68(4)AA825(1)100T	MDK10825(1)100A58P(4)TUBE
100	63	10	AA/A58	12.7	11.0	23.0	10	3	F68(4)AA106(1)100T	MDK10106(1)100A58P(4)TUBE
100	63	0.033	BA/B53	16.5	6.05	11.0	15	390	F683BA333(1)100T	MDK15333(1)100B53P3TUBE
100	63	0.039	BA/B53	16.5	6.05	11.0	15	330	F683BA393(1)100T	MDK15393(1)100B53P3TUBE
100	63	0.047	BA/B53	16.5	6.05	11.0	15	270	F683BA473(1)100T	MDK15473(1)100B53P3TUBE
100	63	0.056	BA/B53	16.5	6.05	11.0	15	230	F683BA563(1)100T	MDK15563(1)100B53P3TUBE
100	63	0.068	BA/B53	16.5	6.05	11.0	15	190	F683BA683(1)100T	MDK15683(1)100B53P3TUBE
100	63	0.082	BA/B53	16.5	6.05	11.0	15	160	F683BA823(1)100T	MDK15823(1)100B53P3TUBE
100	63	0.10	BA/B53	16.5	6.05	11.0	15	130	F683BA104(1)100T	MDK15104(1)100B53P3TUBE
100	63	0.12	BA/B53	16.5	6.05	11.0	15	110	F683BA124(1)100T	MDK15124(1)100B53P3TUBE
100	63	0.15	BA/B53	16.5	6.05	11.0	15	85	F683BA154(1)100T	MDK15154(1)100B53P3TUBE
100	63	0.18	BA/B53	16.5	6.05	11.0	15	70	F683BA184(1)100T	MDK15184(1)100B53P3TUBE
100	63	0.22	BA/B53	16.5	6.05	11.0	15	58	F683BA224(1)100T	MDK15224(1)100B53P3TUBE
100	63	0.27	BA/B53	16.5	6.05	11.0	15	47	F683BA274(1)100T	MDK15274(1)100B53P3TUBE
100	63	0.33	BA/B53	16.5	6.05	11.0	15	39	F683BA334(1)100T	MDK15334(1)100B53P3TUBE
100	63	0.39	BA/B53	16.5	6.05	11.0	15	39	F683BA394(1)100T	MDK15394(1)100B53P3TUBE
100	63	0.47	BA/B53	16.5	6.05	11.0	15	30	F683BA474(1)100T	MDK15474(1)100B53P3TUBE
100	63	0.56	BA/B53	16.5	6.05	11.0	15	26	F683BA564(1)100T	MDK15564(1)100B53P3TUBE
100	63	0.68	BA/B53	16.5	6.05	11.0	15	21	F683BA684(1)100T	MDK15684(1)100B53P3TUBE
100	63	0.82	BA/B53	16.5	6.05	11.0	15	18	F683BA824(1)100T	MDK15824(1)100B53P3TUBE
100	63	1.0	BA/B53	16.5	6.05	11.0	15	15	F683BA105(1)100T	MDK15105(1)100B53P3TUBE
100	63	1.2	BA/B53	16.5	6.05	11.0	15	15	F683BA125(1)100T	MDK15125(1)100B53P3TUBE
100	63	1.5	BA/B53	16.5	6.05	11.0	15	13	F683BA155(1)100T	MDK15155(1)100B53P3TUBE
100	63	1.8	BA/B53	16.5	6.05	11.0	15	13	F683BA185(1)100T	MDK15185(1)100B53P3TUBE
100	63	2.2	BA/B53	16.5	6.05	11.0	15	11	F683BA225(1)100T	MDK15225(1)100B53P3TUBE
100	63	2.7	BA/B53	16.5	6.05	11.0	15	11	F683BA275(1)100T	MDK15275(1)100B53P3TUBE
VDC	VAC	Cap Value (µF)	Size Code (New/ Legacy)	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	ESR 500 kHz (mΩ)	New KEMET Part Number	Legacy Part Number

(1) J = ±5%, K = ±10%, other tolerances on request.
(2) = Number of leads per side, 3 or 4.
(3) = Number of leads per side, 3, 4 or 5.
(4) = Number of leads per side, 7 or 8.

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Cap Value (µF)	Size Code (New/Legacy)	Dimensions in mm			Lead Spacing (p)	ESR 500 kHz (mΩ)	New KEMET Part Number	Legacy Part Number
				B	H	L				
100	63	3.3	BA/B53	16.5	6.05	11.0	15	8	F683BA335(1)100T	MDK15335(1)100B53P3TUBE
100	63	3.9	BA/B53	16.5	6.05	11.0	15	8	F683BA395(1)100T	MDK15395(1)100B53P3TUBE
100	35	4.7	BA/B53	16.5	6.05	11.0	15	6	F683BA475(1)100T	MDK15475(1)100B53P3TUBE
100	35	5.6	BA/B55	16.5	6.05	12.2	15	5	F68(2)BA565(1)100T	MDK15565(1)100B55P(2)TUBE
250	160	0.033	AA/A52	12.2	6.05	11.0	10	390	F683AA333(1)250T	MDK10333(1)250A52P3TUBE
250	160	0.039	AA/A52	12.2	6.05	11.0	10	330	F683AA393(1)250T	MDK10393(1)250A52P3TUBE
250	160	0.047	AA/A52	12.2	6.05	11.0	10	270	F683AA473(1)250T	MDK10473(1)250A52P3TUBE
250	160	0.056	AA/A52	12.2	6.05	11.0	10	230	F683AA563(1)250T	MDK10563(1)250A52P3TUBE
250	160	0.068	AA/A52	12.2	6.05	11.0	10	190	F683AA683(1)250T	MDK10683(1)250A52P3TUBE
250	160	0.082	AA/A52	12.2	6.05	11.0	10	160	F683AA823(1)250T	MDK10823(1)250A52P3TUBE
250	160	0.10	AA/A52	12.2	6.05	11.0	10	130	F683AA104(1)250T	MDK10104(1)250A52P3TUBE
250	160	0.12	AA/A52	12.2	6.05	11.0	10	110	F683AA124(1)250T	MDK10124(1)250A52P3TUBE
250	160	0.15	AA/A52	12.2	6.05	11.0	10	85	F683AA154(1)250T	MDK10154(1)250A52P3TUBE
250	160	0.18	AA/A52	12.2	6.05	11.0	10	70	F683AA184(1)250T	MDK10184(1)250A52P3TUBE
250	160	0.22	AA/A52	12.2	6.05	11.0	10	58	F683AA224(1)250T	MDK10224(1)250A52P3TUBE
250	160	0.27	AA/A52	12.2	6.05	11.0	10	47	F683AA274(1)250T	MDK10274(1)250A52P3TUBE
250	160	0.33	AA/A52	12.2	6.05	11.0	10	39	F683AA334(1)250T	MDK10334(1)250A52P3TUBE
250	160	0.39	AA/A52	12.2	6.05	11.0	10	33	F683AA394(1)250T	MDK10394(1)250A52P3TUBE
250	160	0.47	AA/A52	12.2	6.05	11.0	10	30	F683AA474(1)250T	MDK10474(1)250A52P3TUBE
250	160	0.56	AA/A54	12.2	6.05	13.5	10	26	F68(2)AA564(1)250T	MDK10564(1)250A54P(2)TUBE
250	160	0.68	AA/A55	12.2	6.05	16.5	10	21	F68(3)AA684(1)250T	MDK10684(1)250A55P(3)TUBE
250	160	0.82	AA/A57	12.7	9.0	23.0	10	18	F68(4)AA824(1)250T	MDK10824(1)250A57P(4)TUBE
250	160	1.0	AA/A57	12.7	9.0	23.0	10	15	F68(4)AA105(1)250T	MDK10105(1)250A57P(4)TUBE
250	160	1.2	AA/A58	12.7	11.0	23.0	10	14	F68(4)AA125(1)250T	MDK10125(1)250A58P(4)TUBE
250	160	1.5	AA/A58	12.7	11.0	23.0	10	13	F68(4)AA155(1)250T	MDK10155(1)250A58P(4)TUBE
250	160	0.033	BA/B53	16.5	6.05	11.0	15	390	F683BA333(1)250T	MDK15333(1)250B53P3TUBE
250	160	0.039	BA/B53	16.5	6.05	11.0	15	330	F683BA393(1)250T	MDK15393(1)250B53P3TUBE
250	160	0.047	BA/B53	16.5	6.05	11.0	15	270	F683BA473(1)250T	MDK15473(1)250B53P3TUBE
250	160	0.056	BA/B53	16.5	6.05	11.0	15	230	F683BA563(1)250T	MDK15563(1)250B53P3TUBE
250	160	0.068	BA/B53	16.5	6.05	11.0	15	190	F683BA683(1)250T	MDK15683(1)250B53P3TUBE
250	160	0.082	BA/B53	16.5	6.05	11.0	15	160	F683BA823(1)250T	MDK15823(1)250B53P3TUBE
250	160	0.10	BA/B53	16.5	6.05	11.0	15	130	F683BA104(1)250T	MDK15104(1)250B53P3TUBE
250	160	0.12	BA/B53	16.5	6.05	11.0	15	110	F683BA124(1)250T	MDK15124(1)250B53P3TUBE
250	160	0.15	BA/B53	16.5	6.05	11.0	15	85	F683BA154(1)250T	MDK15154(1)250B53P3TUBE
250	160	0.18	BA/B53	16.5	6.05	11.0	15	70	F683BA184(1)250T	MDK15184(1)250B53P3TUBE
250	160	0.22	BA/B53	16.5	6.05	11.0	15	58	F683BA224(1)250T	MDK15224(1)250B53P3TUBE
250	160	0.27	BA/B53	16.5	6.05	11.0	15	47	F683BA274(1)250T	MDK15274(1)250B53P3TUBE
250	160	0.33	BA/B53	16.5	6.05	11.0	15	39	F683BA334(1)250T	MDK15334(1)250B53P3TUBE
250	160	0.39	BA/B53	16.5	6.05	11.0	15	39	F683BA394(1)250T	MDK15394(1)250B53P3TUBE
250	160	0.47	BA/B53	16.5	6.05	11.0	15	30	F683BA474(1)250T	MDK15474(1)250B53P3TUBE
250	160	0.56	BA/B53	16.5	6.05	11.0	15	26	F683BA564(1)250T	MDK15564(1)250B53P3TUBE
250	160	0.68	BA/B53	16.5	6.05	11.0	15	21	F683BA684(1)250T	MDK15684(1)250B53P3TUBE
400	200	0.033	AA/A52	12.2	6.05	11.0	10	390	F683AA333(1)400T	MDK10333(1)400A52P3TUBE
400	200	0.039	AA/A52	12.2	6.05	11.0	10	330	F683AA393(1)400T	MDK10393(1)400A52P3TUBE
400	200	0.047	AA/A52	12.2	6.05	11.0	10	270	F683AA473(1)400T	MDK10473(1)400A52P3TUBE
400	200	0.056	AA/A52	12.2	6.05	11.0	10	230	F683AA563(1)400T	MDK10563(1)400A52P3TUBE
400	200	0.068	AA/A52	12.2	6.05	11.0	10	190	F683AA683(1)400T	MDK10683(1)400A52P3TUBE
400	200	0.082	AA/A52	12.2	6.05	11.0	10	160	F683AA823(1)400T	MDK10823(1)400A52P3TUBE
400	200	0.10	AA/A52	12.2	6.05	11.0	10	130	F683AA104(1)400T	MDK10104(1)400A52P3TUBE
400	200	0.12	AA/A52	12.2	6.05	11.0	10	110	F683AA124(1)400T	MDK10124(1)400A52P3TUBE
400	200	0.15	AA/A52	12.2	6.05	11.0	10	85	F683AA154(1)400T	MDK10154(1)400A52P3TUBE
400	200	0.18	AA/A52	12.2	6.05	11.0	10	70	F683AA184(1)400T	MDK10184(1)400A52P3TUBE
400	200	0.22	AA/A57	12.7	9.0	23.0	10	58	F68(4)AA224(1)400T	MDK10224(1)400A57P(4)TUBE
400	200	0.27	AA/A57	12.7	9.0	23.0	10	47	F68(4)AA274(1)400T	MDK10274(1)400A57P(4)TUBE
400	200	0.33	AA/A57	12.7	9.0	23.0	10	39	F68(4)AA334(1)400T	MDK10334(1)400A57P(4)TUBE
400	200	0.39	AA/A58	12.7	11.0	23.0	10	33	F68(4)AA394(1)400T	MDK10394(1)400A58P(4)TUBE
400	200	0.47	AA/A58	12.7	11.0	23.0	10	30	F68(4)AA474(1)400T	MDK10474(1)400A58P(4)TUBE
400	200	0.033	BA/B53	16.5	6.05	11.0	15	390	F683BA333(1)400T	MDK15333(1)400B53P3TUBE
400	200	0.039	BA/B53	16.5	6.05	11.0	15	330	F683BA393(1)400T	MDK15393(1)400B53P3TUBE
VDC	VAC	Cap Value (µF)	Size Code (New/ Legacy)	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	ESR 500 kHz (mΩ)	New KEMET Part Number	Legacy Part Number

(1) J = ±5%, K = ±10%, other tolerances on request.
(2) = Number of Leads per side, 3 or 4.
(3) = Number of Leads per side, 3, 4 or 5.
(4) = Number of Leads per side, 7 or 8.

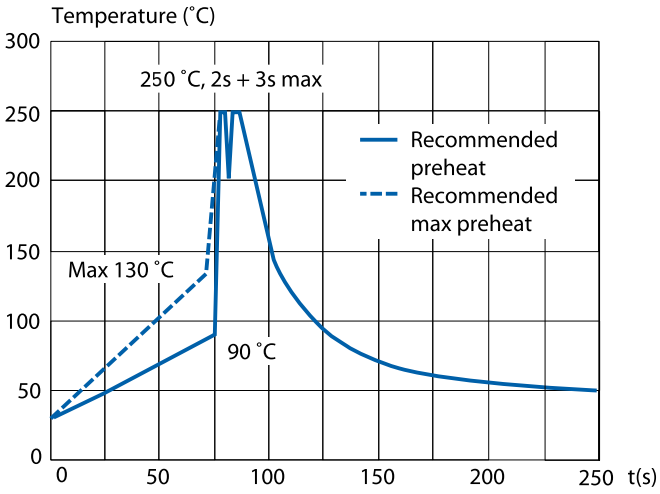
Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Cap Value (µF)	Size Code (New/Legacy)	Dimensions in mm			Lead Spacing (p)	ESR 500 kHz (mΩ)	New KEMET Part Number	Legacy Part Number
				B	H	L				
400	200	0.047	BA/B53	16.5	6.05	11.0	15	270	F683BA473(1)400T	MDK15473(1)400B53P3TUBE
400	200	0.056	BA/B53	16.5	6.05	11.0	15	230	F683BA563(1)400T	MDK15563(1)400B53P3TUBE
400	200	0.068	BA/B53	16.5	6.05	11.0	15	190	F683BA683(1)400T	MDK15683(1)400B53P3TUBE
400	200	0.082	BA/B53	16.5	6.05	11.0	15	160	F683BA823(1)400T	MDK15823(1)400B53P3TUBE
400	200	0.10	BA/B53	16.5	6.05	11.0	15	130	F683BA104(1)400T	MDK15104(1)400B53P3TUBE
400	200	0.12	BA/B53	16.5	6.05	11.0	15	110	F683BA124(1)400T	MDK15124(1)400B53P3TUBE
400	200	0.15	BA/B53	16.5	6.05	11.0	15	85	F683BA154(1)400T	MDK15154(1)400B53P3TUBE
400	200	0.18	BA/B53	16.5	6.05	11.0	15	70	F683BA184(1)400T	MDK15184(1)400B53P3TUBE
400	200	0.22	BA/B53	16.5	6.05	11.0	15	58	F683BA224(1)400T	MDK15224(1)400B53P3TUBE
400	200	0.27	BA/B53	16.5	6.05	11.0	15	47	F683BA274(1)400T	MDK15274(1)400B53P3TUBE
400	200	0.33	BA/B55	16.5	6.05	12.2	15	39	F68(2)BA334(1)400T	MDK15334(1)400B55P(2)TUBE
630	220	0.033	AA/A52	12.2	6.05	11.0	10	390	F683AA333(1)630T	MDK10333(1)630A52P3TUBE
630	220	0.039	AA/A52	12.2	6.05	11.0	10	330	F683AA393(1)630T	MDK10393(1)630A52P3TUBE
630	220	0.047	AA/A52	12.2	6.05	11.0	10	270	F683AA473(1)630T	MDK10473(1)630A52P3TUBE
630	220	0.056	AA/A52	12.2	6.05	11.0	10	230	F683AA563(1)630T	MDK10563(1)630A52P3TUBE
630	220	0.068	AA/A54	12.2	6.05	13.5	10	190	F68(2)AA683(1)630T	MDK10683(1)630A54P(2)TUBE
630	220	0.082	AA/A58	12.7	11.0	23.0	10	160	F68(4)AA823(1)630T	MDK10823(1)630A58P(4)TUBE
630	220	0.10	AA/A58	12.7	11.0	23.0	10	130	F68(4)AA104(1)630T	MDK10104(1)630A58P(4)TUBE
630	220	0.12	AA/A58	12.7	11.0	23.0	10	110	F68(4)AA124(1)630T	MDK10124(1)630A58P(4)TUBE
630	220	0.15	AA/A58	12.7	11.0	23.0	10	85	F68(4)AA154(1)630T	MDK10154(1)630A58P(4)TUBE
630	220	0.18	AA/A58	12.7	11.0	23.0	10	70	F68(4)AA184(1)630T	MDK10184(1)630A58P(4)TUBE
630	220	0.033	BA/B53	16.5	6.05	11.0	15	390	F683BA333(1)630T	MDK15333(1)630B53P3TUBE
630	220	0.039	BA/B53	16.5	6.05	11.0	15	330	F683BA393(1)630T	MDK15393(1)630B53P3TUBE
630	220	0.047	BA/B53	16.5	6.05	11.0	15	270	F683BA473(1)630T	MDK15473(1)630B53P3TUBE
630	220	0.056	BA/B53	16.5	6.05	11.0	15	230	F683BA563(1)630T	MDK15563(1)630B53P3TUBE
630	220	0.068	BA/B53	16.5	6.05	11.0	15	190	F683BA683(1)630T	MDK15683(1)630B53P3TUBE
630	220	0.082	BA/B53	16.5	6.05	11.0	15	160	F683BA823(1)630T	MDK15823(1)630B53P3TUBE
630	220	0.10	BA/B53	16.5	6.05	11.0	15	130	F683BA104(1)630T	MDK15104(1)630B53P3TUBE
VDC	**VAC**	**Cap Value (µF)**	**Size Code (New/Legacy)**	**B (mm)**	**H (mm)**	**L (mm)**	**Lead Spacing (p)**	**ESR 500 kHz (mΩ)**	**New KEMET Part Number**	**Legacy Part Number**

(1) J = ±5%, K = ±10%, other tolerances on request.
(2) = Number of leads per side, 3 or 4.
(3) = Number of leads per side, 3, 4 or 5.
(4) = Number of leads per side, 7 or 8.

Soldering Process

Wave soldering: The recommended preheating temperature is 90°C (130°C maximum). The peak temperature 250°C may be applied for 2 – 5 seconds maximum. KEMET recommends wave soldering for parts with up to 2 mm height.



Marking

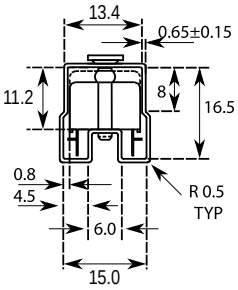
- KEMET
- Capacitance
- Capacitance tolerance code
- Rated voltage
- Capacitor family code MDK

Packaging Quantities

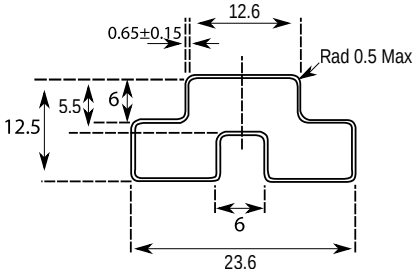
Size Code	Lead Spacing	Base (mm)	Height (mm)	Length (mm)	Bulk	Reel
A52	10.0	12.2	6.05	11.0	43	
A53		12.7	9.0	14.0	34	200
A54		12.2	6.05	13.5	35	
A55		12.2	6.05	16.5	28	
A57		12.7	9.0	23.0	21	
A58		12.7	11.0	23.0	21	
B53	15.0	16.5	6.05	11.0	43	
B55		16.5	6.05	12.2	39	

Tube Packaging

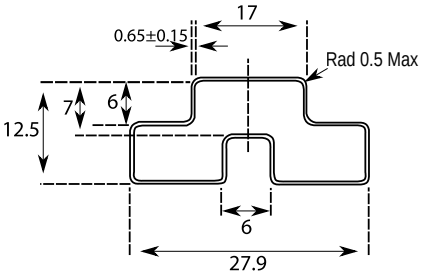
Tube A

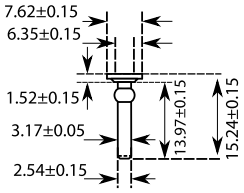


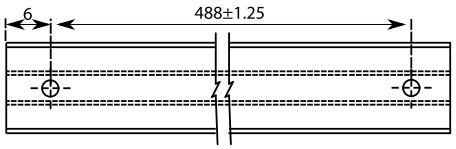
Tube B



Tube C



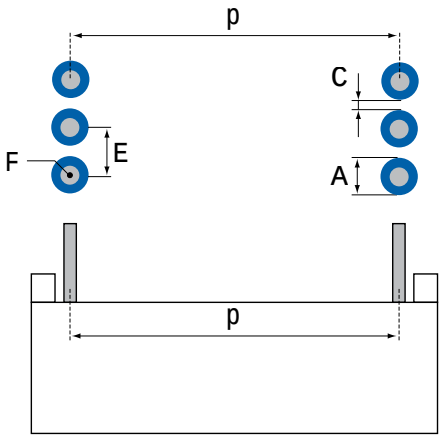




Size Code	Dimensions in mm	Tube
A52	10.0 – 12.2 x 6.05 x 11.0	Tube B
A53	10.0 – 12.7 x 9.0 x 14.0	Tube A
A54	10.0 – 12.2 x 6.05 x 13.5	Tube B
A55	10.0 – 12.2 x 6.05 x 16.5	Tube B
A57	10.0 – 12.7 x 9.0 x 23.0	Tube A
A58	10.0 – 12.7 x 11.0 x 23.0	Tube A
B53	15.0 – 16.5 x 6.05 x 11.0	Tube C
B55	15.0 – 16.5 x 6.05 x 12.2	Tube C

Landing

Size	Dimensions in mm				
	p	A	C	E	F
A52	10	2	0.54	2.54	0.7
A53	10	2	0.54	2.54	0.7
A54	10	2	0.54	2.54	0.7
A55	10	2	0.54	2.54	0.7
A57	10	2	0.54	2.54	0.7
A58	10	2	0.54	2.54	0.7
B53	15	2	0.54	2.54	0.7
B55	15	2	0.54	2.54	0.7



F461 – 464 Series Single Metallized Polypropylene Film

Overview

The F461 – 464 Series is a metallized polypropylene film encapsulated with self-extinguishing resin in a box of material meeting the requirements of UL 94 V–0. Four different winding constructions are used depending on voltage and lead spacing. Please see Table 1 for more information.

Applications

Typical applications include pulse operation in switched mode power supply (SMPS), televisions, computer monitors, electrical ballasts and other high frequency applications demanding stable operation.

Benefits

- Rated voltage: 160 – 2,500 VDC
- Rated voltage: 90 – 900 VAC
- Capacitance range: 0.001 – 56 µF
- Lead spacing: 5 – 37.5 mm
- Capacitance tolerance: ±5%, ±10%, other tolerances on request
- Climatic category: 55/105/56, IEC 60068–1
- Tape and reel packaging in accordance with IEC 60286–2
- RoHS Compliant and lead-free terminations
- Category temperature range of -55˚C to +105˚C
- Rated temperature +85˚C

Part Number System

F	46x	K	E	223	J	160	C
Capacitor Class	Series	Lead Spacing (mm)	Size Code	Capacitance Code (pF)	Capacitance Tolerance	Rated Voltage (VDC)	Lead and Packaging Code
F = Film	Metallized Polypropylene x = sections in construction	J = 5 K = 7.5 A = 10 B = 15 D = 22.5 F = 27.5 R = 37.5	See Dimension Table	First two digits indicate the two most significant digits of the capacitance value in picofarads. The third digit is the number of following zeros.	J = ±5% K = ±10% On Request: F = ±1% G = ±2% M = ±20%	160 = 160 250 = 250 400 = 400 630 = 630 1K0 = 1000 1L2 = 1250 1K6 = 1600 2K0 = 2000 2K5 = 2500	See Ordering Options Table

Ordering Options Table

Lead Spacing Nominal (mm)	Type of Leads and Packaging	Lead Length (mm)	Lead and Packaging Code
5	Standard Lead and Packaging Options		
	Bulk (Bag) – Short Leads	4 +2/-0	C
	Bulk (Bag) – Long Leads	17 +0/-1	A
	Tape & Reel (Standard Reel)	H_0= 18.5 +/-0.5	L
	Other Lead and Packaging Options		
	Bulk (Bag) – Max Length Leads	20 +5/-0	ALL0L
	Ammo Pack	H_0= 18.5 +/-0.5	R

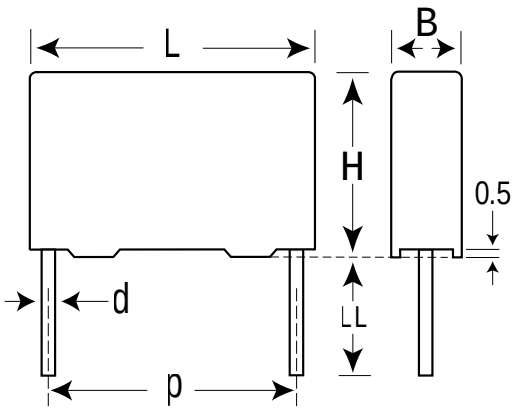
Ordering Options Table cont'd

Lead Spacing Nominal (mm)	Type of Leads and Packaging	Lead Length (mm)	Lead and Packaging Code
7.5	Standard Lead and Packaging Options		
	Bulk (Bag) – Short Leads	4 +2/-0	C
	Bulk (Bag) – Long Leads	17 +0/-1	A
	Tape & Reel (Standard Reel)	H_0= 18.5 +/-0.5	L
	Other Lead and Packaging Options		
	Bulk (Bag) – Max Length Leads	20 +5/-0	ALL0L
	Ammo Pack	H_0= 18.5 +/-0.5	R
10	Standard Lead and Packaging Options		
	Bulk (Bag) – Short Leads	4 +2/-0	C
	Bulk (Bag) – Long Leads	17 +0/-1	A
	Tape & Reel (Standard Reel)	H_0= 18.5 +/-0.5	L
	Other Lead and Packaging Options		
	Bulk (Bag) – Max Length Leads	20 +5/-0	ALL0L
	Ammo Pack	H_0= 18.5 +/-0.5	R
	Tape & Reel (Large Reel)	H_0= 18.5 +/-0.5	P
15	Standard Lead and Packaging Options		
	Bulk (Bag) – Short Leads	4 +2/-0	C
	Bulk (Bag) – Long Leads	17 +0/-1	A
	Pizza Pack	4 +2/-0	Z
	Other Lead and Packaging Options		
	Tape & Reel (Standard Reel)	H_0= 18.5 +/-0.5	L
	Tape & Reel (Large Reel)	H_0= 18.5 +/-0.5	P
	Bulk (Bag) – Max Length Leads	25 +5/-0	ALR0L
	Ammo Pack	H_0= 18.5 +/-0.5	R
22.5	Standard Lead and Packaging Options		
	Bulk (Tray) – Short Leads	4 +2/-0	F
	Bulk (Tray) – Long Leads	17 +0/-1	H
	Pizza Pack	4 +2/-0	Z
	Other Lead and Packaging Options		
	Tape & Reel (Standard Reel)	H_0= 18.5 +/-0.5	L
	Tape & Reel (Large Reel)	H_0= 18.5 +/-0.5	P
	Ammo Pack	H_0= 18.5 +/-0.5	R

Ordering Options Table cont'd

Lead Spacing Nominal (mm)	Type of Leads and Packaging	Lead Length (mm)	Lead and Packaging Code
27.5	Standard Lead and Packaging Options		
	Bulk (Tray) – Short Leads	4 +2/-0	F
	Bulk (Tray) – Long Leads	17 +0/-1	H
	Other Lead and Packaging Options		
	Pizza Pack	4 +2/-0	Z
37.5	Standard Lead and Packaging Options		
	Bulk (Tray) – Short Leads	4 +2/-0	F
	Bulk (Tray) – Long Leads	17 +0/-1	H
	Other Lead and Packaging Options		
	Pizza Pack	4 +2/-0	Z

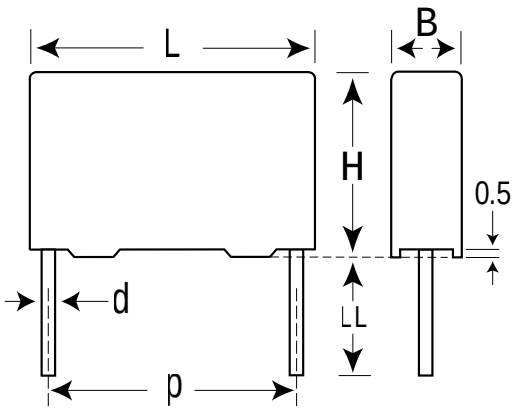
Dimensions – Millimeters



Size Code	p		B		H		L		d	
	Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance
JF	5.0	+/-0.4	2.5	Maximum	6.5	Maximum	7.2	Maximum	0.5	+/-0.05
JG	5.0	+/-0.4	3.5	Maximum	7.5	Maximum	7.2	Maximum	0.5	+/-0.05
JM	5.0	+/-0.4	4.5	Maximum	9.5	Maximum	7.2	Maximum	0.5	+/-0.05
JQ	5.0	+/-0.4	5.0	Maximum	10.0	Maximum	7.2	Maximum	0.5	+/-0.05
JT	5.0	+/-0.4	6.0	Maximum	11.0	Maximum	7.2	Maximum	0.5	+/-0.05
JU	5.0	+/-0.4	7.2	Maximum	13.0	Maximum	7.2	Maximum	0.5	+/-0.05
KE	7.5	+/-0.4	2.5	Maximum	6.0	Maximum	10.0	Maximum	0.6	+/-0.05
KF	7.5	+/-0.4	3.0	Maximum	8.0	Maximum	10.0	Maximum	0.6	+/-0.05
KG	7.5	+/-0.4	4.0	Maximum	8.0	Maximum	10.0	Maximum	0.6	+/-0.05
KJ	7.5	+/-0.4	5.0	Maximum	10.5	Maximum	10.0	Maximum	0.6	+/-0.05
KM	7.5	+/-0.4	6.0	Maximum	12.0	Maximum	10.5	Maximum	0.6	+/-0.05
AG	10.0	+/-0.4	4.0	Maximum	9.0	Maximum	13.0	Maximum	0.6	+/-0.05
AK	10.0	+/-0.4	5.0	Maximum	11.0	Maximum	13.0	Maximum	0.6	+/-0.05
AP	10.0	+/-0.4	6.0	Maximum	12.0	Maximum	13.0	Maximum	0.6	+/-0.05
BB	15.0	+/-0.4	4.0	Maximum	10.0	Maximum	18.0	Maximum	0.8	+/-0.05
BC	15.0	+/-0.4	5.0	Maximum	11.0	Maximum	18.0	Maximum	0.8	+/-0.05
BE	15.0	+/-0.4	5.5	Maximum	12.5	Maximum	18.0	Maximum	0.8	+/-0.05
BG	15.0	+/-0.4	6.0	Maximum	12.0	Maximum	18.0	Maximum	0.8	+/-0.05
BK	15.0	+/-0.4	7.5	Maximum	13.5	Maximum	18.0	Maximum	0.8	+/-0.05
BI	15.0	+/-0.4	6.0	Maximum	17.5	Maximum	18.0	Maximum	0.8	+/-0.05
BP	15.0	+/-0.4	8.5	Maximum	14.5	Maximum	18.0	Maximum	0.8	+/-0.05
BS	15.0	+/-0.4	10.0	Maximum	16.0	Maximum	18.0	Maximum	0.8	+/-0.05
BY	15.0	+/-0.4	11.0	Maximum	19.0	Maximum	18.0	Maximum	0.8	+/-0.05
DB	22.5	+/-0.4	6.0	Maximum	14.5	Maximum	26.0	Maximum	0.8	+/-0.05
DI	22.5	+/-0.4	7.0	Maximum	16.0	Maximum	26.0	Maximum	0.8	+/-0.05
DH	22.5	+/-0.4	8.0	Maximum	16.0	Maximum	26.0	Maximum	0.8	+/-0.05
DJ	22.5	+/-0.4	8.5	Maximum	17.0	Maximum	26.0	Maximum	0.8	+/-0.05
DM	22.5	+/-0.4	9.0	Maximum	18.5	Maximum	26.0	Maximum	0.8	+/-0.05
DO	22.5	+/-0.4	10.0	Maximum	18.5	Maximum	26.0	Maximum	0.8	+/-0.05
DP	22.5	+/-0.4	11.0	Maximum	20.0	Maximum	26.0	Maximum	0.8	+/-0.05

Note: See Ordering Options Table for lead length (LL) options.

Dimensions – Millimeters cont'd



Size Code	p		B		H		L		d	
	Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance
DU	22.5	+/-0.4	13.0	Maximum	22.0	Maximum	26.0	Maximum	0.8	+/-0.05
DY	22.5	+/-0.4	15.5	Maximum	24.5	Maximum	26.0	Maximum	0.8	+/-0.05
FB	27.5	+/-0.4	9.0	Maximum	17.0	Maximum	31.5	Maximum	0.8	+/-0.05
FC	27.5	+/-0.4	11.0	Maximum	20.0	Maximum	31.5	Maximum	0.8	+/-0.05
FI	27.5	+/-0.4	13.0	Maximum	25.0	Maximum	31.5	Maximum	0.8	+/-0.05
FN	27.5	+/-0.4	14.0	Maximum	28.0	Maximum	31.5	Maximum	0.8	+/-0.05
FR	27.5	+/-0.4	17.5	Maximum	28.0	Maximum	31.5	Maximum	0.8	+/-0.05
FS	27.5	+/-0.4	19.0	Maximum	29.0	Maximum	31.5	Maximum	0.8	+/-0.05
FY	27.5	+/-0.4	22.0	Maximum	37.0	Maximum	31.5	Maximum	0.8	+/-0.05
RB	37.5	+/-0.5	11.0	Maximum	22.0	Maximum	41.0	Maximum	1	+/-0.05
RF	37.5	+/-0.5	13.0	Maximum	24.0	Maximum	41.0	Maximum	1	+/-0.05
RH	37.5	+/-0.5	15.0	Maximum	26.0	Maximum	41.0	Maximum	1	+/-0.05
RC	37.5	+/-0.5	16.0	Maximum	28.5	Maximum	41.0	Maximum	1	+/-0.05
RD	37.5	+/-0.5	19.0	Maximum	32.0	Maximum	41.0	Maximum	1	+/-0.05
RP	37.5	+/-0.5	21.0	Maximum	38.0	Maximum	41.0	Maximum	1	+/-0.05
RO	37.5	+/-0.5	24.0	Maximum	44.0	Maximum	41.0	Maximum	1	+/-0.05
RU	37.5	+/-0.5	30.0	Maximum	45.0	Maximum	41.0	Maximum	1	+/-0.05

Note: See Ordering Options Table for lead length (LL) options.

Performance Characteristics

Series	F461	F461	F461	F461	F462	F462	F463	F462	F463	F463	F464
Sections	1	1	1	1	2	2	3	2	3	3	4
Voltage Range (VDC)	160	250	400	630	1000	1250	1250	1600	1600	2000	2500
Voltage Range (VAC)	90	160	220	250	300	400	500	500	650	700	900
Capacitance Range (µF)	0.01 – 56	0.01 – 39	0.0033 – 18	0.0015 – 8.2	0.0047 – 3.9	0.0033 – 2.7	0.0047 – 2.2	0.001 – 1.5	0.0033 – 1.5	0.0010 – 0.82	0.001 – 0.56

Capacitance Values	In accordance with IEC E12 series
Capacitance Tolerance	±5%, ±10%, other tolerances on request
Category Temperature Range	-55°C to +105°C
Rated Temperature	+85°C
Voltage Derating DC	The rated voltage is decreased with 2.0%/°C between +85°C and +105°C
Voltage Derating AC	The voltage is decreased with 1.25%/°C between +85°C and +105°C
Climatic Category	IEC 60068–1, 55/105/56
Passive Flammability	Category B or C according to IEC 60384–1 depending on size
Maximum Pulse Steepness	dV/dt according to Table 1. For peak to peak voltages lower than rated voltage ($V_{PP} < V_R$), the specified dV/dt can be multiplied by the factor V_R/V_{PP}.
Temperature Coefficient	-200 (+50, -100) ppm/°C (at 1 kHz)
Self-Inductance	Approximately 6 nH/cm for the total length of capacitor winding and the leads

Dissipation Factor tanδ

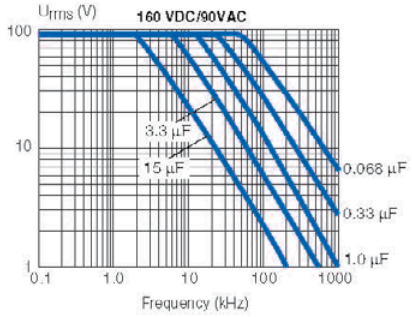
Maximum Values at +23°C			
	C ≤ 0.1 µF	0.1 µF < C ≤ 1.0 µF	C > 1.0 µF
1 kHz	0.0004	0.0005	0.001
10 kHz	0.0006	0.0006	–
100 kHz	0.0025	–	–

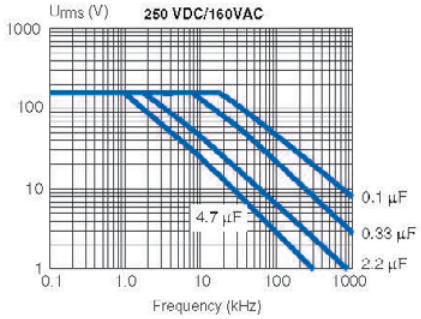
Insulation Resistance

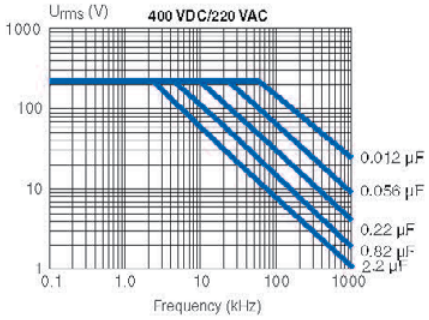
Measured at +23°C, 100 VDC 60 seconds for $V_R < 500$ VDC and at 500 VDC for $V_R \geq 500$ VDC

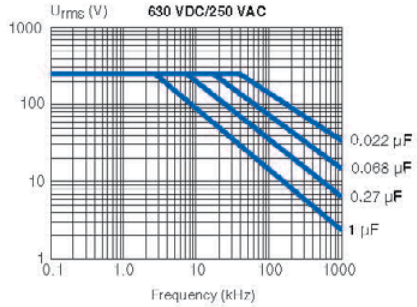
Minimum Values Between Terminals	
C ≤ 0.33 µF	≥ 100,000 MΩ
C > 0.33 µF	≥ 30,000 MΩ • µF
Minimum Values Between Terminals and Case	
	≥ 100,000 MΩ

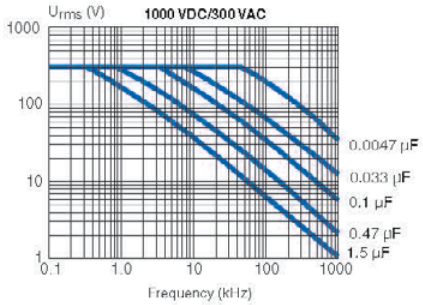
Derating of V_{rms} vs. Frequency, +85ºC Ambient Temperature and 10ºC Internal Heating, Typical Values

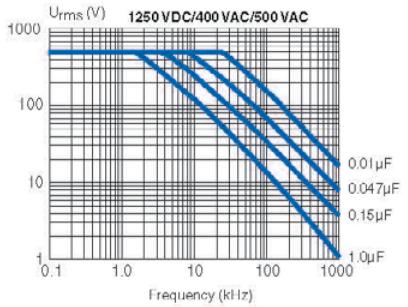


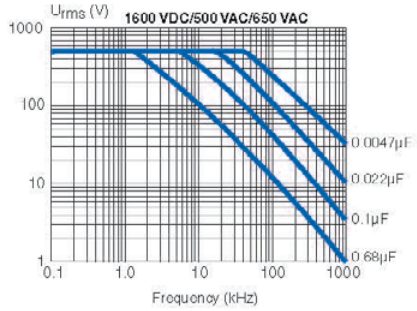


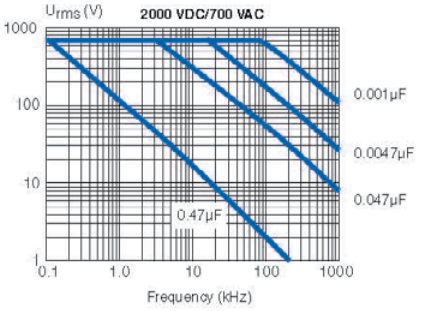


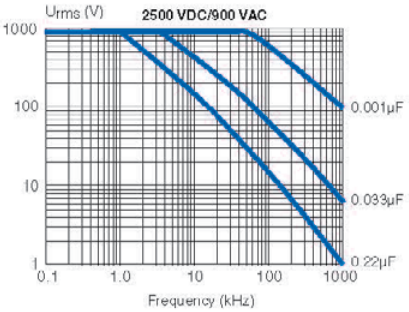












Environmental Test Data

Test	IEC Publication	Procedure	Requirements
Voltage Proof	60384–1 Clause 4.6	1.6 x V_R after 60 seconds	The capacitors must withstand the voltage without breakdowns or flashovers and without decreased insulation resistance below the value in each detail specification. No visible damage
	Clause 4.6 2.3	2 x V_R (minimum 400 VDC to case) after 60 seconds	As above
Vibration	60068–2–6 Test Fc	6 hours with 10 – 500 Hz and 0.75 mm amplitude or 98 m/s^2 depending on frequency	No visible damage tanδ ≤ 1.2 x stated value at 100 kHz Δ C/C ≤ ±0.5%
Bump	60068–2–29 Test Eb	4,000 bumps with 390 m/s^2 mounted on PCB	Δ C/C ≤ ±0.5% tanδ ≤ 1.2 x stated value at 100 kHz Insulation resistance: ≥ 100,000 MΩ for C_R ≤ 0.33 µF ≥ 30,000 MΩ • µF for C_R > 0.33 µF
Resistance to Soldering Heat	60068–2–20 Method 1A	Solder bath at + 260°C ±5°C with screening	Immersion of the terminations into the solder bath shall be completed in a time not exceeding 1 second and the terminations shall remain immersed to the specified depth for 10 + 1 second and then be withdrawn. Δ C/C ≤ ±1.0% tanδ increase < 0.001 No visible damage
Climatic Sequence	60384–1 Paragraph 4:21	60068–2.2 dry heat 16 hours 60068–2–34 damp heat, one cycle, 60068–2–1 Test Aa 2 hours	Insulation resistance: ≥ 100,000 MΩ for C_R ≤ 0.33 µF ≥ 30,000 MΩ • µF for C_R > 0.33 µF Δ C/C ≤ ±0.5% tanδ ≤ 1.2 x stated value at 100 kHz
Damp Heat Steady State	60068–2–3 Test Ca	+40°C and 90 – 95% RH	56 days no visible damage Insulation resistance: ≥ 50,000 MΩ for C_R ≤ 0.33 µF ≥ 15,000 MΩ • µF for C_R > 0.33 µF Δ C/C ≤ ±1% tanδ ≤ 1.2 x stated value at 100 kHz
Endurance, AC		1,000 hours at +85°C and 1.25 x V_R AC	No visible damage Δ C/C ≤ ±3% tanδ ≤ 1.5 x stated value at 100 kHz Insulation resistance: ≥ 100,000 MΩ for C_R ≤ 0.33 µF ≥ 30,000 MΩ • µF for C_R > 0.33 µF
Charge and Discharge	60384–17 Paragraph 4.13	10,000 pulses and with (2 x) dV/dt according to detail specification	tanδ (100 kHz) ≤ 2 x stated value (100 kHz) Δ C/C ≤ ±0.5% Insulation resistance: ≥ 50,000 MΩ for C_R ≤ 0.33 µF ≥ 15,000 MΩ • µF for C_R > 0.33 µF

Environmental Compliance

All KEMET EMI capacitors are RoHS Compliant and Halogen Free.

RoHS Compliant

Halogen Free

Table 1 – Ratings & Part Number Reference

VDC	VAC	Cap Value (µF)	Size Code	Max Dimensions in mm			Lead Spacing (p)	dV/dt (V/µs)	Part Number
				B	H	L			
160	90	0.01	JF	2.5	6.5	7.2	5.0	100	F461JF103(1)160(2)
160	90	0.012	JF	2.5	6.5	7.2	5.0	100	F461JF123(1)160(2)
160	90	0.015	JF	2.5	6.5	7.2	5.0	100	F461JF153(1)160(2)
160	90	0.018	JF	2.5	6.5	7.2	5.0	100	F461JF183(1)160(2)
160	90	0.022	JG	3.5	7.5	7.2	5.0	100	F461JG223(1)160(2)
160	90	0.027	JG	3.5	7.5	7.2	5.0	100	F461JG273(1)160(2)
160	90	0.033	JG	3.5	7.5	7.2	5.0	100	F461JG333(1)160(2)
160	90	0.039	JG	3.5	7.5	7.2	5.0	100	F461JG393(1)160(2)
160	90	0.047	JM	4.5	9.5	7.2	5.0	100	F461JM473(1)160(2)
160	90	0.056	JM	4.5	9.5	7.2	5.0	100	F461JM563(1)160(2)
160	90	0.068	JM	4.5	9.5	7.2	5.0	100	F461JM683(1)160(2)
160	90	0.082	JM	4.5	9.5	7.2	5.0	100	F461JM823(1)160(2)
160	90	0.1	JT	6.0	11.0	7.2	5.0	100	F461JT104(1)160(2)
160	90	0.12	JT	6.0	11.0	7.2	5.0	100	F461JT124(1)160(2)
160	90	0.15	JU	7.2	13.0	7.2	5.0	100	F461JU154(1)160(2)
160	90	0.18	JU	7.2	13.0	7.2	5.0	100	F461JU184(1)160(2)
160	90	0.22	JU	7.2	13.0	7.2	5.0	100	F461JU224(1)160(2)
160	90	0.015	KE	2.5	6.0	10.0	7.5	300	F461KE153(1)160(2)
160	90	0.018	KE	2.5	6.0	10.0	7.5	300	F461KE183(1)160(2)
160	90	0.022	KE	2.5	6.0	10.0	7.5	300	F461KE223(1)160(2)
160	90	0.027	KF	3.0	8.0	10.0	7.5	300	F461KF273(1)160(2)
160	90	0.033	KF	3.0	8.0	10.0	7.5	300	F461KF333(1)160(2)
160	90	0.039	KF	3.0	8.0	10.0	7.5	300	F461KF393(1)160(2)
160	90	0.047	KF	3.0	8.0	10.0	7.5	300	F461KF473(1)160(2)
160	90	0.056	KF	3.0	8.0	10.0	7.5	300	F461KF563(1)160(2)
160	90	0.068	KG	4.0	8.0	10.0	7.5	300	F461KG683(1)160(2)
160	90	0.082	KG	4.0	8.0	10.0	7.5	300	F461KG823(1)160(2)
160	90	0.1	KJ	5.0	10.5	10.0	7.5	300	F461KJ104(1)160(2)
160	90	0.12	KJ	5.0	10.5	10.0	7.5	300	F461KJ124(1)160(2)
160	90	0.15	KJ	5.0	10.5	10.0	7.5	300	F461KJ154(1)160(2)
160	90	0.18	KJ	5.0	10.5	10.0	7.5	300	F461KJ184(1)160(2)
160	90	0.22	KM	6.0	12.0	10.5	7.5	300	F461KM224(1)160(2)
160	90	0.27	KM	6.0	12.0	10.5	7.5	300	F461KM274(1)160(2)
160	90	0.1	AG	4.0	9.0	13.0	10.0	180	F461AG104(1)160(2)
160	90	0.12	AG	4.0	9.0	13.0	10.0	180	F461AG124(1)160(2)
160	90	0.15	AG	4.0	9.0	13.0	10.0	180	F461AG154(1)160(2)
160	90	0.18	AK	5.0	11.0	13.0	10.0	180	F461AK184(1)160(2)
160	90	0.22	AK	5.0	11.0	13.0	10.0	180	F461AK224(1)160(2)
160	90	0.27	AK	5.0	11.0	13.0	10.0	180	F461AK274(1)160(2)
160	90	0.33	AP	6.0	12.0	13.0	10.0	180	F461AP334(1)160(2)
160	90	0.39	AP	6.0	12.0	13.0	10.0	180	F461AP394(1)160(2)
160	90	0.47	AP	6.0	12.0	13.0	10.0	180	F461AP474(1)160(2)
160	90	0.15	BB	4.0	10.0	18.0	15.0	100	F461BB154(1)160(2)
160	90	0.18	BB	4.0	10.0	18.0	15.0	100	F461BB184(1)160(2)
160	90	0.22	BB	4.0	10.0	18.0	15.0	100	F461BB224(1)160(2)
160	90	0.27	BB	4.0	10.0	18.0	15.0	100	F461BB274(1)160(2)
160	90	0.33	BC	5.0	11.0	18.0	15.0	100	F461BC334(1)160(2)
160	90	0.39	BC	5.0	11.0	18.0	15.0	100	F461BC394(1)160(2)
160	90	0.47	BE	5.5	12.5	18.0	15.0	100	F461BE474(1)160(2)
160	90	0.56	BE	5.5	12.5	18.0	15.0	100	F461BE564(1)160(2)
160	90	0.68	BK	7.5	13.5	18.0	15.0	100	F461BK684(1)160(2)
160	90	0.82	BK	7.5	13.5	18.0	15.0	100	F461BK824(1)160(2)
160	90	1.0	BK	7.5	13.5	18.0	15.0	100	F461BK105(1)160(2)
160	90	1.2	BP	8.5	14.5	18.0	15.0	100	F461BP125(1)160(2)
160	90	1.5	BS	10.0	16.0	18.0	15.0	100	F461BS155(1)160(2)
160	90	2.2	BY	11.0	19.0	18.0	15.0	100	F461BY225(1)160(2)
160	90	2.7	BY	11.0	19.0	18.0	15.0	100	F461BY275(1)160(2)
160	90	1.0	DB	6.0	14.5	26.0	22.5	60	F461DB105(1)160(2)
160	90	1.2	DB	6.0	14.5	26.0	22.5	60	F461DB125(1)160(2)
160	90	1.5	DI	7.0	16.0	26.0	22.5	60	F461DI155(1)160(2)
160	90	1.8	DI	7.0	16.0	26.0	22.5	60	F461DI185(1)160(2)
VDC	VAC	Cap Value (µF)	Size Code	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/µs)	Part Number

(1) J = 5%, K = 10%, other tolerances on request.

(2) Insert lead and packaging code. See Ordering Options Table for available options.

Roll Over for Order Info.

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Cap Value (µF)	Size Code	Max Dimensions in mm			Lead Spacing (p)	dV/dt (V/µs)	Part Number
				B	H	L			
160	90	2.2	DJ	8.5	17.0	26.0	22.5	60	F461DJ225(1)160(2)
160	90	2.7	DM	9.0	18.5	26.0	22.5	60	F461DM275(1)160(2)
160	90	3.3	DM	9.0	18.5	26.0	22.5	60	F461DM335(1)160(2)
160	90	3.9	DP	11.0	20.0	26.0	22.5	60	F461DP395(1)160(2)
160	90	4.7	DU	13.0	22.0	26.0	22.5	60	F461DU475(1)160(2)
160	90	5.6	DU	13.0	22.0	26.0	22.5	60	F461DU565(1)160(2)
160	90	6.8	DY	15.5	24.5	26.0	22.5	60	F461DY685(1)160(2)
160	90	8.2	DY	15.5	24.5	26.0	22.5	60	F461DY825(1)160(2)
160	90	2.2	FB	9.0	17.0	31.5	27.5	50	F461FB225(1)160(2)
160	90	2.7	FB	9.0	17.0	31.5	27.5	50	F461FB275(1)160(2)
160	90	3.3	FB	9.0	17.0	31.5	27.5	50	F461FB335(1)160(2)
160	90	3.9	FC	11.0	20.0	31.5	27.5	50	F461FC395(1)160(2)
160	90	4.7	FC	11.0	20.0	31.5	27.5	50	F461FC475(1)160(2)
160	90	5.6	FI	13.0	25.0	31.5	27.5	50	F461FI565(1)160(2)
160	90	6.8	FI	13.0	25.0	31.5	27.5	50	F461FI685(1)160(2)
160	90	8.2	FI	13.0	25.0	31.5	27.5	50	F461FI825(1)160(2)
160	90	10.0	FR	17.5	28.0	31.5	27.5	50	F461FR106(1)160(2)
160	90	12.0	FR	17.5	28.0	31.5	27.5	50	F461FR126(1)160(2)
160	90	15.0	FY	22.0	37.0	31.5	27.5	50	F461FY156(1)160(2)
160	90	18.0	FY	22.0	37.0	31.5	27.5	50	F461FY186(1)160(2)
160	90	22.0	FY	22.0	37.0	31.5	27.5	50	F461FY226(1)160(2)
160	90	6.8	RB	11.0	22.0	41.0	37.5	35	F461RB685(1)160(2)
160	90	8.2	RB	11.0	22.0	41.0	37.5	35	F461RB825(1)160(2)
160	90	10.0	RF	13.0	24.0	41.0	37.5	35	F461RF106(1)160(2)
160	90	12.0	RH	15.0	26.0	41.0	37.5	35	F461RH126(1)160(2)
160	90	15.0	RC	16.0	28.5	41.0	37.5	35	F461RC156(1)160(2)
160	90	18.0	RD	19.0	32.0	41.0	37.5	35	F461RD186(1)160(2)
160	90	22.0	RD	19.0	32.0	41.0	37.5	35	F461RD226(1)160(2)
160	90	27.0	RP	21.0	38.0	41.0	37.5	35	F461RP276(1)160(2)
160	90	33.0	RO	24.0	44.0	41.0	37.5	35	F461RO336(1)160(2)
160	90	39.0	RO	24.0	44.0	41.0	37.5	35	F461RO396(1)160(2)
160	90	47.0	RU	30.0	45.0	41.0	37.5	35	F461RU476(1)160(2)
160	90	56.0	RU	30.0	45.0	41.0	37.5	35	F461RU566(1)160(2)
250	160	0.01	JF	2.5	6.5	7.2	5.0	250	F461JF103(1)250(2)
250	160	0.012	JF	2.5	6.5	7.2	5.0	250	F461JF123(1)250(2)
250	160	0.015	JF	2.5	6.5	7.2	5.0	250	F461JF153(1)250(2)
250	160	0.022	JG	3.5	7.5	7.2	5.0	250	F461JG223(1)250(2)
250	160	0.027	JG	3.5	7.5	7.2	5.0	250	F461JG273(1)250(2)
250	160	0.033	JM	4.5	9.5	7.2	5.0	250	F461JM333(1)250(2)
250	160	0.039	JM	4.5	9.5	7.2	5.0	250	F461JM393(1)250(2)
250	160	0.047	JQ	5.0	10.0	7.2	5.0	250	F461JQ473(1)250(2)
250	160	0.056	JQ	5.0	10.0	7.2	5.0	250	F461JQ563(1)250(2)
250	160	0.068	JT	6.0	11.0	7.2	5.0	250	F461JT683(1)250(2)
250	160	0.082	JT	6.0	11.0	7.2	5.0	250	F461JT823(1)250(2)
250	160	0.1	JU	7.2	13.0	7.2	5.0	250	F461JU104(1)250(2)
250	160	0.12	JU	7.2	13.0	7.2	5.0	250	F461JU124(1)250(2)
250	160	0.15	JU	7.2	13.0	7.2	5.0	250	F461JU154(1)250(2)
250	160	0.01	KE	2.5	6.0	10.0	7.5	650	F461KE103(1)250(2)
250	160	0.012	KE	2.5	6.0	10.0	7.5	650	F461KE123(1)250(2)
250	160	0.015	KF	3.0	8.0	10.0	7.5	650	F461KF153(1)250(2)
250	160	0.018	KF	3.0	8.0	10.0	7.5	650	F461KF183(1)250(2)
250	160	0.022	KF	3.0	8.0	10.0	7.5	650	F461KF223(1)250(2)
250	160	0.027	KF	3.0	8.0	10.0	7.5	650	F461KF273(1)250(2)
250	160	0.033	KF	3.0	8.0	10.0	7.5	650	F461KF333(1)250(2)
250	160	0.039	KG	4.0	8.0	10.0	7.5	650	F461KG393(1)250(2)
250	160	0.047	KG	4.0	8.0	10.0	7.5	650	F461KG473(1)250(2)
250	160	0.056	KG	4.0	8.0	10.0	7.5	650	F461KG563(1)250(2)
250	160	0.068	KJ	5.0	10.5	10.0	7.5	650	F461KJ683(1)250(2)
250	160	0.082	KJ	5.0	10.5	10.0	7.5	650	F461KJ823(1)250(2)
250	160	0.1	KJ	5.0	10.5	10.0	7.5	650	F461KJ104(1)250(2)
250	160	0.12	KM	6.0	12.0	10.5	7.5	650	F461KM124(1)250(2)
VDC	VAC	Cap Value (µF)	Size Code	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/µs)	Part Number

(1) J = 5%, K = 10%, other tolerances on request.

(2) Insert lead and packaging code. See Ordering Options Table for available options.

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Cap Value (µF)	Size Code	Max Dimensions in mm			Lead Spacing (p)	dV/dt (V/µs)	Part Number
				B	H	L			
250	160	0.15	KM	6.0	12.0	10.5	7.5	650	F461KM154(1)250(2)
250	160	0.068	AG	4.0	9.0	13.0	10.0	550	F461AG683(1)250(2)
250	160	0.082	AG	4.0	9.0	13.0	10.0	550	F461AG823(1)250(2)
250	160	0.1	AG	4.0	9.0	13.0	10.0	550	F461AG104(1)250(2)
250	160	0.12	AK	5.0	11.0	13.0	10.0	550	F461AK124(1)250(2)
250	160	0.15	AK	5.0	11.0	13.0	10.0	550	F461AK154(1)250(2)
250	160	0.18	AK	5.0	11.0	13.0	10.0	550	F461AK184(1)250(2)
250	160	0.22	AK	5.0	11.0	13.0	10.0	550	F461AK224(1)250(2)
250	160	0.27	AP	6.0	12.0	13.0	10.0	550	F461AP274(1)250(2)
250	160	0.1	BB	4.0	10.0	18.0	15.0	300	F461BB104(1)250(2)
250	160	0.12	BB	4.0	10.0	18.0	15.0	300	F461BB124(1)250(2)
250	160	0.15	BB	4.0	10.0	18.0	15.0	300	F461BB154(1)250(2)
250	160	0.18	BB	4.0	10.0	18.0	15.0	300	F461BB184(1)250(2)
250	160	0.22	BC	5.0	11.0	18.0	15.0	300	F461BC224(1)250(2)
250	160	0.27	BC	5.0	11.0	18.0	15.0	300	F461BC274(1)250(2)
250	160	0.33	BG	6.0	12.0	18.0	15.0	300	F461BG334(1)250(2)
250	160	0.39	BK	7.5	13.5	18.0	15.0	300	F461BK394(1)250(2)
250	160	0.47	BK	7.5	13.5	18.0	15.0	300	F461BK474(1)250(2)
250	160	0.56	BK	7.5	13.5	18.0	15.0	300	F461BK564(1)250(2)
250	160	0.68	BP	8.5	14.5	18.0	15.0	300	F461BP684(1)250(2)
250	160	0.82	BP	8.5	14.5	18.0	15.0	300	F461BP824(1)250(2)
250	160	1.0	BS	10.0	16.0	18.0	15.0	300	F461BS105(1)250(2)
250	160	1.2	BY	11.0	19.0	18.0	15.0	300	F461BY125(1)250(2)
250	160	1.5	BY	11.0	19.0	18.0	15.0	300	F461BY155(1)250(2)
250	160	1.8	BY	11.0	19.0	18.0	15.0	300	F461BY185(1)250(2)
250	160	0.47	DB	6.0	14.5	26.0	22.5	125	F461DB474(1)250(2)
250	160	0.56	DB	6.0	14.5	26.0	22.5	125	F461DB564(1)250(2)
250	160	0.68	DB	6.0	14.5	26.0	22.5	125	F461DB684(1)250(2)
250	160	0.82	DI	7.0	16.0	26.0	22.5	125	F461DI824(1)250(2)
250	160	1.0	DI	7.0	16.0	26.0	22.5	125	F461DI105(1)250(2)
250	160	1.2	DH	8.0	16.0	26.0	22.5	125	F461DH125(1)250(2)
250	160	1.5	DM	9.0	18.5	26.0	22.5	125	F461DM155(1)250(2)
250	160	1.8	DM	9.0	18.5	26.0	22.5	125	F461DM185(1)250(2)
250	160	2.2	DO	10.0	18.5	26.0	22.5	125	F461DO225(1)250(2)
250	160	2.7	DU	13.0	22.0	26.0	22.5	125	F461DU275(1)250(2)
250	160	3.3	DU	13.0	22.0	26.0	22.5	125	F461DU335(1)250(2)
250	160	3.9	DY	15.5	24.5	26.0	22.5	125	F461DY395(1)250(2)
250	160	4.7	DY	15.5	24.5	26.0	22.5	125	F461DY475(1)250(2)
250	160	5.6	DY	15.5	24.5	26.0	22.5	125	F461DY565(1)250(2)
250	160	1.5	FB	9.0	17.0	31.5	27.5	100	F461FB155(1)250(2)
250	160	1.8	FB	9.0	17.0	31.5	27.5	100	F461FB185(1)250(2)
250	160	2.2	FC	11.0	20.0	31.5	27.5	100	F461FC225(1)250(2)
250	160	2.7	FC	11.0	20.0	31.5	27.5	100	F461FC275(1)250(2)
250	160	3.3	FC	11.0	20.0	31.5	27.5	100	F461FC335(1)250(2)
250	160	3.9	FI	13.0	25.0	31.5	27.5	100	F461FI395(1)250(2)
250	160	4.7	FI	13.0	25.0	31.5	27.5	100	F461FI475(1)250(2)
250	160	5.6	FN	14.0	28.0	31.5	27.5	100	F461FN565(1)250(2)
250	160	6.8	FR	17.5	28.0	31.5	27.5	100	F461FR685(1)250(2)
250	160	8.2	FS	19.0	29.0	31.5	27.5	100	F461FS825(1)250(2)
250	160	10.0	FY	22.0	37.0	31.5	27.5	100	F461FY106(1)250(2)
250	160	12.0	FY	22.0	37.0	31.5	27.5	100	F461FY126(1)250(2)
250	160	15.0	FY	22.0	37.0	31.5	27.5	100	F461FY156(1)250(2)
250	160	3.3	RB	11.0	22.0	41.0	37.5	40	F461RB335(1)250(2)
250	160	3.9	RB	11.0	22.0	41.0	37.5	40	F461RB395(1)250(2)
250	160	4.7	RB	11.0	22.0	41.0	37.5	40	F461RB475(1)250(2)
250	160	5.6	RF	13.0	24.0	41.0	37.5	40	F461RF565(1)250(2)
250	160	6.8	RF	13.0	24.0	41.0	37.5	40	F461RF685(1)250(2)
250	160	8.2	RH	15.0	26.0	41.0	37.5	40	F461RH825(1)250(2)
250	160	10.0	RC	16.0	28.5	41.0	37.5	40	F461RC106(1)250(2)
250	160	12.0	RD	19.0	32.0	41.0	37.5	40	F461RD126(1)250(2)
250	160	15.0	RD	19.0	32.0	41.0	37.5	40	F461RD156(1)250(2)
VDC	VAC	Cap Value (µF)	Size Code	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/µs)	Part Number

(1) J = 5%, K = 10%, other tolerances on request.

(2) Insert lead and packaging code. See Ordering Options Table for available options.

Roll Over for Order Info.

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Cap Value (µF)	Size Code	Max Dimensions in mm			Lead Spacing (p)	dV/dt (V/µs)	Part Number
				B	H	L			
250	160	18.0	RP	21.0	38.0	41.0	37.5	40	F461RP186(1)250(2)
250	160	22.0	RO	24.0	44.0	41.0	37.5	40	F461RO226(1)250(2)
250	160	27.0	RO	24.0	44.0	41.0	37.5	40	F461RO276(1)250(2)
250	160	33.0	RU	30.0	45.0	41.0	37.5	40	F461RU336(1)250(2)
250	160	39.0	RU	30.0	45.0	41.0	37.5	40	F461RU396(1)250(2)
400	220	0.0033	JF	2.5	6.5	7.2	5.0	400	F461JF332(1)400(2)
400	220	0.0039	JF	2.5	6.5	7.2	5.0	400	F461JF392(1)400(2)
400	220	0.0047	JF	2.5	6.5	7.2	5.0	400	F461JF472(1)400(2)
400	220	0.0056	JF	2.5	6.5	7.2	5.0	400	F461JF562(1)400(2)
400	220	0.0068	JG	3.5	7.5	7.2	5.0	400	F461JG682(1)400(2)
400	220	0.0082	JG	3.5	7.5	7.2	5.0	400	F461JG822(1)400(2)
400	220	0.01	JG	3.5	7.5	7.2	5.0	400	F461JG103(1)400(2)
400	220	0.012	JG	3.5	7.5	7.2	5.0	400	F461JG123(1)400(2)
400	220	0.015	JM	4.5	9.5	7.2	5.0	400	F461JM153(1)400(2)
400	220	0.018	JM	4.5	9.5	7.2	5.0	400	F461JM183(1)400(2)
400	220	0.022	JM	4.5	9.5	7.2	5.0	400	F461JM223(1)400(2)
400	220	0.027	JQ	5.0	10.0	7.2	5.0	400	F461JQ273(1)400(2)
400	220	0.033	JT	6.0	11.0	7.2	5.0	400	F461JT333(1)400(2)
400	220	0.039	JT	6.0	11.0	7.2	5.0	400	F461JT393(1)400(2)
400	220	0.047	JU	7.2	13.0	7.2	5.0	400	F461JU473(1)400(2)
400	220	0.056	JU	7.2	13.0	7.2	5.0	400	F461JU563(1)400(2)
400	220	0.0033	KE	2.5	6.0	10.0	7.5	1500	F461KE332(1)400(2)
400	220	0.0039	KE	2.5	6.0	10.0	7.5	1500	F461KE392(1)400(2)
400	220	0.0047	KE	2.5	6.0	10.0	7.5	1500	F461KE472(1)400(2)
400	220	0.0056	KF	3.0	8.0	10.0	7.5	1500	F461KF562(1)400(2)
400	220	0.0068	KF	3.0	8.0	10.0	7.5	1500	F461KF682(1)400(2)
400	220	0.0082	KF	3.0	8.0	10.0	7.5	1500	F461KF822(1)400(2)
400	220	0.01	KF	3.0	8.0	10.0	7.5	1500	F461KF103(1)400(2)
400	220	0.012	KF	3.0	8.0	10.0	7.5	1500	F461KF123(1)400(2)
400	220	0.015	KG	4.0	8.0	10.0	7.5	1500	F461KG153(1)400(2)
400	220	0.018	KG	4.0	8.0	10.0	7.5	1500	F461KG183(1)400(2)
400	220	0.022	KG	4.0	8.0	10.0	7.5	1500	F461KG223(1)400(2)
400	220	0.027	KJ	5.0	10.5	10.0	7.5	1500	F461KJ273(1)400(2)
400	220	0.033	KJ	5.0	10.5	10.0	7.5	1500	F461KJ333(1)400(2)
400	220	0.039	KJ	5.0	10.5	10.0	7.5	1500	F461KJ393(1)400(2)
400	220	0.047	KJ	5.0	10.5	10.0	7.5	1500	F461KJ473(1)400(2)
400	220	0.056	KM	6.0	12.0	10.5	7.5	1500	F461KM563(1)400(2)
400	220	0.068	KM	6.0	12.0	10.5	7.5	1500	F461KM683(1)400(2)
400	220	0.022	AG	4.0	9.0	13.0	10.0	1300	F461AG223(1)400(2)
400	220	0.027	AG	4.0	9.0	13.0	10.0	1300	F461AG273(1)400(2)
400	220	0.033	AG	4.0	9.0	13.0	10.0	1300	F461AG333(1)400(2)
400	220	0.039	AG	4.0	9.0	13.0	10.0	1300	F461AG393(1)400(2)
400	220	0.047	AK	5.0	11.0	13.0	10.0	1300	F461AK473(1)400(2)
400	220	0.056	AK	5.0	11.0	13.0	10.0	1300	F461AK563(1)400(2)
400	220	0.068	AK	5.0	11.0	13.0	10.0	1300	F461AK683(1)400(2)
400	220	0.082	AK	5.0	11.0	13.0	10.0	1300	F461AK823(1)400(2)
400	220	0.1	AK	5.0	11.0	13.0	10.0	1300	F461AK104(1)400(2)
400	220	0.12	AP	6.0	12.0	13.0	10.0	1300	F461AP124(1)400(2)
400	220	0.047	BB	4.0	10.0	18.0	15.0	900	F461BB473(1)400(2)
400	220	0.056	BB	4.0	10.0	18.0	15.0	900	F461BB563(1)400(2)
400	220	0.068	BB	4.0	10.0	18.0	15.0	900	F461BB683(1)400(2)
400	220	0.082	BC	5.0	11.0	18.0	15.0	900	F461BC823(1)400(2)
400	220	0.1	BC	5.0	11.0	18.0	15.0	900	F461BC104(1)400(2)
400	220	0.12	BE	5.5	12.5	18.0	15.0	900	F461BE124(1)400(2)
400	220	0.15	BE	5.5	12.5	18.0	15.0	900	F461BE154(1)400(2)
400	220	0.18	BK	7.5	13.5	18.0	15.0	900	F461BK184(1)400(2)
400	220	0.22	BK	7.5	13.5	18.0	15.0	900	F461BK224(1)400(2)
400	220	0.27	BK	7.5	13.5	18.0	15.0	900	F461BK274(1)400(2)
400	220	0.33	BI	6.0	17.5	18.0	15.0	900	F461BI334(1)400(2)
400	220	0.39	BS	10.0	16.0	18.0	15.0	900	F461BS394(1)400(2)
400	220	0.47	BS	10.0	16.0	18.0	15.0	900	F461BS474(1)400(2)
VDC	VAC	Cap Value (µF)	Size Code	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/µs)	Part Number

(1) J = 5%, K = 10%, other tolerances on request.

(2) Insert lead and packaging code. See Ordering Options Table for available options.

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Cap Value (µF)	Size Code	Max Dimensions in mm			Lead Spacing (p)	dV/dt (V/µs)	Part Number
				B	H	L			
400	220	0.56	BY	11.0	19.0	18.0	15.0	900	F461BY564(1)400(2)
400	220	0.68	BY	11.0	19.0	18.0	15.0	900	F461BY684(1)400(2)
400	220	0.82	BY	11.0	19.0	18.0	15.0	900	F461BY824(1)400(2)
400	220	0.22	DB	6.0	14.5	26.0	22.5	300	F461DB224(1)400(2)
400	220	0.27	DB	6.0	14.5	26.0	22.5	300	F461DB274(1)400(2)
400	220	0.33	DB	6.0	14.5	26.0	22.5	300	F461DB334(1)400(2)
400	220	0.39	DI	7.0	16.0	26.0	22.5	300	F461DI394(1)400(2)
400	220	0.47	DI	7.0	16.0	26.0	22.5	300	F461DI474(1)400(2)
400	220	0.56	DH	8.0	16.0	26.0	22.5	300	F461DH564(1)400(2)
400	220	0.68	DM	9.0	18.5	26.0	22.5	300	F461DM684(1)400(2)
400	220	0.82	DM	9.0	18.5	26.0	22.5	300	F461DM824(1)400(2)
400	220	1.0	DP	11.0	20.0	26.0	22.5	300	F461DP105(1)400(2)
400	220	1.2	DP	11.0	20.0	26.0	22.5	300	F461DP125(1)400(2)
400	220	1.5	DU	13.0	22.0	26.0	22.5	300	F461DU155(1)400(2)
400	220	1.8	DY	15.5	24.5	26.0	22.5	300	F461DY185(1)400(2)
400	220	2.2	DY	15.5	24.5	26.0	22.5	300	F461DY225(1)400(2)
400	220	0.56	FB	9.0	17.0	31.5	27.5	130	F461FB564(1)400(2)
400	220	0.68	FB	9.0	17.0	31.5	27.5	130	F461FB684(1)400(2)
400	220	0.82	FB	9.0	17.0	31.5	27.5	130	F461FB824(1)400(2)
400	220	1.0	FC	11.0	20.0	31.5	27.5	130	F461FC105(1)400(2)
400	220	1.2	FC	11.0	20.0	31.5	27.5	130	F461FC125(1)400(2)
400	220	1.5	FC	11.0	20.0	31.5	27.5	130	F461FC155(1)400(2)
400	220	1.8	FI	13.0	25.0	31.5	27.5	130	F461FI185(1)400(2)
400	220	2.2	FI	13.0	25.0	31.5	27.5	130	F461FI225(1)400(2)
400	220	2.7	FN	14.0	28.0	31.5	27.5	130	F461FN275(1)400(2)
400	220	3.3	FR	17.5	28.0	31.5	27.5	130	F461FR335(1)400(2)
400	220	3.9	FS	19.0	29.0	31.5	27.5	130	F461FS395(1)400(2)
400	220	4.7	FY	22.0	37.0	31.5	27.5	130	F461FY475(1)400(2)
400	220	5.6	FY	22.0	37.0	31.5	27.5	130	F461FY565(1)400(2)
400	220	6.8	FY	22.0	37.0	31.5	27.5	130	F461FY685(1)400(2)
400	220	1.5	RB	11.0	22.0	41.0	37.5	70	F461RB155(1)400(2)
400	220	1.8	RB	11.0	22.0	41.0	37.5	70	F461RB185(1)400(2)
400	220	2.2	RB	11.0	22.0	41.0	37.5	70	F461RB225(1)400(2)
400	220	2.7	RF	13.0	24.0	41.0	37.5	70	F461RF275(1)400(2)
400	220	3.3	RF	13.0	24.0	41.0	37.5	70	F461RF335(1)400(2)
400	220	3.9	RH	15.0	26.0	41.0	37.5	70	F461RH395(1)400(2)
400	220	4.7	RC	16.0	28.5	41.0	37.5	70	F461RC475(1)400(2)
400	220	5.6	RD	19.0	32.0	41.0	37.5	70	F461RD565(1)400(2)
400	220	6.8	RD	19.0	32.0	41.0	37.5	70	F461RD685(1)400(2)
400	220	8.2	RP	21.0	38.0	41.0	37.5	70	F461RP825(1)400(2)
400	220	10.0	RO	24.0	44.0	41.0	37.5	70	F461RO106(1)400(2)
400	220	12.0	RO	24.0	44.0	41.0	37.5	70	F461RO126(1)400(2)
400	220	15.0	RU	30.0	45.0	41.0	37.5	70	F461RU156(1)400(2)
400	220	18.0	RU	30.0	45.0	41.0	37.5	70	F461RU186(1)400(2)
630	250	0.0015	JF	2.5	6.5	7.2	5.0	500	F461JF152(1)630(2)
630	250	0.0018	JF	2.5	6.5	7.2	5.0	500	F461JF182(1)630(2)
630	250	0.0022	JF	2.5	6.5	7.2	5.0	500	F461JF222(1)630(2)
630	250	0.0027	JF	2.5	6.5	7.2	5.0	500	F461JF272(1)630(2)
630	250	0.0033	JF	2.5	6.5	7.2	5.0	500	F461JF332(1)630(2)
630	250	0.0039	JG	3.5	7.5	7.2	5.0	500	F461JG392(1)630(2)
630	250	0.0047	JG	3.5	7.5	7.2	5.0	500	F461JG472(1)630(2)
630	250	0.0056	JG	3.5	7.5	7.2	5.0	500	F461JG562(1)630(2)
630	250	0.0068	JM	4.5	9.5	7.2	5.0	500	F461JM682(1)630(2)
630	250	0.0082	JM	4.5	9.5	7.2	5.0	500	F461JM822(1)630(2)
630	250	0.01	JM	4.5	9.5	7.2	5.0	500	F461JM103(1)630(2)
630	250	0.012	JQ	5.0	10.0	7.2	5.0	500	F461JQ123(1)630(2)
630	250	0.015	JT	6.0	11.0	7.2	5.0	500	F461JT153(1)630(2)
630	250	0.018	JT	6.0	11.0	7.2	5.0	500	F461JT183(1)630(2)
630	250	0.022	JT	6.0	11.0	7.2	5.0	500	F461JT223(1)630(2)
630	250	0.027	JU	7.2	13.0	7.2	5.0	500	F461JU273(1)630(2)
630	250	0.033	JU	7.2	13.0	7.2	5.0	500	F461JU333(1)630(2)
VDC	VAC	Cap Value (µF)	Size Code	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/µs)	Part Number

(1) J = 5%, K = 10%, other tolerances on request.

(2) Insert lead and packaging code. See Ordering Options Table for available options.

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Cap Value (µF)	Size Code	Max Dimensions in mm			Lead Spacing (p)	dV/dt (V/µs)	Part Number
				B	H	L			
630	250	0.0015	KE	2.5	6.0	10.0	7.5	2400	F461KE152(1)630(2)
630	250	0.0018	KE	2.5	6.0	10.0	7.5	2400	F461KE182(1)630(2)
630	250	0.0022	KE	2.5	6.0	10.0	7.5	2400	F461KE222(1)630(2)
630	250	0.0027	KF	3.0	8.0	10.0	7.5	2400	F461KF272(1)630(2)
630	250	0.0033	KF	3.0	8.0	10.0	7.5	2400	F461KF332(1)630(2)
630	250	0.0039	KF	3.0	8.0	10.0	7.5	2400	F461KF392(1)630(2)
630	250	0.0047	KF	3.0	8.0	10.0	7.5	2400	F461KF472(1)630(2)
630	250	0.0056	KF	3.0	8.0	10.0	7.5	2400	F461KF562(1)630(2)
630	250	0.0068	KF	3.0	8.0	10.0	7.5	2400	F461KF682(1)630(2)
630	250	0.0082	KG	4.0	8.0	10.0	7.5	2400	F461KG822(1)630(2)
630	250	0.01	KG	4.0	8.0	10.0	7.5	2400	F461KG103(1)630(2)
630	250	0.012	KJ	5.0	10.5	10.0	7.5	2400	F461KJ123(1)630(2)
630	250	0.015	KJ	5.0	10.5	10.0	7.5	2400	F461KJ153(1)630(2)
630	250	0.018	KJ	5.0	10.5	10.0	7.5	2400	F461KJ183(1)630(2)
630	250	0.022	KJ	5.0	10.5	10.0	7.5	2400	F461KJ223(1)630(2)
630	250	0.027	KM	6.0	12.0	10.5	7.5	2400	F461KM273(1)630(2)
630	250	0.033	KM	6.0	12.0	10.5	7.5	2400	F461KM333(1)630(2)
630	250	0.039	KM	6.0	12.0	10.5	7.5	2400	F461KM393(1)630(2)
630	250	0.01	AG	4.0	9.0	13.0	10.0	2000	F461AG103(1)630(2)
630	250	0.012	AG	4.0	9.0	13.0	10.0	2000	F461AG123(1)630(2)
630	250	0.015	AG	4.0	9.0	13.0	10.0	2000	F461AG153(1)630(2)
630	250	0.018	AG	4.0	9.0	13.0	10.0	2000	F461AG183(1)630(2)
630	250	0.022	AG	4.0	9.0	13.0	10.0	2000	F461AG223(1)630(2)
630	250	0.027	AK	5.0	11.0	13.0	10.0	2000	F461AK273(1)630(2)
630	250	0.033	AK	5.0	11.0	13.0	10.0	2000	F461AK333(1)630(2)
630	250	0.039	AK	5.0	11.0	13.0	10.0	2000	F461AK393(1)630(2)
630	250	0.047	AP	6.0	12.0	13.0	10.0	2000	F461AP473(1)630(2)
630	250	0.056	AP	6.0	12.0	13.0	10.0	2000	F461AP563(1)630(2)
630	250	0.068	AP	6.0	12.0	13.0	10.0	2000	F461AP683(1)630(2)
630	250	0.022	BB	4.0	10.0	18.0	15.0	1000	F461BB223(1)630(2)
630	250	0.027	BB	4.0	10.0	18.0	15.0	1000	F461BB273(1)630(2)
630	250	0.033	BB	4.0	10.0	18.0	15.0	1000	F461BB333(1)630(2)
630	250	0.039	BB	4.0	10.0	18.0	15.0	1000	F461BB393(1)630(2)
630	250	0.047	BC	5.0	11.0	18.0	15.0	1000	F461BC473(1)630(2)
630	250	0.056	BC	5.0	11.0	18.0	15.0	1000	F461BC563(1)630(2)
630	250	0.063	BC	5.0	11.0	18.0	15.0	1000	F461BC633(1)630(2)
630	250	0.068	BE	5.5	12.5	18.0	15.0	1000	F461BE683(1)630(2)
630	250	0.082	BE	5.5	12.5	18.0	15.0	1000	F461BE823(1)630(2)
630	250	0.1	BK	7.5	13.5	18.0	15.0	1000	F461BK104(1)630(2)
630	250	0.12	BK	7.5	13.5	18.0	15.0	1000	F461BK124(1)630(2)
630	250	0.15	BK	7.5	13.5	18.0	15.0	1000	F461BK154(1)630(2)
630	250	0.18	BP	8.5	14.5	18.0	15.0	1000	F461BP184(1)630(2)
630	250	0.22	BS	10.0	16.0	18.0	15.0	1000	F461BS224(1)630(2)
630	250	0.27	BY	11.0	19.0	18.0	15.0	1000	F461BY274(1)630(2)
630	250	0.33	BY	11.0	19.0	18.0	15.0	1000	F461BY334(1)630(2)
630	250	0.39	BY	11.0	19.0	18.0	15.0	1000	F461BY394(1)630(2)
630	250	0.1	DB	6.0	14.5	26.0	22.5	400	F461DB104(1)630(2)
630	250	0.12	DB	6.0	14.5	26.0	22.5	400	F461DB124(1)630(2)
630	250	0.15	DB	6.0	14.5	26.0	22.5	400	F461DB154(1)630(2)
630	250	0.18	DI	7.0	16.0	26.0	22.5	400	F461DI184(1)630(2)
630	250	0.22	DI	7.0	16.0	26.0	22.5	400	F461DI224(1)630(2)
630	250	0.27	DH	8.0	16.0	26.0	22.5	400	F461DH274(1)630(2)
630	250	0.33	DJ	8.5	17.0	26.0	22.5	400	F461DJ334(1)630(2)
630	250	0.39	DM	9.0	18.5	26.0	22.5	400	F461DM394(1)630(2)
630	250	0.47	DM	9.0	18.5	26.0	22.5	400	F461DM474(1)630(2)
630	250	0.56	DP	11.0	20.0	26.0	22.5	400	F461DP564(1)630(2)
630	250	0.68	DU	13.0	22.0	26.0	22.5	400	F461DU684(1)630(2)
630	250	0.82	DU	13.0	22.0	26.0	22.5	400	F461DU824(1)630(2)
630	250	1.0	DY	15.5	24.5	26.0	22.5	400	F461DY105(1)630(2)
630	250	1.2	DY	15.5	24.5	26.0	22.5	400	F461DY125(1)630(2)
630	250	0.33	FB	9.0	17.0	31.5	27.5	180	F461FB334(1)630(2)
VDC	VAC	Cap Value (µF)	Size Code	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/µs)	Part Number

(1) J = 5%, K = 10%, other tolerances on request.

(2) Insert lead and packaging code. See Ordering Options Table for available options.

Roll Over for Order Info.

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Cap Value (µF)	Size Code	Max Dimensions in mm			Lead Spacing (p)	dV/dt (V/µs)	Part Number
				B	H	L			
630	250	0.39	FB	9.0	17.0	31.5	27.5	180	F461FB394(1)630(2)
630	250	0.47	FB	9.0	17.0	31.5	27.5	180	F461FB474(1)630(2)
630	250	0.56	FC	11.0	20.0	31.5	27.5	180	F461FC564(1)630(2)
630	250	0.68	FC	11.0	20.0	31.5	27.5	180	F461FC684(1)630(2)
630	250	0.82	FC	11.0	20.0	31.5	27.5	180	F461FC824(1)630(2)
630	250	1.0	FI	13.0	25.0	31.5	27.5	180	F461FI105(1)630(2)
630	250	1.2	FI	13.0	25.0	31.5	27.5	180	F461FI125(1)630(2)
630	250	1.5	FN	14.0	28.0	31.5	27.5	180	F461FN155(1)630(2)
630	250	1.8	FR	17.5	28.0	31.5	27.5	180	F461FR185(1)630(2)
630	250	2.2	FS	19.0	29.0	31.5	27.5	180	F461FS225(1)630(2)
630	250	2.7	FY	22.0	37.0	31.5	27.5	180	F461FY275(1)630(2)
630	250	3.3	FY	22.0	37.0	31.5	27.5	180	F461FY335(1)630(2)
630	250	3.9	FY	22.0	37.0	31.5	27.5	180	F461FY395(1)630(2)
630	250	0.68	RB	11.0	22.0	41.0	37.5	90	F461RB684(1)630(2)
630	250	0.82	RB	11.0	22.0	41.0	37.5	90	F461RB824(1)630(2)
630	250	1.0	RB	11.0	22.0	41.0	37.5	90	F461RB105(1)630(2)
630	250	1.2	RB	11.0	22.0	41.0	37.5	90	F461RB125(1)630(2)
630	250	1.5	RF	13.0	24.0	41.0	37.5	90	F461RF155(1)630(2)
630	250	1.8	RF	13.0	24.0	41.0	37.5	90	F461RF185(1)630(2)
630	250	2.2	RH	15.0	26.0	41.0	37.5	90	F461RH225(1)630(2)
630	250	2.7	RC	16.0	28.5	41.0	37.5	90	F461RC275(1)630(2)
630	250	3.3	RD	19.0	32.0	41.0	37.5	90	F461RD335(1)630(2)
630	250	3.9	RP	21.0	38.0	41.0	37.5	90	F461RP395(1)630(2)
630	250	4.7	RP	21.0	38.0	41.0	37.5	90	F461RP475(1)630(2)
630	250	5.6	RO	24.0	44.0	41.0	37.5	90	F461RO565(1)630(2)
630	250	6.8	RO	24.0	44.0	41.0	37.5	90	F461RO685(1)630(2)
630	250	8.2	RU	30.0	45.0	41.0	37.5	90	F461RU825(1)630(2)
1000	300	0.0047	AG	4.0	9.0	13.0	10.0	2000	F462AG472(1)1K0(2)
1000	300	0.0056	AG	4.0	9.0	13.0	10.0	2000	F462AG562(1)1K0(2)
1000	300	0.0068	AG	4.0	9.0	13.0	10.0	2000	F462AG682(1)1K0(2)
1000	300	0.0082	AK	5.0	11.0	13.0	10.0	2000	F462AK822(1)1K0(2)
1000	300	0.01	AK	5.0	11.0	13.0	10.0	2000	F462AK103(1)1K0(2)
1000	300	0.012	AK	5.0	11.0	13.0	10.0	2000	F462AK123(1)1K0(2)
1000	300	0.015	AK	5.0	11.0	13.0	10.0	2000	F462AK153(1)1K0(2)
1000	300	0.018	AK	5.0	11.0	13.0	10.0	2000	F462AK183(1)1K0(2)
1000	300	0.022	AP	6.0	12.0	13.0	10.0	2000	F462AP223(1)1K0(2)
1000	300	0.01	BB	4.0	10.0	18.0	15.0	1600	F462BB103(1)1K0(2)
1000	300	0.012	BB	4.0	10.0	18.0	15.0	1600	F462BB123(1)1K0(2)
1000	300	0.015	BB	4.0	10.0	18.0	15.0	1600	F462BB153(1)1K0(2)
1000	300	0.018	BC	5.0	11.0	18.0	15.0	1600	F462BC183(1)1K0(2)
1000	300	0.022	BC	5.0	11.0	18.0	15.0	1600	F462BC223(1)1K0(2)
1000	300	0.027	BE	5.5	12.5	18.0	15.0	1600	F462BE273(1)1K0(2)
1000	300	0.033	BE	5.5	12.5	18.0	15.0	1600	F462BE333(1)1K0(2)
1000	300	0.039	BK	7.5	13.5	18.0	15.0	1600	F462BK393(1)1K0(2)
1000	300	0.047	BK	7.5	13.5	18.0	15.0	1600	F462BK473(1)1K0(2)
1000	300	0.056	BK	7.5	13.5	18.0	15.0	1600	F462BK563(1)1K0(2)
1000	300	0.068	BP	8.5	14.5	18.0	15.0	1600	F462BP683(1)1K0(2)
1000	300	0.082	BS	10.0	16.0	18.0	15.0	1600	F462BS823(1)1K0(2)
1000	300	0.1	BS	10.0	16.0	18.0	15.0	1600	F462BS104(1)1K0(2)
1000	300	0.12	BY	11.0	19.0	18.0	15.0	1600	F462BY124(1)1K0(2)
1000	300	0.15	BY	11.0	19.0	18.0	15.0	1600	F462BY154(1)1K0(2)
1000	300	0.047	DB	6.0	14.5	26.0	22.5	600	F462DB473(1)1K0(2)
1000	300	0.056	DB	6.0	14.5	26.0	22.5	600	F462DB563(1)1K0(2)
1000	300	0.068	DB	6.0	14.5	26.0	22.5	600	F462DB683(1)1K0(2)
1000	300	0.082	DI	7.0	16.0	26.0	22.5	600	F462DI823(1)1K0(2)
1000	300	0.1	DI	7.0	16.0	26.0	22.5	600	F462DI104(1)1K0(2)
1000	300	0.12	DH	8.0	16.0	26.0	22.5	600	F462DH124(1)1K0(2)
1000	300	0.15	DM	9.0	18.5	26.0	22.5	600	F462DM154(1)1K0(2)
1000	300	0.18	DO	10.0	18.5	26.0	22.5	600	F462DO184(1)1K0(2)
1000	300	0.22	DO	10.0	18.5	26.0	22.5	600	F462DO224(1)1K0(2)
1000	300	0.27	DU	13.0	22.0	26.0	22.5	600	F462DU274(1)1K0(2)
VDC	VAC	Cap Value (µF)	Size Code	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/µs)	Part Number

(1) J = 5%, K = 10%, other tolerances on request.

(2) Insert lead and packaging code. See Ordering Options Table for available options.

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Cap Value (µF)	Size Code	Max Dimensions in mm			Lead Spacing (p)	dV/dt (V/µs)	Part Number
				B	H	L			
1000	300	0.33	DU	13.0	22.0	26.0	22.5	600	F462DU334(1)1K0(2)
1000	300	0.39	DY	15.5	24.5	26.0	22.5	600	F462DY394(1)1K0(2)
1000	300	0.47	DY	15.5	24.5	26.0	22.5	600	F462DY474(1)1K0(2)
1000	300	0.56	DY	15.5	24.5	26.0	22.5	600	F462DY564(1)1K0(2)
1000	300	0.15	FB	9.0	17.0	31.5	27.5	200	F462FB154(1)1K0(2)
1000	300	0.18	FB	9.0	17.0	31.5	27.5	200	F462FB184(1)1K0(2)
1000	300	0.22	FB	9.0	17.0	31.5	27.5	200	F462FB224(1)1K0(2)
1000	300	0.27	FC	11.0	20.0	31.5	27.5	200	F462FC274(1)1K0(2)
1000	300	0.33	FC	11.0	20.0	31.5	27.5	200	F462FC334(1)1K0(2)
1000	300	0.39	FI	13.0	25.0	31.5	27.5	200	F462FI394(1)1K0(2)
1000	300	0.47	FI	13.0	25.0	31.5	27.5	200	F462FI474(1)1K0(2)
1000	300	0.56	FN	14.0	28.0	31.5	27.5	200	F462FN564(1)1K0(2)
1000	300	0.68	FN	14.0	28.0	31.5	27.5	200	F462FN684(1)1K0(2)
1000	300	0.82	FR	17.5	28.0	31.5	27.5	200	F462FR824(1)1K0(2)
1000	300	1.0	FY	22.0	37.0	31.5	27.5	200	F462FY105(1)1K0(2)
1000	300	1.2	FY	22.0	37.0	31.5	27.5	200	F462FY125(1)1K0(2)
1000	300	1.5	FY	22.0	37.0	31.5	27.5	200	F462FY155(1)1K0(2)
1000	300	0.33	RB	11.0	22.0	41.0	37.5	150	F462RB334(1)1K0(2)
1000	300	0.39	RB	11.0	22.0	41.0	37.5	150	F462RB394(1)1K0(2)
1000	300	0.47	RB	11.0	22.0	41.0	37.5	150	F462RB474(1)1K0(2)
1000	300	0.56	RB	11.0	22.0	41.0	37.5	150	F462RB564(1)1K0(2)
1000	300	0.68	RF	13.0	24.0	41.0	37.5	150	F462RF684(1)1K0(2)
1000	300	0.82	RH	15.0	26.0	41.0	37.5	150	F462RH824(1)1K0(2)
1000	300	1.0	RC	16.0	28.5	41.0	37.5	150	F462RC105(1)1K0(2)
1000	300	1.2	RD	19.0	32.0	41.0	37.5	150	F462RD125(1)1K0(2)
1000	300	1.5	RD	19.0	32.0	41.0	37.5	150	F462RD155(1)1K0(2)
1000	300	1.8	RP	21.0	38.0	41.0	37.5	150	F462RP185(1)1K0(2)
1000	300	2.2	RP	21.0	38.0	41.0	37.5	150	F462RP225(1)1K0(2)
1000	300	2.7	RO	24.0	44.0	41.0	37.5	150	F462RO275(1)1K0(2)
1000	300	3.3	RU	30.0	45.0	41.0	37.5	150	F462RU335(1)1K0(2)
1000	300	3.9	RU	30.0	45.0	41.0	37.5	150	F462RU395(1)1K0(2)
1250	400	0.0033	AG	4.0	9.0	13.0	10.0	2200	F462AG332(1)1L2(2)
1250	400	0.0047	AG	4.0	9.0	13.0	10.0	2200	F462AG472(1)1L2(2)
1250	400	0.0056	AG	4.0	9.0	13.0	10.0	2200	F462AG562(1)1L2(2)
1250	400	0.0068	AK	5.0	11.0	13.0	10.0	2200	F462AK682(1)1L2(2)
1250	400	0.0082	AK	5.0	11.0	13.0	10.0	2200	F462AK822(1)1L2(2)
1250	400	0.01	AK	5.0	11.0	13.0	10.0	2200	F462AK103(1)1L2(2)
1250	400	0.012	AK	5.0	11.0	13.0	10.0	2200	F462AK123(1)1L2(2)
1250	400	0.015	AP	6.0	12.0	13.0	10.0	2200	F462AP153(1)1L2(2)
1250	400	0.0068	BB	4.0	10.0	18.0	15.0	2000	F462BB682(1)1L2(2)
1250	400	0.0082	BB	4.0	10.0	18.0	15.0	2000	F462BB822(1)1L2(2)
1250	400	0.01	BB	4.0	10.0	18.0	15.0	2000	F462BB103(1)1L2(2)
1250	400	0.012	BC	5.0	11.0	18.0	15.0	2000	F462BC123(1)1L2(2)
1250	400	0.015	BC	5.0	11.0	18.0	15.0	2000	F462BC153(1)1L2(2)
1250	400	0.018	BE	5.5	12.5	18.0	15.0	2000	F462BE183(1)1L2(2)
1250	400	0.022	BE	5.5	12.5	18.0	15.0	2000	F462BE223(1)1L2(2)
1250	400	0.027	BK	7.5	13.5	18.0	15.0	2000	F462BK273(1)1L2(2)
1250	400	0.033	BK	7.5	13.5	18.0	15.0	2000	F462BK333(1)1L2(2)
1250	400	0.039	BK	7.5	13.5	18.0	15.0	2000	F462BK393(1)1L2(2)
1250	400	0.047	BK	7.5	13.5	18.0	15.0	2000	F462BK473(1)1L2(2)
1250	400	0.056	BP	8.5	14.5	18.0	15.0	2000	F462BP563(1)1L2(2)
1250	400	0.068	BS	10.0	16.0	18.0	15.0	2000	F462BS683(1)1L2(2)
1250	400	0.082	BY	11.0	19.0	18.0	15.0	2000	F462BY823(1)1L2(2)
1250	400	0.1	BY	11.0	19.0	18.0	15.0	2000	F462BY104(1)1L2(2)
1250	400	0.12	BY	11.0	19.0	18.0	15.0	2000	F462BY124(1)1L2(2)
1250	400	0.033	DB	6.0	14.5	26.0	22.5	800	F462DB333(1)1L2(2)
1250	400	0.039	DB	6.0	14.5	26.0	22.5	800	F462DB393(1)1L2(2)
1250	400	0.047	DB	6.0	14.5	26.0	22.5	800	F462DB473(1)1L2(2)
1250	400	0.056	DB	6.0	14.5	26.0	22.5	800	F462DB563(1)1L2(2)
1250	400	0.068	DI	7.0	16.0	26.0	22.5	800	F462DI683(1)1L2(2)
1250	400	0.082	DI	7.0	16.0	26.0	22.5	800	F462DI823(1)1L2(2)
VDC	VAC	Cap Value (µF)	Size Code	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/µs)	Part Number

(1) J = 5%, K = 10%, other tolerances on request.

(2) Insert lead and packaging code. See Ordering Options Table for available options.

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Cap Value (µF)	Size Code	Max Dimensions in mm			Lead Spacing (p)	dV/dt (V/µs)	Part Number
				B	H	L			
1250	400	0.1	DJ	8.5	17.0	26.0	22.5	800	F462DJ104(1)1L2(2)
1250	400	0.12	DM	9.0	18.5	26.0	22.5	800	F462DM124(1)1L2(2)
1250	400	0.15	DM	9.0	18.5	26.0	22.5	800	F462DM154(1)1L2(2)
1250	400	0.18	DP	11.0	20.0	26.0	22.5	800	F462DP184(1)1L2(2)
1250	400	0.22	DU	13.0	22.0	26.0	22.5	800	F462DU224(1)1L2(2)
1250	400	0.27	DY	15.5	24.5	26.0	22.5	800	F462DY274(1)1L2(2)
1250	400	0.33	DY	15.5	24.5	26.0	22.5	800	F462DY334(1)1L2(2)
1250	400	0.39	DY	15.5	24.5	26.0	22.5	800	F462DY394(1)1L2(2)
1250	400	0.1	FB	9.0	17.0	31.5	27.5	380	F462FB104(1)1L2(2)
1250	400	0.12	FB	9.0	17.0	31.5	27.5	380	F462FB124(1)1L2(2)
1250	400	0.15	FB	9.0	17.0	31.5	27.5	380	F462FB154(1)1L2(2)
1250	400	0.18	FC	11.0	20.0	31.5	27.5	380	F462FC184(1)1L2(2)
1250	400	0.22	FC	11.0	20.0	31.5	27.5	380	F462FC224(1)1L2(2)
1250	400	0.27	FI	13.0	25.0	31.5	27.5	380	F462FI274(1)1L2(2)
1250	400	0.33	FI	13.0	25.0	31.5	27.5	380	F462FI334(1)1L2(2)
1250	400	0.39	FI	13.0	25.0	31.5	27.5	380	F462FI394(1)1L2(2)
1250	400	0.47	FN	14.0	28.0	31.5	27.5	380	F462FN474(1)1L2(2)
1250	400	0.56	FR	17.5	28.0	31.5	27.5	380	F462FR564(1)1L2(2)
1250	400	0.68	FS	19.0	29.0	31.5	27.5	380	F462FS684(1)1L2(2)
1250	400	0.82	FY	22.0	37.0	31.5	27.5	380	F462FY824(1)1L2(2)
1250	400	1.0	FY	22.0	37.0	31.5	27.5	380	F462FY105(1)1L2(2)
1250	400	1.2	FY	22.0	37.0	31.5	27.5	380	F462FY125(1)1L2(2)
1250	400	0.22	RB	11.0	22.0	41.0	37.5	180	F462RB224(1)1L2(2)
1250	400	0.27	RB	11.0	22.0	41.0	37.5	180	F462RB274(1)1L2(2)
1250	400	0.33	RB	11.0	22.0	41.0	37.5	180	F462RB334(1)1L2(2)
1250	400	0.39	RB	11.0	22.0	41.0	37.5	180	F462RB394(1)1L2(2)
1250	400	0.47	RF	13.0	24.0	41.0	37.5	180	F462RF474(1)1L2(2)
1250	400	0.56	RF	13.0	24.0	41.0	37.5	180	F462RF564(1)1L2(2)
1250	400	0.68	RH	15.0	26.0	41.0	37.5	180	F462RH684(1)1L2(2)
1250	400	0.82	RC	16.0	28.5	41.0	37.5	180	F462RC824(1)1L2(2)
1250	400	1.0	RD	19.0	32.0	41.0	37.5	180	F462RD105(1)1L2(2)
1250	400	1.2	RP	21.0	38.0	41.0	37.5	180	F462RP125(1)1L2(2)
1250	400	1.5	RP	21.0	38.0	41.0	37.5	180	F462RP155(1)1L2(2)
1250	400	1.8	RO	24.0	44.0	41.0	37.5	180	F462RO185(1)1L2(2)
1250	400	2.2	RU	30.0	45.0	41.0	37.5	180	F462RU225(1)1L2(2)
1250	400	2.7	RU	30.0	45.0	41.0	37.5	180	F462RU275(1)1L2(2)
1250	500	0.0047	BB	4.0	10.0	18.0	15.0	3500	F463BB472(1)1L2(2)
1250	500	0.0056	BB	4.0	10.0	18.0	15.0	3500	F463BB562(1)1L2(2)
1250	500	0.0068	BB	4.0	10.0	18.0	15.0	3500	F463BB682(1)1L2(2)
1250	500	0.0082	BC	5.0	11.0	18.0	15.0	3500	F463BC822(1)1L2(2)
1250	500	0.01	BC	5.0	11.0	18.0	15.0	3500	F463BC103(1)1L2(2)
1250	500	0.012	BE	5.5	12.5	18.0	15.0	3500	F463BE123(1)1L2(2)
1250	500	0.015	BG	6.0	12.0	18.0	15.0	3500	F463BG153(1)1L2(2)
1250	500	0.018	BK	7.5	13.5	18.0	15.0	3500	F463BK183(1)1L2(2)
1250	500	0.022	BK	7.5	13.5	18.0	15.0	3500	F463BK223(1)1L2(2)
1250	500	0.027	BK	7.5	13.5	18.0	15.0	3500	F463BK273(1)1L2(2)
1250	500	0.033	BP	8.5	14.5	18.0	15.0	3500	F463BP333(1)1L2(2)
1250	500	0.039	BS	10.0	16.0	18.0	15.0	3500	F463BS393(1)1L2(2)
1250	500	0.047	BS	10.0	16.0	18.0	15.0	3500	F463BS473(1)1L2(2)
1250	500	0.056	BY	11.0	19.0	18.0	15.0	3500	F463BY563(1)1L2(2)
1250	500	0.068	BY	11.0	19.0	18.0	15.0	3500	F463BY683(1)1L2(2)
1250	500	0.022	DB	6.0	14.5	26.0	22.5	2000	F463DB223(1)1L2(2)
1250	500	0.027	DB	6.0	14.5	26.0	22.5	2000	F463DB273(1)1L2(2)
1250	500	0.033	DB	6.0	14.5	26.0	22.5	2000	F463DB333(1)1L2(2)
1250	500	0.039	DB	6.0	14.5	26.0	22.5	2000	F463DB393(1)1L2(2)
1250	500	0.047	DI	7.0	16.0	26.0	22.5	2000	F463DI473(1)1L2(2)
1250	500	0.056	DI	7.0	16.0	26.0	22.5	2000	F463DI563(1)1L2(2)
1250	500	0.068	DJ	8.5	17.0	26.0	22.5	2000	F463DJ683(1)1L2(2)
1250	500	0.082	DM	9.0	18.5	26.0	22.5	2000	F463DM823(1)1L2(2)
1250	500	0.1	DO	10.0	18.5	26.0	22.5	2000	F463DO104(1)1L2(2)
1250	500	0.12	DP	11.0	20.0	26.0	22.5	2000	F463DP124(1)1L2(2)
VDC	VAC	Cap Value (µF)	Size Code	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/µs)	Part Number

(1) J = 5%, K = 10%, other tolerances on request.

(2) Insert lead and packaging code. See Ordering Options Table for available options.

Roll Over for Order Info.

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Cap Value (µF)	Size Code	Max Dimensions in mm			Lead Spacing (p)	dV/dt (V/µs)	Part Number
				B	H	L			
1250	500	0.15	DU	13.0	22.0	26.0	22.5	2000	F463DU154(1)1L2(2)
1250	500	0.18	DU	13.0	22.0	26.0	22.5	2000	F463DU184(1)1L2(2)
1250	500	0.22	DY	15.5	24.5	26.0	22.5	2000	F463DY224(1)1L2(2)
1250	500	0.27	DY	15.5	24.5	26.0	22.5	2000	F463DY274(1)1L2(2)
1250	500	0.068	FB	9.0	17.0	31.5	27.5	800	F463FB683(1)1L2(2)
1250	500	0.082	FB	9.0	17.0	31.5	27.5	800	F463FB823(1)1L2(2)
1250	500	0.1	FB	9.0	17.0	31.5	27.5	800	F463FB104(1)1L2(2)
1250	500	0.12	FB	9.0	17.0	31.5	27.5	800	F463FB124(1)1L2(2)
1250	500	0.15	FC	11.0	20.0	31.5	27.5	800	F463FC154(1)1L2(2)
1250	500	0.18	FC	11.0	20.0	31.5	27.5	800	F463FC184(1)1L2(2)
1250	500	0.22	FI	13.0	25.0	31.5	27.5	800	F463FI224(1)1L2(2)
1250	500	0.27	FI	13.0	25.0	31.5	27.5	800	F463FI274(1)1L2(2)
1250	500	0.33	FN	14.0	28.0	31.5	27.5	800	F463FN334(1)1L2(2)
1250	500	0.39	FR	17.5	28.0	31.5	27.5	800	F463FR394(1)1L2(2)
1250	500	0.47	FR	17.5	28.0	31.5	27.5	800	F463FR474(1)1L2(2)
1250	500	0.56	FY	22.0	37.0	31.5	27.5	800	F463FY564(1)1L2(2)
1250	500	0.68	FY	22.0	37.0	31.5	27.5	800	F463FY684(1)1L2(2)
1250	500	0.82	FY	22.0	37.0	31.5	27.5	800	F463FY824(1)1L2(2)
1250	500	0.22	RB	11.0	22.0	41.0	37.5	400	F463RB224(1)1L2(2)
1250	500	0.27	RB	11.0	22.0	41.0	37.5	400	F463RB274(1)1L2(2)
1250	500	0.33	RB	11.0	22.0	41.0	37.5	400	F463RB334(1)1L2(2)
1250	500	0.39	RF	13.0	24.0	41.0	37.5	400	F463RF394(1)1L2(2)
1250	500	0.47	RH	15.0	26.0	41.0	37.5	400	F463RH474(1)1L2(2)
1250	500	0.56	RC	16.0	28.5	41.0	37.5	400	F463RC564(1)1L2(2)
1250	500	0.68	RC	16.0	28.5	41.0	37.5	400	F463RC684(1)1L2(2)
1250	500	0.82	RD	19.0	32.0	41.0	37.5	400	F463RD824(1)1L2(2)
1250	500	1.0	RP	21.0	38.0	41.0	37.5	400	F463RP105(1)1L2(2)
1250	500	1.2	RP	21.0	38.0	41.0	37.5	400	F463RP125(1)1L2(2)
1250	500	1.5	RO	24.0	44.0	41.0	37.5	400	F463RO155(1)1L2(2)
1250	500	1.8	RU	30.0	45.0	41.0	37.5	400	F463RU185(1)1L2(2)
1250	500	2.2	RU	30.0	45.0	41.0	37.5	400	F463RU225(1)1L2(2)
1600	500	0.001	AG	4.0	9.0	13.0	10.0	6000	F462AG102(1)1K6(2)
1600	500	0.0012	AG	4.0	9.0	13.0	10.0	6000	F462AG122(1)1K6(2)
1600	500	0.0015	AG	4.0	9.0	13.0	10.0	6000	F462AG152(1)1K6(2)
1600	500	0.0018	AG	4.0	9.0	13.0	10.0	6000	F462AG182(1)1K6(2)
1600	500	0.0022	AG	4.0	9.0	13.0	10.0	6000	F462AG222(1)1K6(2)
1600	500	0.0027	AK	5.0	11.0	13.0	10.0	6000	F462AK272(1)1K6(2)
1600	500	0.0033	AK	5.0	11.0	13.0	10.0	6000	F462AK332(1)1K6(2)
1600	500	0.0039	AK	5.0	11.0	13.0	10.0	6000	F462AK392(1)1K6(2)
1600	500	0.0047	AK	5.0	11.0	13.0	10.0	6000	F462AK472(1)1K6(2)
1600	500	0.0056	AP	6.0	12.0	13.0	10.0	6000	F462AP562(1)1K6(2)
1600	500	0.0068	AP	6.0	12.0	13.0	10.0	6000	F462AP682(1)1K6(2)
1600	500	0.0033	BB	4.0	10.0	18.0	15.0	4500	F462BB332(1)1K6(2)
1600	500	0.0039	BB	4.0	10.0	18.0	15.0	4500	F462BB392(1)1K6(2)
1600	500	0.0047	BB	4.0	10.0	18.0	15.0	4500	F462BB472(1)1K6(2)
1600	500	0.0056	BB	4.0	10.0	18.0	15.0	4500	F462BB562(1)1K6(2)
1600	500	0.0068	BC	5.0	11.0	18.0	15.0	4500	F462BC682(1)1K6(2)
1600	500	0.0082	BC	5.0	11.0	18.0	15.0	4500	F462BC822(1)1K6(2)
1600	500	0.01	BE	5.5	12.5	18.0	15.0	4500	F462BE103(1)1K6(2)
1600	500	0.012	BG	6.0	12.0	18.0	15.0	4500	F462BG123(1)1K6(2)
1600	500	0.015	BK	7.5	13.5	18.0	15.0	4500	F462BK153(1)1K6(2)
1600	500	0.018	BK	7.5	13.5	18.0	15.0	4500	F462BK183(1)1K6(2)
1600	500	0.022	BK	7.5	13.5	18.0	15.0	4500	F462BK223(1)1K6(2)
1600	500	0.027	BP	8.5	14.5	18.0	15.0	4500	F462BP273(1)1K6(2)
1600	500	0.033	BS	10.0	16.0	18.0	15.0	4500	F462BS333(1)1K6(2)
1600	500	0.039	BY	11.0	19.0	18.0	15.0	4500	F462BY393(1)1K6(2)
1600	500	0.047	BY	11.0	19.0	18.0	15.0	4500	F462BY473(1)1K6(2)
1600	500	0.056	BY	11.0	19.0	18.0	15.0	4500	F462BY563(1)1K6(2)
1600	500	0.015	DB	6.0	14.5	26.0	22.5	1800	F462DB153(1)1K6(2)
1600	500	0.018	DB	6.0	14.5	26.0	22.5	1800	F462DB183(1)1K6(2)
1600	500	0.022	DB	6.0	14.5	26.0	22.5	1800	F462DB223(1)1K6(2)
VDC	VAC	Cap Value (µF)	Size Code	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/µs)	Part Number

(1) J = 5%, K = 10%, other tolerances on request.

(2) Insert lead and packaging code. See Ordering Options Table for available options.

Roll Over for Order Info.

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Cap Value (µF)	Size Code	Max Dimensions in mm			Lead Spacing (p)	dV/dt (V/µs)	Part Number
				B	H	L			
1600	500	0.027	DB	6.0	14.5	26.0	22.5	1800	F462DB273(1)1K6(2)
1600	500	0.033	DI	7.0	16.0	26.0	22.5	1800	F462DI333(1)1K6(2)
1600	500	0.039	DI	7.0	16.0	26.0	22.5	1800	F462DI393(1)1K6(2)
1600	500	0.047	DH	8.0	16.0	26.0	22.5	1800	F462DH473(1)1K6(2)
1600	500	0.056	DM	9.0	18.5	26.0	22.5	1800	F462DM563(1)1K6(2)
1600	500	0.068	DO	10.0	18.5	26.0	22.5	1800	F462DO683(1)1K6(2)
1600	500	0.082	DP	11.0	20.0	26.0	22.5	1800	F462DP823(1)1K6(2)
1600	500	0.1	DP	11.0	20.0	26.0	22.5	1800	F462DP104(1)1K6(2)
1600	500	0.12	DU	13.0	22.0	26.0	22.5	1800	F462DU124(1)1K6(2)
1600	500	0.15	DY	15.5	24.5	26.0	22.5	1800	F462DY154(1)1K6(2)
1600	500	0.18	DY	15.5	24.5	26.0	22.5	1800	F462DY184(1)1K6(2)
1600	500	0.22	DY	15.5	24.5	26.0	22.5	1800	F462DY224(1)1K6(2)
1600	500	0.047	FB	9.0	17.0	31.5	27.5	500	F462FB473(1)1K6(2)
1600	500	0.056	FB	9.0	17.0	31.5	27.5	500	F462FB563(1)1K6(2)
1600	500	0.068	FB	9.0	17.0	31.5	27.5	500	F462FB683(1)1K6(2)
1600	500	0.082	FB	9.0	17.0	31.5	27.5	500	F462FB823(1)1K6(2)
1600	500	0.1	FC	11.0	20.0	31.5	27.5	500	F462FC104(1)1K6(2)
1600	500	0.12	FC	11.0	20.0	31.5	27.5	500	F462FC124(1)1K6(2)
1600	500	0.15	FI	13.0	25.0	31.5	27.5	500	F462FI154(1)1K6(2)
1600	500	0.18	FI	13.0	25.0	31.5	27.5	500	F462FI184(1)1K6(2)
1600	500	0.22	FN	14.0	28.0	31.5	27.5	500	F462FN224(1)1K6(2)
1600	500	0.27	FR	17.5	28.0	31.5	27.5	500	F462FR274(1)1K6(2)
1600	500	0.33	FR	17.5	28.0	31.5	27.5	500	F462FR334(1)1K6(2)
1600	500	0.39	FS	19.0	29.0	31.5	27.5	500	F462FS394(1)1K6(2)
1600	500	0.47	FY	22.0	37.0	31.5	27.5	500	F462FY474(1)1K6(2)
1600	500	0.56	FY	22.0	37.0	31.5	27.5	500	F462FY564(1)1K6(2)
1600	500	0.68	FY	22.0	37.0	31.5	27.5	500	F462FY684(1)1K6(2)
1600	500	0.15	RB	11.0	22.0	41.0	37.5	300	F462RB154(1)1K6(2)
1600	500	0.18	RB	11.0	22.0	41.0	37.5	300	F462RB184(1)1K6(2)
1600	500	0.22	RB	11.0	22.0	41.0	37.5	300	F462RB224(1)1K6(2)
1600	500	0.27	RF	13.0	24.0	41.0	37.5	300	F462RF274(1)1K6(2)
1600	500	0.33	RH	15.0	26.0	41.0	37.5	300	F462RH334(1)1K6(2)
1600	500	0.39	RC	16.0	28.5	41.0	37.5	300	F462RC394(1)1K6(2)
1600	500	0.47	RC	16.0	28.5	41.0	37.5	300	F462RC474(1)1K6(2)
1600	500	0.56	RD	19.0	32.0	41.0	37.5	300	F462RD564(1)1K6(2)
1600	500	0.68	RP	21.0	38.0	41.0	37.5	300	F462RP684(1)1K6(2)
1600	500	0.82	RP	21.0	38.0	41.0	37.5	300	F462RP824(1)1K6(2)
1600	500	1.0	RO	24.0	44.0	41.0	37.5	300	F462RO105(1)1K6(2)
1600	500	1.2	RO	24.0	44.0	41.0	37.5	300	F462RO125(1)1K6(2)
1600	500	1.5	RU	30.0	45.0	41.0	37.5	300	F462RU155(1)1K6(2)
1600	650	0.0033	BB	4.0	10.0	18.0	15.0	6000	F463BB332(1)1K6(2)
1600	650	0.0039	BB	4.0	10.0	18.0	15.0	6000	F463BB392(1)1K6(2)
1600	650	0.0047	BB	4.0	10.0	18.0	15.0	6000	F463BB472(1)1K6(2)
1600	650	0.0056	BC	5.0	11.0	18.0	15.0	6000	F463BC562(1)1K6(2)
1600	650	0.0068	BC	5.0	11.0	18.0	15.0	6000	F463BC682(1)1K6(2)
1600	650	0.0082	BE	5.5	12.5	18.0	15.0	6000	F463BE822(1)1K6(2)
1600	650	0.01	BG	6.0	12.0	18.0	15.0	6000	F463BG103(1)1K6(2)
1600	650	0.012	BK	7.5	13.5	18.0	15.0	6000	F463BK123(1)1K6(2)
1600	650	0.015	BK	7.5	13.5	18.0	15.0	6000	F463BK153(1)1K6(2)
1600	650	0.018	BP	8.5	14.5	18.0	15.0	6000	F463BP183(1)1K6(2)
1600	650	0.022	BP	8.5	14.5	18.0	15.0	6000	F463BP223(1)1K6(2)
1600	650	0.027	BS	10.0	16.0	18.0	15.0	6000	F463BS273(1)1K6(2)
1600	650	0.033	BY	11.0	19.0	18.0	15.0	6000	F463BY333(1)1K6(2)
1600	650	0.039	BY	11.0	19.0	18.0	15.0	6000	F463BY393(1)1K6(2)
1600	650	0.047	BY	11.0	19.0	18.0	15.0	6000	F463BY473(1)1K6(2)
1600	650	0.015	DB	6.0	14.5	26.0	22.5	3000	F463DB153(1)1K6(2)
1600	650	0.018	DB	6.0	14.5	26.0	22.5	3000	F463DB183(1)1K6(2)
1600	650	0.022	DB	6.0	14.5	26.0	22.5	3000	F463DB223(1)1K6(2)
1600	650	0.027	DB	6.0	14.5	26.0	22.5	3000	F463DB273(1)1K6(2)
1600	650	0.033	DI	7.0	16.0	26.0	22.5	3000	F463DI333(1)1K6(2)
1600	650	0.039	DI	7.0	16.0	26.0	22.5	3000	F463DI393(1)1K6(2)
VDC	VAC	Cap Value (µF)	Size Code	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/µs)	Part Number

(1) J = 5%, K = 10%, other tolerances on request.

(2) Insert lead and packaging code. See Ordering Options Table for available options.

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Cap Value (µF)	Size Code	Max Dimensions in mm			Lead Spacing (p)	dV/dt (V/µs)	Part Number
				B	H	L			
1600	650	0.047	DJ	8.5	17.0	26.0	22.5	3000	F463DJ473(1)1K6(2)
1600	650	0.056	DM	9.0	18.5	26.0	22.5	3000	F463DM563(1)1K6(2)
1600	650	0.068	DO	10.0	18.5	26.0	22.5	3000	F463DO683(1)1K6(2)
1600	650	0.082	DP	11.0	20.0	26.0	22.5	3000	F463DP823(1)1K6(2)
1600	650	0.1	DU	13.0	22.0	26.0	22.5	3000	F463DU104(1)1K6(2)
1600	650	0.12	DU	13.0	22.0	26.0	22.5	3000	F463DU124(1)1K6(2)
1600	650	0.15	DY	15.5	24.5	26.0	22.5	3000	F463DY154(1)1K6(2)
1600	650	0.18	DY	15.5	24.5	26.0	22.5	3000	F463DY184(1)1K6(2)
1600	650	0.047	FB	9.0	17.0	31.5	27.5	1500	F463FB473(1)1K6(2)
1600	650	0.056	FB	9.0	17.0	31.5	27.5	1500	F463FB563(1)1K6(2)
1600	650	0.068	FB	9.0	17.0	31.5	27.5	1500	F463FB683(1)1K6(2)
1600	650	0.082	FB	9.0	17.0	31.5	27.5	1500	F463FB823(1)1K6(2)
1600	650	0.1	FC	11.0	20.0	31.5	27.5	1500	F463FC104(1)1K6(2)
1600	650	0.12	FC	11.0	20.0	31.5	27.5	1500	F463FC124(1)1K6(2)
1600	650	0.15	FI	13.0	25.0	31.5	27.5	1500	F463FI154(1)1K6(2)
1600	650	0.18	FI	13.0	25.0	31.5	27.5	1500	F463FI184(1)1K6(2)
1600	650	0.22	FN	14.0	28.0	31.5	27.5	1500	F463FN224(1)1K6(2)
1600	650	0.27	FR	17.5	28.0	31.5	27.5	1500	F463FR274(1)1K6(2)
1600	650	0.33	FS	19.0	29.0	31.5	27.5	1500	F463FS334(1)1K6(2)
1600	650	0.39	FY	22.0	37.0	31.5	27.5	1500	F463FY394(1)1K6(2)
1600	650	0.47	FY	22.0	37.0	31.5	27.5	1500	F463FY474(1)1K6(2)
1600	650	0.56	FY	22.0	37.0	31.5	27.5	1500	F463FY564(1)1K6(2)
1600	650	0.15	RB	11.0	22.0	41.0	37.5	750	F463RB154(1)1K6(2)
1600	650	0.18	RB	11.0	22.0	41.0	37.5	750	F463RB184(1)1K6(2)
1600	650	0.22	RB	11.0	22.0	41.0	37.5	750	F463RB224(1)1K6(2)
1600	650	0.27	RF	13.0	24.0	41.0	37.5	750	F463RF274(1)1K6(2)
1600	650	0.33	RH	15.0	26.0	41.0	37.5	750	F463RH334(1)1K6(2)
1600	650	0.39	RC	16.0	28.5	41.0	37.5	750	F463RC394(1)1K6(2)
1600	650	0.47	RD	19.0	32.0	41.0	37.5	750	F463RD474(1)1K6(2)
1600	650	0.56	RD	19.0	32.0	41.0	37.5	750	F463RD564(1)1K6(2)
1600	650	0.68	RP	21.0	38.0	41.0	37.5	750	F463RP684(1)1K6(2)
1600	650	0.82	RP	21.0	38.0	41.0	37.5	750	F463RP824(1)1K6(2)
1600	650	1.0	RO	24.0	44.0	41.0	37.5	750	F463RO105(1)1K6(2)
1600	650	1.2	RO	24.0	44.0	41.0	37.5	750	F463RO125(1)1K6(2)
1600	650	1.5	RU	30.0	45.0	41.0	37.5	750	F463RU155(1)1K6(2)
2000	700	0.001	AG	4.0	9.0	13.0	10.0	10000	F463AG102(1)2K0(2)
2000	700	0.0012	AG	4.0	9.0	13.0	10.0	10000	F463AG122(1)2K0(2)
2000	700	0.0015	AG	4.0	9.0	13.0	10.0	10000	F463AG152(1)2K0(2)
2000	700	0.0018	AG	4.0	9.0	13.0	10.0	10000	F463AG182(1)2K0(2)
2000	700	0.0022	AK	4.0	9.0	13.0	10.0	10000	F463AG222(1)2K0(2)
2000	700	0.0027	AK	5.0	11.0	13.0	10.0	10000	F463AK272(1)2K0(2)
2000	700	0.0033	AK	5.0	11.0	13.0	10.0	10000	F463AK332(1)2K0(2)
2000	700	0.0039	AK	5.0	11.0	13.0	10.0	10000	F463AK392(1)2K0(2)
2000	700	0.0047	AP	5.0	11.0	13.0	10.0	10000	F463AK472(1)2K0(2)
2000	700	0.0056	AP	6.0	12.0	13.0	10.0	10000	F463AP562(1)2K0(2)
2000	700	0.001	BB	4.0	10.0	18.0	15.0	9500	F463BB102(1)2K0(2)
2000	700	0.0012	BB	4.0	10.0	18.0	15.0	9500	F463BB122(1)2K0(2)
2000	700	0.0015	BB	4.0	10.0	18.0	15.0	9500	F463BB152(1)2K0(2)
2000	700	0.0018	BB	4.0	10.0	18.0	15.0	9500	F463BB182(1)2K0(2)
2000	700	0.0022	BB	4.0	10.0	18.0	15.0	9500	F463BB222(1)2K0(2)
2000	700	0.0027	BC	5.0	11.0	18.0	15.0	9500	F463BC272(1)2K0(2)
2000	700	0.0033	BC	5.0	11.0	18.0	15.0	9500	F463BC332(1)2K0(2)
2000	700	0.0039	BC	5.0	11.0	18.0	15.0	9500	F463BC392(1)2K0(2)
2000	700	0.0047	BE	5.5	12.5	18.0	15.0	9500	F463BE472(1)2K0(2)
2000	700	0.0056	BE	5.5	12.5	18.0	15.0	9500	F463BE562(1)2K0(2)
2000	700	0.0068	BK	7.5	13.5	18.0	15.0	9500	F463BK682(1)2K0(2)
2000	700	0.0082	BK	7.5	13.5	18.0	15.0	9500	F463BK822(1)2K0(2)
2000	700	0.01	BK	7.5	13.5	18.0	15.0	9500	F463BK103(1)2K0(2)
2000	700	0.012	BP	8.5	14.5	18.0	15.0	9500	F463BP123(1)2K0(2)
2000	700	0.015	BS	10.0	16.0	18.0	15.0	9500	F463BS153(1)2K0(2)
2000	700	0.018	BY	11.0	19.0	18.0	15.0	9500	F463BY183(1)2K0(2)
VDC	VAC	Cap Value (µF)	Size Code	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/µs)	Part Number

(1) J = 5%, K = 10%, other tolerances on request.

(2) Insert lead and packaging code. See Ordering Options Table for available options.

Roll Over for Order Info.

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Cap Value (µF)	Size Code	Max Dimensions in mm			Lead Spacing (p)	dV/dt (V/µs)	Part Number
				B	H	L			
2000	700	0.022	BY	11.0	19.0	18.0	15.0	9500	F463BY223(1)2K0(2)
2000	700	0.027	BY	11.0	19.0	18.0	15.0	9500	F463BY273(1)2K0(2)
2000	700	0.01	DB	6.0	14.5	26.0	22.5	4500	F463DB103(1)2K0(2)
2000	700	0.012	DB	6.0	14.5	26.0	22.5	4500	F463DB123(1)2K0(2)
2000	700	0.015	DI	7.0	16.0	26.0	22.5	4500	F463DI153(1)2K0(2)
2000	700	0.018	DI	7.0	16.0	26.0	22.5	4500	F463DI183(1)2K0(2)
2000	700	0.022	DH	8.0	16.0	26.0	22.5	4500	F463DH223(1)2K0(2)
2000	700	0.027	DJ	8.5	17.0	26.0	22.5	4500	F463DJ273(1)2K0(2)
2000	700	0.033	DO	10.0	18.5	26.0	22.5	4500	F463DO333(1)2K0(2)
2000	700	0.039	DO	10.0	18.5	26.0	22.5	4500	F463DO393(1)2K0(2)
2000	700	0.047	DP	11.0	20.0	26.0	22.5	4500	F463DP473(1)2K0(2)
2000	700	0.056	DU	13.0	22.0	26.0	22.5	4500	F463DU563(1)2K0(2)
2000	700	0.068	DU	13.0	22.0	26.0	22.5	4500	F463DU683(1)2K0(2)
2000	700	0.082	DY	15.5	24.5	26.0	22.5	4500	F463DY823(1)2K0(2)
2000	700	0.1	DY	15.5	24.5	26.0	22.5	4500	F463DY104(1)2K0(2)
2000	700	0.022	FB	9.0	17.0	31.5	27.5	1000	F463FB223(1)2K0(2)
2000	700	0.027	FB	9.0	17.0	31.5	27.5	1000	F463FB273(1)2K0(2)
2000	700	0.033	FB	9.0	17.0	31.5	27.5	1000	F463FB333(1)2K0(2)
2000	700	0.039	FB	9.0	17.0	31.5	27.5	1000	F463FB393(1)2K0(2)
2000	700	0.047	FC	11.0	20.0	31.5	27.5	1000	F463FC473(1)2K0(2)
2000	700	0.056	FC	11.0	20.0	31.5	27.5	1000	F463FC563(1)2K0(2)
2000	700	0.068	FC	11.0	20.0	31.5	27.5	1000	F463FC683(1)2K0(2)
2000	700	0.082	FI	13.0	25.0	31.5	27.5	1000	F463FI823(1)2K0(2)
2000	700	0.1	FI	13.0	25.0	31.5	27.5	1000	F463FI104(1)2K0(2)
2000	700	0.12	FN	14.0	28.0	31.5	27.5	1000	F463FN124(1)2K0(2)
2000	700	0.15	FR	17.5	28.0	31.5	27.5	1000	F463FR154(1)2K0(2)
2000	700	0.18	FS	19.0	29.0	31.5	27.5	1000	F463FS184(1)2K0(2)
2000	700	0.22	FY	22.0	37.0	31.5	27.5	1000	F463FY224(1)2K0(2)
2000	700	0.27	FY	22.0	37.0	31.5	27.5	1000	F463FY274(1)2K0(2)
2000	700	0.33	FY	22.0	37.0	31.5	27.5	1000	F463FY334(1)2K0(2)
2000	700	0.068	RB	11.0	22.0	41.0	37.5	500	F463RB683(1)2K0(2)
2000	700	0.082	RB	11.0	22.0	41.0	37.5	500	F463RB823(1)2K0(2)
2000	700	0.1	RB	11.0	22.0	41.0	37.5	500	F463RB104(1)2K0(2)
2000	700	0.12	RB	11.0	22.0	41.0	37.5	500	F463RB124(1)2K0(2)
2000	700	0.15	RF	13.0	24.0	41.0	37.5	500	F463RF154(1)2K0(2)
2000	700	0.18	RH	15.0	26.0	41.0	37.5	500	F463RH184(1)2K0(2)
2000	700	0.22	RC	16.0	28.5	41.0	37.5	500	F463RC224(1)2K0(2)
2000	700	0.27	RD	19.0	32.0	41.0	37.5	500	F463RD274(1)2K0(2)
2000	700	0.33	RD	19.0	32.0	41.0	37.5	500	F463RD334(1)2K0(2)
2000	700	0.39	RP	21.0	38.0	41.0	37.5	500	F463RP394(1)2K0(2)
2000	700	0.47	RP	21.0	38.0	41.0	37.5	500	F463RP474(1)2K0(2)
2000	700	0.56	RO	24.0	44.0	41.0	37.5	500	F463RO564(1)2K0(2)
2000	700	0.68	RU	30.0	45.0	41.0	37.5	500	F463RU684(1)2K0(2)
2000	700	0.82	RU	30.0	45.0	41.0	37.5	500	F463RU824(1)2K0(2)
2500	900	0.001	BB	4.0	10.0	18.0	15.0	4500	F464BB102(1)2K5(2)
2500	900	0.0012	BB	4.0	10.0	18.0	15.0	4500	F464BB122(1)2K5(2)
2500	900	0.0015	BB	4.0	10.0	18.0	15.0	4500	F464BB152(1)2K5(2)
2500	900	0.0018	BB	4.0	10.0	18.0	15.0	4500	F464BB182(1)2K5(2)
2500	900	0.0022	BB	4.0	10.0	18.0	15.0	4500	F464BB222(1)2K5(2)
2500	900	0.0027	BC	5.0	11.0	18.0	15.0	4500	F464BC272(1)2K5(2)
2500	900	0.0033	BC	5.0	11.0	18.0	15.0	4500	F464BC332(1)2K5(2)
2500	900	0.0039	BE	5.5	12.5	18.0	15.0	4500	F464BE392(1)2K5(2)
2500	900	0.0047	BE	5.5	12.5	18.0	15.0	4500	F464BE472(1)2K5(2)
2500	900	0.0056	BK	7.5	13.5	18.0	15.0	4500	F464BK562(1)2K5(2)
2500	900	0.0068	BK	7.5	13.5	18.0	15.0	4500	F464BK682(1)2K5(2)
2500	900	0.0082	BK	7.5	13.5	18.0	15.0	4500	F464BK822(1)2K5(2)
2500	900	0.01	BP	8.5	14.5	18.0	15.0	4500	F464BP103(1)2K5(2)
2500	900	0.012	BS	10.0	16.0	18.0	15.0	4500	F464BS123(1)2K5(2)
2500	900	0.015	BS	10.0	16.0	18.0	15.0	4500	F464BS153(1)2K5(2)
2500	900	0.018	BY	11.0	19.0	18.0	15.0	4500	F464BY183(1)2K5(2)
2500	900	0.022	BY	11.0	19.0	18.0	15.0	4500	F464BY223(1)2K5(2)
VDC	VAC	Cap Value (µF)	Size Code	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/µs)	Part Number

(1) J = 5%, K = 10%, other tolerances on request.

(2) Insert lead and packaging code. See Ordering Options Table for available options.

Table 1 – Ratings & Part Number Reference cont'd

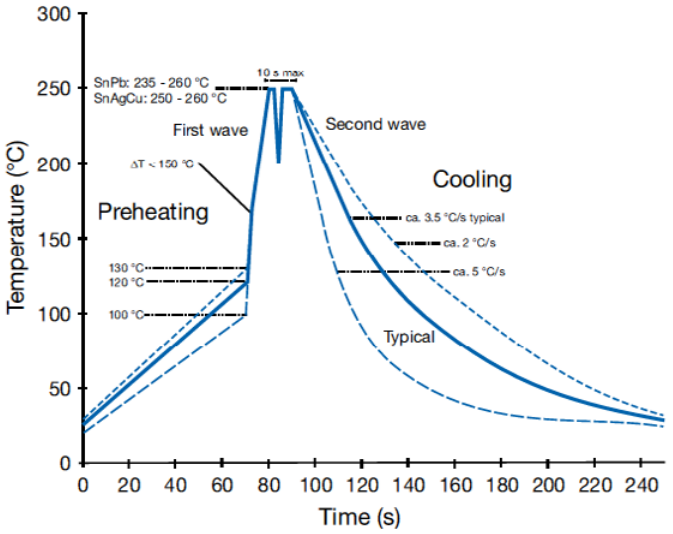
VDC	VAC	Cap Value (µF)	Size Code	Max Dimensions in mm			Lead Spacing (p)	dV/dt (V/µs)	Part Number
				B	H	L			
2500	900	0.0047	DB	6.0	14.5	26.0	22.5	2500	F464DB472(1)2K5(2)
2500	900	0.0056	DB	6.0	14.5	26.0	22.5	2500	F464DB562(1)2K5(2)
2500	900	0.0068	DB	6.0	14.5	26.0	22.5	2500	F464DB682(1)2K5(2)
2500	900	0.0082	DB	6.0	14.5	26.0	22.5	2500	F464DB822(1)2K5(2)
2500	900	0.01	DI	7.0	16.0	26.0	22.5	2500	F464DI103(1)2K5(2)
2500	900	0.012	DI	7.0	16.0	26.0	22.5	2500	F464DI123(1)2K5(2)
2500	900	0.015	DJ	8.5	17.0	26.0	22.5	2500	F464DJ153(1)2K5(2)
2500	900	0.018	DM	9.0	18.5	26.0	22.5	2500	F464DM183(1)2K5(2)
2500	900	0.022	DM	9.0	18.5	26.0	22.5	2500	F464DM223(1)2K5(2)
2500	900	0.027	DP	11.0	20.0	26.0	22.5	2500	F464DP273(1)2K5(2)
2500	900	0.033	DU	13.0	22.0	26.0	22.5	2500	F464DU333(1)2K5(2)
2500	900	0.039	DY	15.5	24.5	26.0	22.5	2500	F464DY393(1)2K5(2)
2500	900	0.047	DY	15.5	24.5	26.0	22.5	2500	F464DY473(1)2K5(2)
2500	900	0.056	DY	15.5	24.5	26.0	22.5	2500	F464DY563(1)2K5(2)
2500	900	0.015	FB	9.0	17.0	31.5	27.5	1500	F464FB153(1)2K5(2)
2500	900	0.018	FB	9.0	17.0	31.5	27.5	1500	F464FB183(1)2K5(2)
2500	900	0.022	FB	9.0	17.0	31.5	27.5	1500	F464FB223(1)2K5(2)
2500	900	0.027	FB	9.0	17.0	31.5	27.5	1500	F464FB273(1)2K5(2)
2500	900	0.033	FC	11.0	20.0	31.5	27.5	1500	F464FC333(1)2K5(2)
2500	900	0.039	FC	11.0	20.0	31.5	27.5	1500	F464FC393(1)2K5(2)
2500	900	0.047	FI	13.0	25.0	31.5	27.5	1500	F464FI473(1)2K5(2)
2500	900	0.056	FI	13.0	25.0	31.5	27.5	1500	F464FI563(1)2K5(2)
2500	900	0.068	FI	13.0	25.0	31.5	27.5	1500	F464FI683(1)2K5(2)
2500	900	0.082	FN	14.0	28.0	31.5	27.5	1500	F464FN823(1)2K5(2)
2500	900	0.1	FR	17.5	28.0	31.5	27.5	1500	F464FR104(1)2K5(2)
2500	900	0.12	FS	19.0	29.0	31.5	27.5	1500	F464FS124(1)2K5(2)
2500	900	0.15	FY	22.0	37.0	31.5	27.5	1500	F464FY154(1)2K5(2)
2500	900	0.18	FY	22.0	37.0	31.5	27.5	1500	F464FY184(1)2K5(2)
2500	900	0.047	RB	11.0	22.0	41.0	37.5	900	F464RB473(1)2K5(2)
2500	900	0.056	RB	11.0	22.0	41.0	37.5	900	F464RB563(1)2K5(2)
2500	900	0.068	RB	11.0	22.0	41.0	37.5	900	F464RB683(1)2K5(2)
2500	900	0.082	RF	13.0	24.0	41.0	37.5	900	F464RF823(1)2K5(2)
2500	900	0.1	RF	13.0	24.0	41.0	37.5	900	F464RF104(1)2K5(2)
2500	900	0.12	RH	15.0	26.0	41.0	37.5	900	F464RH124(1)2K5(2)
2500	900	0.15	RC	16.0	28.5	41.0	37.5	900	F464RC154(1)2K5(2)
2500	900	0.18	RD	19.0	32.0	41.0	37.5	900	F464RD184(1)2K5(2)
2500	900	0.22	RD	19.0	32.0	41.0	37.5	900	F464RD224(1)2K5(2)
2500	900	0.27	RP	21.0	38.0	41.0	37.5	900	F464RP274(1)2K5(2)
2500	900	0.33	RO	24.0	44.0	41.0	37.5	900	F464RO334(1)2K5(2)
2500	900	0.39	RO	24.0	44.0	41.0	37.5	900	F464RO394(1)2K5(2)
2500	900	0.47	RU	30.0	45.0	41.0	37.5	900	F464RU474(1)2K5(2)
2500	900	0.56	RU	30.0	45.0	41.0	37.5	900	F464RU564(1)2K5(2)
VDC	VAC	Cap Value (µF)	Size Code	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/µs)	Part Number

(1) J = 5%, K = 10%, other tolerances on request.
(2) Insert lead and packaging code. See Ordering Options Table for available options.

Roll Over for Order Info.

Soldering Process

The implementation of the RoHS Directive has required the selection SnAuCu (SAC) alloys or SnCu alloys as primary solder. This has increased the liquidus temperature from that of 183ºC for SnPb eutectic alloy to 217ºC – 221ºC for the new alloys. As a result, the heat stress to components, even in wave soldering, has increased considerably due to higher pre-heat and wave temperatures. Polypropylene capacitors are especially sensitive to heat (melting point of polypropylene is 160ºC – 170ºC). Wave soldering can be destructive especially for mechanically small polypropylene capacitors and great care must be taken during soldering. The solder profiles from KEMET are highly recommended. You may also refer to the wave soldering curve from IEC Publication 61760–1 Edition 2. Please consult KEMET with any questions.



Marking

- Capacitance
- Tolerance code
- Rated DC voltage
- Series
- Manufacturing date code

Packaging Quantities

Size Code	Lead Spacing	Thickness (mm)	Height (mm)	Length (mm)	Bulk Short Leads	Bulk Long Leads	Standard Reel ø 355 mm	Large Reel ø 500 mm	Ammo	Pizza
JF	5	2.5	6.5	7.2	3000	4000	2500		3500	
JG		3.5	7.5	7.2	2000	3000	1800		2500	
JM		4.5	9.5	7.2	1500	2000	1400		1900	
JQ		5.0	10.0	7.2	1000	1500	1200		1700	
JT		6	11	7.2	2000	1000	1000		1400	
JU		7.2	13	7.2	1500	750	800		1150	
KE	7.5	2.5	6	10	2000	3000	2500		3500	
KF		3	8	10	1500	1750	2100		2800	
KG		4	8	10	2000	1500	1500		2100	
KJ		5	10.5	10	1500	1000	1200		1600	
KM		6	12	10.5	1000	800	1000		1350	
KH		4	9	10	2000	1500	1500		2100	
AN	10	3.5	9	13	2200	3200	850	1700	1150	
AG		4	9	13	2000	2200	750	1500	1000	
AK		5	11	13	1300	2000	600	1250	800	
AP		6	12	13	1000	1800	500	1000	680	
AO		7	17	13	600	900	450	900	580	
AL		9.5	7.5	13	1100	2000	300	600	430	
AE		4	8	13	2000	2200	750	1500	1000	
BB	15	4	10	18	1300	1500	750	1500	1000	1411
BC		5	11	18	1000	1250	600	1250	800	1139
BE		5.5	12.5	18	800	1100	550	1100	750	1020
BG		6	12	18	1750	1000	500	1000	680	935
BK		7.5	13.5	18	1000	800	350	800	500	748
BI		6	17.5	18	1000	800	500	1000	680	935
BP		8.5	14.5	18	1000	650	300	700	440	663
BT		9	12.5	18	1000	700	270	650	410	629
BO		7.5	18.5	18	900	600	350	800	500	748
BS		10	16	18	750	550	300	600	380	561
BR		13	12	18	750	520	200	480	280	425
BY		11	19	18	450	400	250	500	340	510
BA		8.5	12.5	18	1000	650	300	700	440	663
BZ		12	20	18	350	300	220	450	330	459

Packaging Quantities cont'd

Size Code	Lead Spacing	Thickness (mm)	Height (mm)	Length (mm)	Bulk Short Leads	Bulk Long Leads	Standard Reel ø 355 mm	Large Reel ø 500 mm	Ammo	Pizza
DB	22.5	6	14.5	26	1638	702	300	700	464	660
DI		7	16	26	1188	594	250	550	380	564
DH		8.0	16.0	26	1026	513	240	500	330	492
DJ		8.5	17	26	972	486	250	450	280	468
DM		9	18.5	26	918	459	200	400	300	444
DO		10	18.5	26	810	405	160	350	235	396
DP		11	20	26	756	378	190	350	217	360
DU		13	22	26	540	324	150	300	200	300
DY		15.5	24.5	26	450	270	120	250	170	252
FB	27.5	9.0	17.0	31.5	816	408				370
FC		11.0	20.0	31.5	672	336				300
FI		13.0	25.0	31.5	480	288				250
FN		14.0	28.0	31.5	352	176				230
FO		17.0	40.0	31.5	216	144				190
FR		17.5	28.0	31.5	256	128				190
FS		19.0	29.0	31.5	256	128				170
FY		22.0	37.0	31.5	168	112				150
FH		21.0	12.5	31.5	392	168				150
FQ		27.5	16.0	31.5	280	120				120
FT		31.0	19.0	31.5	240	120				100
RB	37.5	11.0	22.0	41.0	420	252				210
RF		13.0	24.0	41.0	360	216				175
RH		15.0	26.0	41.0	300	180				154
RC		16.0	28.5	41.0	216	108				140
RD		19.0	32.0	41.0	192	96				119
RP		21.0	38.0	41.0	126	84				105
RO		24.0	44.0	41.0	108	72				91
RU		30.0	45.0	41.0	90	60				77
RV		24.0	15.0	41.0	252	108				91
RW		24.0	19.0	41.0	216	108				91

R74 Series 125°C Single Metallized Polypropylene Film, Optimized for AC Applications

Overview

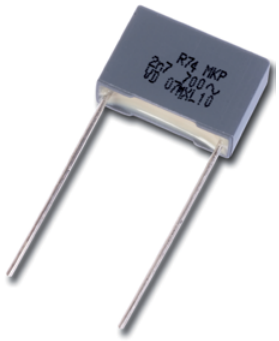
The R74 Series is a metallized polypropylene film encapsulated with self-extinguishing resin in a box of material meeting the requirements of UL 94 V–0.

Applications

Typical applications include electronic lighting such as automotive headlamps and ballasts, as well as pulse applications with high AC voltage and high current.

Benefits

- Rated voltage: 1,600 – 2,000 VDC
- Rated voltage: 500 – 700 VAC
- Capacitance range: 0.00068 – 0.1 µF
- Lead spacing: 10 – 22.5 mm
- Capacitance tolerance: ±5%, ±10%
- Climatic category: 55/125/56, IEC 60068–1
- Tape and reel packaging in accordance with IEC 60286–2
- RoHS Compliant and lead-free terminations
- Category temperature range of -55˚C to +125˚C



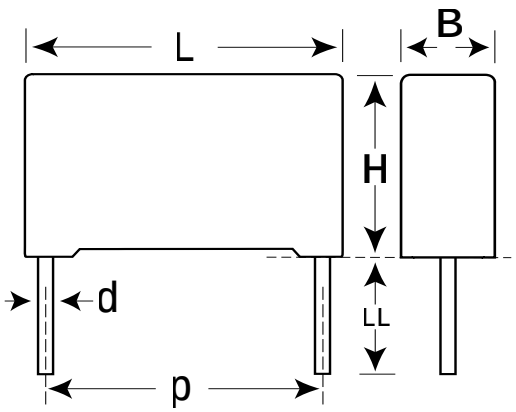
Part Number System

R74	5	F	1100	AA	H	0	J
Series	Rated Voltage (VAC)	Lead Spacing (mm)	Capacitance Code (pF)	Lead and Packaging Code	Dimensions and Electrical Characteristics	Internal Use	Capacitance Tolerance
Metallized Polypropylene	5 = 500 7 = 700	F = 10.0 I = 15.0 N = 22.5	Digits 2 – 4 indicate the first three digits of the capacitance value. First digit indicates the number of zeros to be added.	See Ordering Options Table	H = 125ºC	0 (Standard)	J = ±5% K = ±10%

Ordering Options Table

Lead Spacing Nominal (mm)	Type of Leads and Packaging	Lead Length (mm)	Lead and Packaging Code
10	Standard Lead and Packaging Options		
	Bulk (Bag) – Short Leads	4 +2/-0	AA
	Ammo Pack	H_0= 18.5 +/-0.5	DQ
	Other Lead and Packaging Options		
	Bulk (Bag) – Long Leads	17 +1/-2	JM
	Tape & Reel (Standard Reel)	H_0= 18.5 +/-0.5	GY
	Tape & Reel (Large Reel)	H_0= 18.5 +/-0.5	CK
15	Standard Lead and Packaging Options		
	Bulk (Bag) – Short Leads	4 +2/-0	AA
	Ammo Pack	H_0= 18.5 +/-0.5	DQ
	Other Lead and Packaging Options		
	Bulk (Bag) – Long Leads	25 +2/-1	50
	Bulk (Bag) – Max Length Leads	30 +5/-0	40
	Tape & Reel (Standard Reel)	H_0= 18.5 +/-0.5	GY
	Tape & Reel (Large Reel)	H_0= 18.5 +/-0.5	CK
	Pizza Pack	4 +2/-0	BB
22.5	Standard Lead and Packaging Options		
	Bulk (Tray) – Short Leads	4 +2/-0	AA
	Ammo Pack	H_0= 18.5 +/-0.5	DQ
	Other Lead and Packaging Options		
	Bulk (Tray) – Long Leads	25 +2/-1	50
	Bulk (Tray) – Max Length Leads	30 +5/-0	40
	Tape & Reel (Large Reel)	H_0= 18.5 +/-0.5	CK
	Pizza Pack	4 +2/-0	BB

Dimensions – Millimeters



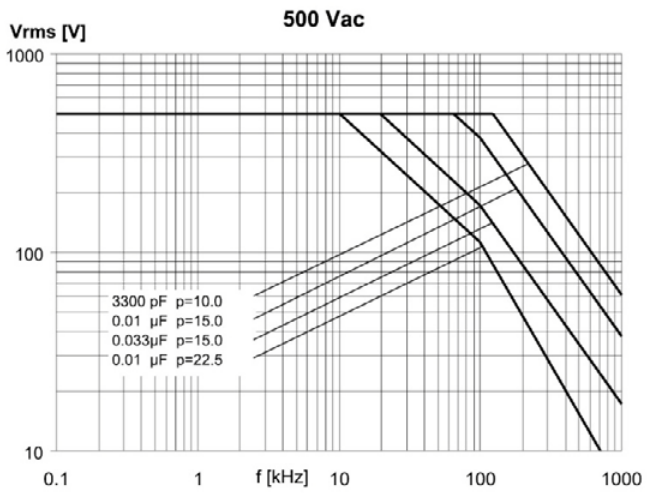
p		B		H		L		d	
Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance
10	+/-0.4	4	+0.2/-0	9	+0.1/-0	13	+0.2/-0	0.6	+/-0.05
10	+/-0.4	5	+0.2/-0	11	+0.1/-0	13	+0.2/-0	0.6	+/-0.05
10	+/-0.4	6	+0.2/-0	12	+0.1/-0	13	+0.2/-0	0.6	+/-0.05
15	+/-0.4	4	+0.2/-0	10	+0.1/-0	18	+0.3/-0	0.8	+/-0.05
15	+/-0.4	5	+0.2/-0	11	+0.1/-0	18	+0.3/-0	0.8	+/-0.05
15	+/-0.4	6	+0.2/-0	12	+0.1/-0	18	+0.3/-0	0.8	+/-0.05
15	+/-0.4	7.5	+0.2/-0	13.5	+0.1/-0	18	+0.5/-0	0.8	+/-0.05
15	+/-0.4	8.5	+0.2/-0	14.5	+0.1/-0	18	+0.5/-0	0.8	+/-0.05
15	+/-0.4	9	+0.2/-0	12.5	+0.1/-0	18	+0.5/-0	0.8	+/-0.05
15	+/-0.4	10	+0.2/-0	16	+0.1/-0	18	+0.5/-0	0.8	+/-0.05
15	+/-0.4	11	+0.2/-0	19	+0.1/-0	18	+0.5/-0	0.8	+/-0.05
15	+/-0.4	13	+0.2/-0	12	+0.1/-0	18	+0.5/-0	0.8	+/-0.05
15	+/-0.4	13	+0.2/-0	12	+0.1/-0	18	+0.5/-0	0.8	+/-0.05
22.5	+/-0.4	6	+0.2/-0	15	+0.1/-0	26.5	+0.3/-0	0.8	+/-0.05
22.5	+/-0.4	7	+0.2/-0	16	+0.1/-0	26.5	+0.3/-0	0.8	+/-0.05
22.5	+/-0.4	8.5	+0.2/-0	17	+0.1/-0	26.5	+0.3/-0	0.8	+/-0.05
22.5	+/-0.4	10	+0.2/-0	18.5	+0.1/-0	26.5	+0.3/-0	0.8	+/-0.05
22.5	+/-0.4	11	+0.2/-0	20	+0.1/-0	26.5	+0.3/-0	0.8	+/-0.05
22.5	+/-0.4	13	+0.2/-0	22	+0.1/-0	26.5	+0.3/-0	0.8	+/-0.05

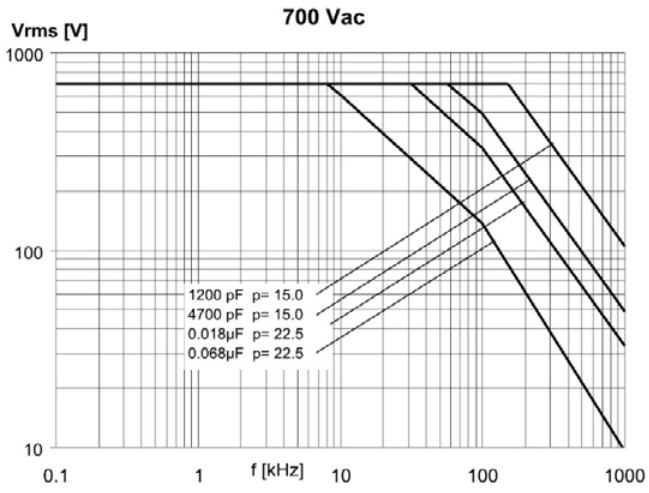
Note: See Ordering Options Table for lead length (LL) options.

Performance Characteristics

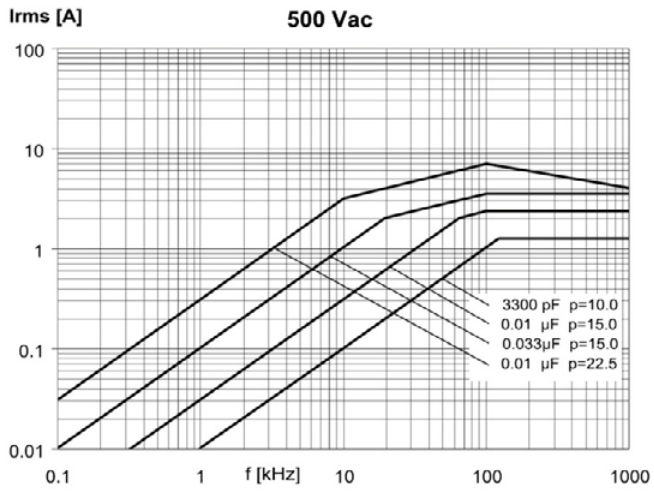
Series	R74		R74	
Sections	2		3	
Voltage Range (VDC)	1,600		2,000	
Voltage Range (VAC)	500		700	
Capacitance Range (µF)	0.001 – 0.1		0.00068 – 0.068	
Capacitance Values	In accordance with IEC E12 series			
Capacitance Tolerance	±5%, ±10%			
Category Temperature Range	-55°C to +125°C			
Voltage Derating	The rated voltage is decreased with 1.25%/°C between +105°C and +125°C			
Climatic Category	IEC 60068–1, 55/125/56			
Self-Inductance L (Lead Length ~ 2 mm)	Lead Space (mm)	10	15	22.5
	L (nH) ≈	9	10	18
Dissipation Factor tanδ	Measured at 25°C ± 5°C			
		C ≤ 2.2 nF	2.2 nF < C ≤ 0.027 µF	0.027 µF < C ≤ 0.1 µF
	1 kHz	0.0001	0.0001	0.0004
	10 kHz	0.0002	0.0002	0.0006
	100 kHz	0.0003	0.0008	0.0025
Insulation Resistance	Measured at +25°C, 100 VDC 60 seconds for V_R < 500 VDC and at 500 VDC for V_R ≥ 500 VDC			
	Minimum Values Between Terminals			
	C ≤ 0.33 µF		≥ 100,000 MΩ	
Test Voltage Between Terminals	1.0 x V_R applied for 2 seconds at 25°C ±5°C			

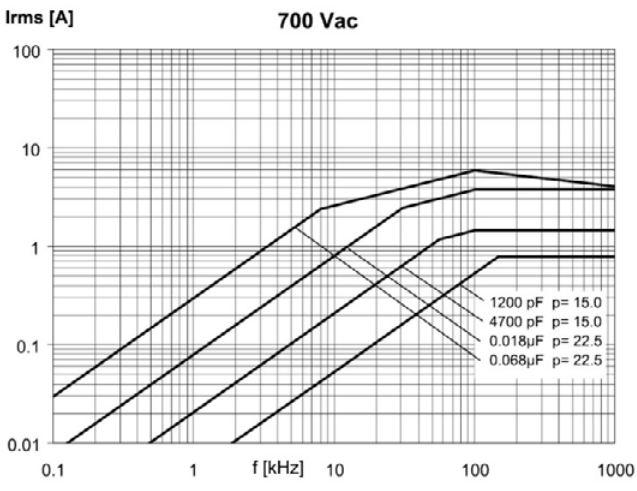
Maximum Voltage (V_{rms}) vs. Frequency (Sinusoidal Waveform/T ≤ 85ºC)





Maximum Current (I_{rms}) vs. Frequency (Sinusoidal Waveform/T ≤ 85ºC)





Environmental Test Data

Test	IEC Publication	Procedure	Requirements
Voltage Proof	60384–1 Clause 4.6	1.6 x V_R after 60 seconds	The capacitors must withstand the voltage without breakdowns or flashovers and without decreased insulation resistance below the value in each detail specification. No visible damage.
	Clause 4.6 2.3	2 x V_R (minimum 400 VDC to case) after 60 seconds	As above
Vibration	60068–2–6 Test Fc	6 hours with 10 – 500 Hz and 0.75 mm amplitude or 98 m/s^2 depending on frequency	No visible damage tanδ ≤ 1.2 x stated value at 100 kHz Δ C/C ≤ ±0.5 %
Bump	60068–2–29 Test Eb	4,000 bumps with 390 m/s^2 mounted on PCB	Δ C/C ≤ ±0.5% tanδ ≤ 1.2 x stated value at 100 kHz Insulation resistance: ≥ 100,000 MΩ for C_R ≤ 0.33 µF ≥ 30,000 MΩ • µF for C_R > 0.33 µF
Resistance to Soldering Heat	60068–2–20 Method 1A	Solder bath at + 260°C ±5°C with screening	Immersion of the terminations into the solder bath shall be completed in a time not exceeding 1 second and the terminations shall remain immersed to the specified depth for 10 + 1 second and then be withdrawn. Δ C/C ≤ ±1.0 % tanδ increase < 0.001 No visible damage
Climatic Sequence	60384–1 Paragraph 4:21	60068–2.2 dry heat 16 hours 60068–2–34 damp heat, one cycle 60068–2–1 Test Aa 2 hours	Insulation resistance: ≥ 100,000 MΩ for C_R ≤ 0.33 µF ≥ 30,000 MΩ • µF for C_R > 0.33 µF Δ C/C ≤ ±0.5 % tanδ ≤ 1.2 x stated value at 100 kHz
Damp Heat Steady State	60068–2–3 Test Ca	+40°C and 90 – 95% RH	56 days no visible damage Insulation resistance: ≥ 50,000 MΩ for C_R ≤ 0.33 µF ≥ 15,000 MΩ • µF for C_R > 0.33 µF Δ C/C ≤ ±1% tanδ ≤ 1.2 x stated value at 100 kHz
Endurance, AC		1,000 hours at +85°C and 1.25 x V_R AC	No visible damage Δ C/C ≤ ±3% tanδ ≤ 1.5 x stated value at 100 kHz Insulation resistance: ≥ 100,000 MΩ for C_R ≤ 0.33 µF ≥ 30,000 MΩ • µF for C_R > 0.33 µF
Charge and Discharge	60384–17 Paragraph 4.13	10,000 pulses and with (2 x) dV/dt according to detail specification	tanδ (100 kHz) ≤ 2 x stated value (100 kHz) Δ C/C ≤ ±0.5% Insulation resistance: ≥ 50,000 MΩ for C_R ≤ 0.33 µF ≥ 15,000 MΩ • µF for C_R > 0.33 µF

Environmental Compliance

All KEMET pulse capacitors are RoHS Compliant.

RoHS Compliant

Table 1 – Ratings & Part Number Reference

VDC	VAC	Cap Value (µF)	Dimensions in mm			Lead Spacing (p)	dV/dt (V/µs)	Max K_0 (V^2/µs)	New KEMET Part Number	Legacy Part Number
			B	H	L					
1600	500	0.001	4.0	9.0	13.0	10.0	6000	1.28 E7	745F1100(1)H0(2)	R745F1100(1)H0(2)
1600	500	0.0012	4.0	9.0	13.0	10.0	6000	1.28 E7	745F1120(1)H0(2)	R745F1120(1)H0(2)
1600	500	0.0015	4.0	9.0	13.0	10.0	6000	1.28 E7	745F1150(1)H0(2)	R745F1150(1)H0(2)
1600	500	0.0018	5.0	11.0	13.0	10.0	6000	1.28 E7	745F1180(1)H0(2)	R745F1180(1)H0(2)
1600	500	0.0022	5.0	11.0	13.0	10.0	6000	1.28 E7	745F1220(1)H0(2)	R745F1220(1)H0(2)
1600	500	0.0027	5.0	11.0	13.0	10.0	6000	1.28 E7	745F1270(1)H0(2)	R745F1270(1)H0(2)
1600	500	0.0033	6.0	12.0	13.0	10.0	6000	1.28 E7	745F1330(1)H0(2)	R745F1330(1)H0(2)
1600	500	0.0039	6.0	12.0	13.0	10.0	6000	1.28 E7	745F1390(1)H0(2)	R745F1390(1)H0(2)
1600	500	0.0027	4.0	10.0	18.0	15.0	4500	8.00 E6	745I1270(1)H3(2)	R745I1270(1)H3(2)
1600	500	0.0033	4.0	10.0	18.0	15.0	4500	8.00 E6	745I1330(1)H3(2)	R745I1330(1)H3(2)
1600	500	0.0039	4.0	10.0	18.0	15.0	4500	8.00 E6	745I1390(1)H3(2)	R745I1390(1)H3(2)
1600	500	0.0047	5.0	11.0	18.0	15.0	4500	8.00 E6	745I1470(1)H0(2)	R745I1470(1)H0(2)
1600	500	0.0056	5.0	11.0	18.0	15.0	4500	8.00 E6	745I1560(1)H0(2)	R745I1560(1)H0(2)
1600	500	0.0068	6.0	12.0	18.0	15.0	4500	8.00 E6	745I1680(1)H0(2)	R745I1680(1)H0(2)
1600	500	0.0082	6.0	12.0	18.0	15.0	4500	8.00 E6	745I1820(1)H0(2)	R745I1820(1)H0(2)
1600	500	0.010	6.0	12.0	18.0	15.0	4500	8.00 E6	745I2100(1)H0(2)	R745I2100(1)H0(2)
1600	500	0.012	7.5	13.5	18.0	15.0	4500	8.00 E6	745I2120(1)H0(2)	R745I2120(1)H0(2)
1600	500	0.015	7.5	13.5	18.0	15.0	4500	8.00 E6	745I2150(1)H0(2)	R745I2150(1)H0(2)
1600	500	0.015	13.0	12.0	18.0	15.0	4500	8.00 E6	745I2150(1)H1(2)	R745I2150(1)H1(2)
1600	500	0.018	8.5	14.5	18.0	15.0	4500	8.00 E6	745I2180(1)H0(2)	R745I2180(1)H0(2)
1600	500	0.018	13.0	12.0	18.0	15.0	4500	8.00 E6	745I2180(1)H1(2)	R745I2180(1)H1(2)
1600	500	0.022	10.0	16.0	18.0	15.0	4500	8.00 E6	745I2220(1)H0(2)	R745I2220(1)H0(2)
1600	500	0.022	13.0	12.0	18.0	15.0	4500	8.00 E6	745I2220(1)H1(2)	R745I2220(1)H1(2)
1600	500	0.027	10.0	16.0	18.0	15.0	4500	8.00 E6	745I2270(1)H0(2)	R745I2270(1)H0(2)
1600	500	0.033	11.0	19.0	18.0	15.0	4500	8.00 E6	745I2330(1)H0(2)	R745I2330(1)H0(2)
1600	500	0.018	6.0	15.0	26.5	22.5	1200	3.84 E6	745N2180(1)H0(2)	R745N2180(1)H0(2)
1600	500	0.022	6.0	15.0	26.5	22.5	1200	3.84 E4	745N2220(1)H0(2)	R745N2220(1)H0(2)
1600	500	0.027	7.0	16.0	26.5	22.5	1200	3.84 E4	745N2270(1)H0(2)	R745N2270(1)H0(2)
1600	500	0.033	7.0	16.0	26.5	22.5	1200	3.84 E4	745N2330(1)H0(2)	R745N2330(1)H0(2)
1600	500	0.039	8.5	17.0	26.5	22.5	1200	3.84 E4	745N2390(1)H0(2)	R745N2390(1)H0(2)
1600	500	0.047	10.0	18.5	26.5	22.5	1200	3.84 E4	745N2470(1)H0(2)	R745N2470(1)H0(2)
1600	500	0.056	10.0	18.5	26.5	22.5	1200	3.84 E4	745N2560(1)H0(2)	R745N2560(1)H0(2)
1600	500	0.068	11.0	20.0	26.5	22.5	1200	3.84 E4	745N2680(1)H0(2)	R745N2680(1)H0(2)
1600	500	0.082	13.0	22.0	26.5	22.5	1200	3.84 E4	745N2820(1)H0(2)	R745N2820(1)H0(2)
1600	500	0.10	13.0	22.0	26.5	22.5	1200	3.84 E4	745N3100(1)H0(2)	R745N3100(1)H0(2)
2000	700	0.00068	4.0	10.0	18.0	15.0	9500	960 E4	747I0680(1)H3(2)	R747I0680(1)H3(2)
2000	700	0.00082	4.0	10.0	18.0	15.0	9500	960 E4	747I0820(1)H3(2)	R747I0820(1)H3(2)
2000	700	0.001	4.0	10.0	18.0	15.0	9500	960 E4	747I1100(1)H3(2)	R747I1100(1)H3(2)
2000	700	0.0012	4.0	10.0	18.0	15.0	9500	960 E4	747I1120(1)H3(2)	R747I1120(1)H3(2)
2000	700	0.0013	4.0	10.0	18.0	15.0	9500	960 E4	747I1130(1)H3(2)	R747I1130(1)H3(2)
2000	700	0.0018	4.0	10.0	18.0	15.0	9500	960 E4	747I1180(1)H3(2)	R747I1180(1)H3(2)
2000	700	0.0022	4.0	10.0	18.0	15.0	9500	960 E4	747I1220(1)H3(2)	R747I1220(1)H3(2)
2000	700	0.0025	4.0	10.0	18.0	15.0	9500	960 E4	747I1250(1)H3(2)	R747I1250(1)H3(2)
2000	700	0.0027	5.0	11.0	18.0	15.0	9500	960 E4	747I1270(1)H0(2)	R747I1270(1)H0(2)
2000	700	0.0033	5.0	11.0	18.0	15.0	9500	960 E4	747I1330(1)H0(2)	R747I1330(1)H0(2)
2000	700	0.0036	6.0	12.0	18.0	15.0	9500	960 E4	747I1360(1)H0(2)	R747I1360(1)H0(2)
2000	700	0.0039	6.0	12.0	18.0	15.0	9500	960 E4	747I1390(1)H0(2)	R747I1390(1)H0(2)
2000	700	0.0043	6.0	12.0	18.0	15.0	9500	960 E4	747I1430(1)H0(2)	R747I1430(1)H0(2)
2000	700	0.0047	6.0	12.0	18.0	15.0	9500	960 E4	747I1470(1)H0(2)	R747I1470(1)H0(2)
2000	700	0.0052	6.0	12.0	18.0	15.0	9500	960 E4	747I1520(1)H0(2)	R747I1520(1)H0(2)
2000	700	0.0056	6.0	12.0	18.0	15.0	9500	960 E4	747I1560(1)H0(2)	R747I1560(1)H0(2)
2000	700	0.0062	7.5	13.5	18.0	15.0	9500	960 E4	747I1620(1)H0(2)	R747I1620(1)H0(2)
2000	700	0.0068	7.5	13.5	18.0	15.0	9500	960 E4	747I1680(1)H0(2)	R747I1680(1)H0(2)
2000	700	0.0082	7.5	13.5	18.0	15.0	9500	960 E4	747I1820(1)H0(2)	R747I1820(1)H0(2)
2000	700	0.0082	9.0	12.5	18.0	15.0	9500	960 E4	747I1820(1)H1(2)	R747I1820(1)H1(2)
2000	700	0.010	8.5	14.5	18.0	15.0	9500	960 E4	747I2100(1)H0(2)	R747I2100(1)H0(2)
2000	700	0.010	13.0	12.0	18.0	15.0	9500	960 E4	747I2100(1)H1(2)	R747I2100(1)H1(2)
2000	700	0.012	10.0	16.0	18.0	15.0	9500	960 E4	747I2120(1)H0(2)	R747I2120(1)H0(2)
2000	700	0.012	13.0	12.0	18.0	15.0	9500	960 E4	747I2120(1)H1(2)	R747I2120(1)H1(2)
2000	700	0.015	10.0	16.0	18.0	15.0	9500	960 E4	747I2150(1)H0(2)	R747I2150(1)H0(2)
VDC	VAC	Cap Value (µF)	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/µs)	Max K_0 (V^2/µs)	New KEMET Part Number	Legacy Part Number

(1) Insert lead and packaging code. See Ordering Options Table for available options.
(2) J = 5%, K = 10%.

Roll Over for Order Info.

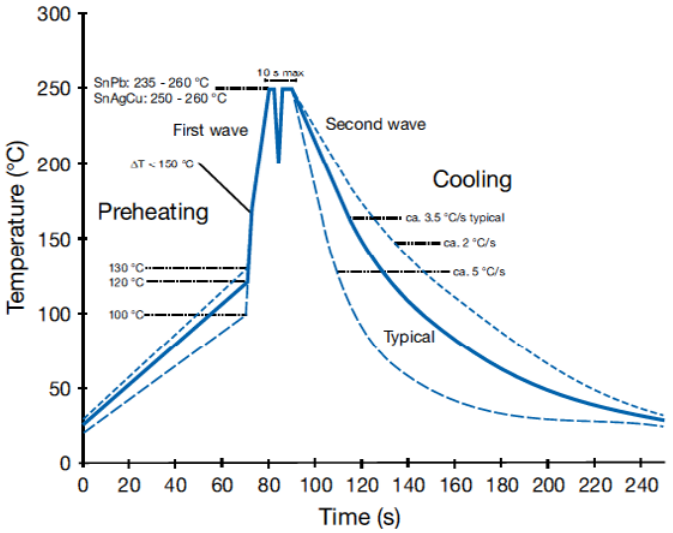
Table 1 – Ratings & Part Number Reference, cont'd

VDC	VAC	Cap Value (µF)	Dimensions in mm			Lead Spacing (p)	dV/dt (V/µs)	Max K_0 (V^2/µs)	New KEMET Part Number	Legacy Part Number
			B	H	L					
2000	700	0.018	11.0	19.0	18.0	15.0	9500	960 E4	747I2180(1)H0(2)	R747I2180(1)H0(2)
2000	700	0.0062	6.0	15.0	26.5	22.5	4500	420 E4	747N1620(1)H0(2)	R747N1620(1)H0(2)
2000	700	0.0068	6.0	15.0	26.5	22.5	4500	420 E4	747N1680(1)H0(2)	R747N1680(1)H0(2)
2000	700	0.0075	6.0	15.0	26.5	22.5	4500	420 E4	747N1750(1)H0(2)	R747N1750(1)H0(2)
2000	700	0.0082	6.0	15.0	26.5	22.5	4500	420 E4	747N1820(1)H0(2)	R747N1820(1)H0(2)
2000	700	0.010	6.0	15.0	26.5	22.5	4500	420 E4	747N2100(1)H0(2)	R747N2100(1)H0(2)
2000	700	0.012	6.0	15.0	26.5	22.5	4500	420 E4	747N2120(1)H0(2)	R747N2120(1)H0(2)
2000	700	0.015	6.0	15.0	26.5	22.5	4500	420 E4	747N2150(1)H0(2)	R747N2150(1)H0(2)
2000	700	0.018	7.0	16.0	26.5	22.5	4500	420 E4	747N2180(1)H0(2)	R747N2180(1)H0(2)
2000	700	0.022	8.5	17.0	26.5	22.5	4500	420 E4	747N2220(1)H0(2)	R747N2220(1)H0(2)
2000	700	0.027	8.5	17.0	26.5	22.5	4500	420 E4	747N2270(1)H0(2)	R747N2270(1)H0(2)
2000	700	0.033	10.0	18.5	26.5	22.5	4500	420 E4	747N2330(1)H0(2)	R747N2330(1)H0(2)
2000	700	0.039	10.0	18.5	26.5	22.5	4500	420 E4	747N2390(1)H0(2)	R747N2390(1)H0(2)
2000	700	0.047	11.0	20.0	26.5	22.5	4500	420 E4	747N2470(1)H0(2)	R747N2470(1)H0(2)
2000	700	0.056	13.0	22.0	26.5	22.5	4500	420 E4	747N2560(1)H0(2)	R747N2560(1)H0(2)
2000	700	0.062	13.0	22.0	26.5	22.5	4500	420 E4	747N2620(1)H0(2)	R747N2620(1)H0(2)
2000	700	0.068	13.0	22.0	26.5	22.5	4500	420 E4	747N2680(1)H0(2)	R747N2680(1)H0(2)
VDC	VAC	Cap Value (µF)	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/µs)	Max K_0 (V^2/µs)	New KEMET Part Number	Legacy Part Number

(1) Insert lead and packaging code. See Ordering Options Table for available options.
(2) J = 5%, K = 10%.

Soldering Process

The implementation of the RoHS Directive has required the selection SnAuCu (SAC) alloys or SnCu alloys as primary solder. This has increased the liquidus temperature from that of 183ºC for SnPb eutectic alloy to 217ºC – 221ºC for the new alloys. As a result, the heat stress to components, even in wave soldering, has increased considerably due to higher pre-heat and wave temperatures. Polypropylene capacitors are especially sensitive to heat (melting point of polypropylene is 160ºC – 170ºC). Wave soldering can be destructive especially for mechanically small polypropylene capacitors and great care must be taken during soldering. The solder profiles from KEMET are highly recommended. You may also refer to the wave soldering curve from IEC Publication 61760–1 Edition 2. Please consult KEMET with any questions.



Roll Over for Order Info.

Marking

- KEMET's logo
- Series
- Dielectric code MKP
- Capacitance
- Capacitance tolerance
- Rated AC voltage
- Manufacturing date code

Packaging Quantities

Lead Spacing	Thickness (mm)	Height (mm)	Length (mm)	Bulk Short Leads	Bulk Long Leads	Standard Reel ø 355 mm	Large Reel ø 500 mm	Ammo	Pizza
10	4	9	13	2000	2200	750	1500	1000	
	5	11	13	1300	2000	600	1250	800	
	6	12	13	1000	1800	500	1000	680	
15	4	10	18	2500	1500	750	1500	1000	1411
	5	11	18	1000	1250	600	1250	800	1139
	6	12	18	1750	1000	500	1000	680	935
	7.5	13.5	18	1000	800	350	800	500	748
	6	17.5	18	1000	800	500	1000	680	935
	7.5	14.5	18	1000	750	350	800	500	748
	8.5	14.5	18	1000	650	300	700	440	663
	9	12.5	18	1000	700	270	650	410	629
	7.5	18.5	18	900	600	350	800	500	748
	10	16	18	750	550	300	600	380	561
	13	12	18	750	520	200	480	280	425
	11	19	18	450	400	250	500	340	510
22.5	6	15	26.5	1404	702	300	700	464	660
	7	16	26.5	1188	594	250	550	380	564
	8.5	17	26.5	972	486	250	450	280	468
	10	18.5	26.5	810	405	160	350	235	396
	11	20	26.5	630	378	190	350	217	360
	13	22	26.5	540	324	150	300	200	300

R71 Series Single Metallized Polypropylene Film, Optimized for SMPS PFC Applications

Overview

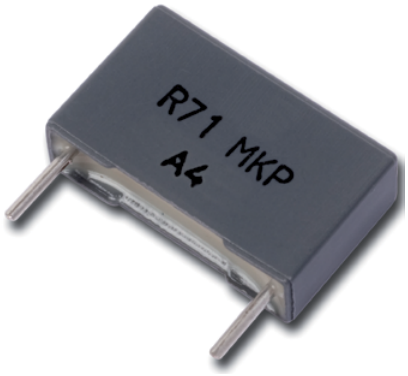
The R71 Series is a metallized polypropylene film encapsulated with self-extinguishing resin in a box of material meeting the requirements of UL 94 V–0.

Applications

Typical applications include power factor correction and pulse applications.

Benefits

- Rated voltage: 420 – 1,000 VDC
- Rated voltage: 220 – 275 VAC
- Capacitance range: 0.01 – 22 µF
- Lead spacing: 10 – 37.5 mm
- Capacitance tolerance: ±5%, ±10%, ±20%
- Climatic category: 40/110/56, IEC 60068–1
- Tape and reel packaging in accordance with IEC 60286–2
- RoHS Compliant and lead-free terminations
- Category temperature range of -40˚C to +110˚C



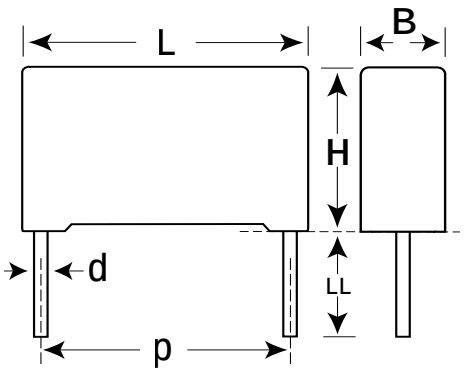
Part Number System

R71	M	F	2100	AA	00	J
Series	Rated Voltage (VDC)	Lead Spacing (mm)	Capacitance Code (pF)	Lead and Packaging Code	Internal Use	Capacitance Tolerance
Metallized Polypropylene	M = 420 V = 520 P = 630 Q = 1,000	F = 10.0 I = 15.0 N = 22.5 R = 27.5 W = 37.5	Digits 2 – 4 indicate the first three digits of the capacitance value. First digit indicates the number of zeros to be added.	See Ordering Options Table	00, 10, 20, 30, 40 (Standard)	J = ±5% K = ±10% M = ±20%

Ordering Options Table

Lead Spacing Nominal (mm)	Type of Leads and Packaging	Lead Length (mm)	Lead and Packaging Code
10	Standard Lead and Packaging Options		
	Bulk (Bag) – Short Leads	4 +2/-0	AA
	Ammo Pack	H_0= 18.5 +/-0.5	DQ
	Other Lead and Packaging Options		
	Bulk (Bag) – Max Length Leads	30 +5/-0	40
	Tape & Reel (Standard Reel)	H_0= 18.5 +/-0.5	GY
	Tape & Reel (Large Reel)	H_0= 18.5 +/-0.5	CK
15	Standard Lead and Packaging Options		
	Bulk (Bag) – Short Leads	4 +2/-0	AA
	Ammo Pack	H_0= 18.5 +/-0.5	DQ
	Other Lead and Packaging Options		
	Bulk (Bag) – Long Leads	25 +2/-1	50
	Bulk (Bag) – Max Length Leads	30 +5/-0	40
	Tape & Reel (Standard Reel)	H_0= 18.5 +/-0.5	GY
	Tape & Reel (Large Reel)	H_0= 18.5 +/-0.5	CK
	Pizza Pack	4 +2/-0	BB
22.5	Standard Lead and Packaging Options		
	Bulk (Tray) – Straight Leads	4 +2/-0	AA
	Ammo Pack	H_0= 18.5 +/-0.5	DQ
	Other Lead and Packaging Options		
	Bulk (Tray) – Long Leads	25 +2/-1	50
	Bulk (Tray) – Max Length Leads	30 +5/-0	40
	Tape & Reel (Large Reel)	H_0= 18.5 +/-0.5	CK
	Pizza Pack	4 +2/-0	BB
27.5	Standard Lead and Packaging Options		
	Bulk (Tray) – Straight Leads	4 +2/-0	AA
	Other Lead and Packaging Options		
	Bulk (Tray) – Long Leads	25 +2/-1	50
	Bulk (Tray) – Max Length Leads	30 +5/-0	40
	Tape & Reel (Large Reel)	H_0= 18.5 +/-0.5	CK
37.5	Standard Lead and Packaging Options		
	Tray– Short Leads	4 +2/-0	0
	Other Lead and Packaging Options		
	Tray– Long Leads	25 +2/-1	50
	Tray– Max Length Leads	30 +5/-0	40

Dimensions – Millimeters



p		B		H		L		d	
Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance
10	+/-0.4	4	+0.2/-0	9	+0.1/-0	13	+0.2/-0	0.6	+/-0.05
10	+/-0.4	5	+0.2/-0	11	+0.1/-0	13	+0.2/-0	0.6	+/-0.05
10	+/-0.4	6	+0.2/-0	12	+0.1/-0	13	+0.2/-0	0.6	+/-0.05
15	+/-0.4	5	+0.2/-0	11	+0.1/-0	18	+0.3/-0	0.6	+/-0.05
15	+/-0.4	6	+0.2/-0	12	+0.1/-0	18	+0.3/-0	0.6	+/-0.05
15	+/-0.4	6	+0.2/-0	17.5	+0.1/-0	18	+0.3/-0	0.6	+/-0.05
15	+/-0.4	7.5	+0.2/-0	13.5	+0.1/-0	18	+0.5/-0	0.6	+/-0.05
15	+/-0.4	7.5	+0.2/-0	18.5	+0.1/-0	18	+0.5/-0	0.6	+/-0.05
15	+/-0.4	8.5	+0.2/-0	14.5	+0.1/-0	18	+0.5/-0	0.6	+/-0.05
15	+/-0.4	9	+0.2/-0	12.5	+0.1/-0	18	+0.5/-0	0.6	+/-0.05
15	+/-0.4	10	+0.2/-0	16	+0.1/-0	18	+0.5/-0	0.8	+/-0.05
15	+/-0.4	11	+0.2/-0	19	+0.1/-0	18	+0.5/-0	0.8	+/-0.05
15	+/-0.4	13	+0.2/-0	12	+0.1/-0	18	+0.5/-0	0.8	+/-0.05
22.5	+/-0.4	6	+0.2/-0	15	+0.1/-0	26.5	+0.3/-0	0.8	+/-0.05
22.5	+/-0.4	7	+0.2/-0	16	+0.1/-0	26.5	+0.3/-0	0.8	+/-0.05
22.5	+/-0.4	10	+0.2/-0	18.5	+0.1/-0	26.5	+0.3/-0	0.8	+/-0.05
22.5	+/-0.4	11	+0.2/-0	20	+0.1/-0	26.5	+0.3/-0	0.8	+/-0.05
22.5	+/-0.4	13	+0.2/-0	22	+0.1/-0	26.5	+0.3/-0	0.8	+/-0.05
22.5	+/-0.4	8.5.	+0.2/-0	17	+0.1/-0	26.5	+0.3/-0	0.8	+/-0.05
27.5	+/-0.4	9	+0.2/-0	17	+0.1/-0	32	+0.3/-0	0.8	+/-0.05
27.5	+/-0.4	11	+0.2/-0	20	+0.1/-0	32	+0.3/-0	0.8	+/-0.05
27.5	+/-0.4	13	+0.2/-0	22	+0.1/-0	32	+0.3/-0	0.8	+/-0.05
27.5	+/-0.4	13	+0.2/-0	25	+0.1/-0	32	+0.3/-0	0.8	+/-0.05
27.5	+/-0.4	14	+0.2/-0	28	+0.1/-0	32	+0.3/-0	0.8	+/-0.05
27.5	+/-0.4	18	+0.2/-0	33	+0.1/-0	32	+0.3/-0	0.8	+/-0.05
27.5	+/-0.4	22	+0.2/-0	37	+0.1/-0	32	+0.3/-0	0.8	+/-0.05
37.5	+/-0.4	13	+0.3/-0	24	+0.1/-0	41.5	+0.3/-0	1	+/-0.05
37.5	+/-0.4	16	+0.3/-0	28.5	+0.1/-0	41.5	+0.3/-0	1	+/-0.05
37.5	+/-0.4	19	+0.3/-0	32	+0.1/-0	41.5	+0.3/-0	1	+/-0.05
37.5	+/-0.4	20	+0.3/-0	40	+0.1/-0	41.5	+0.3/-0	1	+/-0.05
37.5	+/-0.4	24	+0.3/-0	44	+0.1/-0	41.5	+0.3/-0	1	+/-0.05
37.5	+/-0.4	30	+0.3/-0	45	+0.1/-0	41.5	+0.3/-0	1	+/-0.05

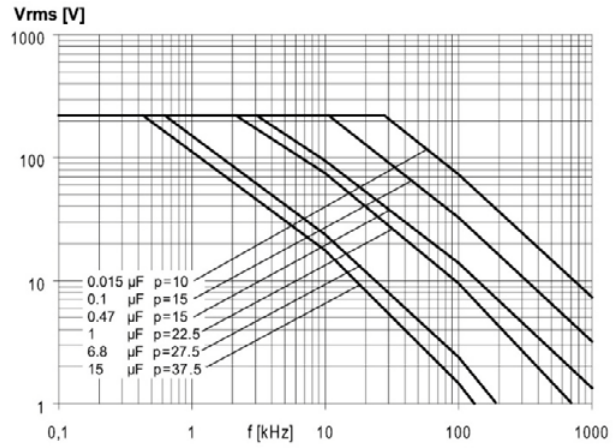
Note: See Ordering Options Table for lead length (LL) options.

Performance Characteristics

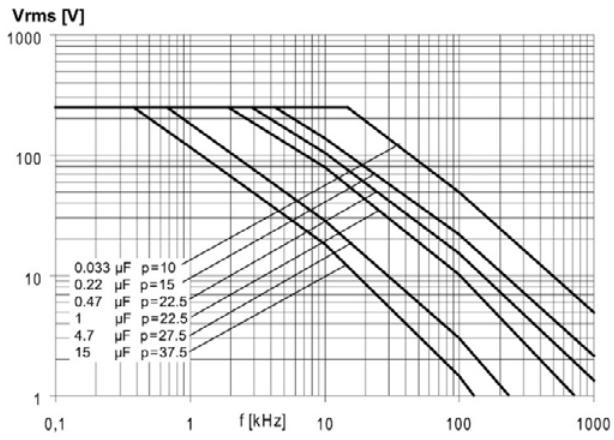
Voltage Range (VDC)	420		520		630	1000
Voltage Range (VAC)	220		250		275	275
Capacitance Range (µF)	0.015 – 22		0.01 – 22		0.01 – 15	0.22 – 8.2
Capacitance Values	IEC E12 values available on request					
Capacitance Tolerance	±5%, ±10%, ±20%					
Category Temperature Range	-55°C to +110°C					
Voltage Derating	The rated voltage is decreased with 4%/°C between +105°C and +110°C					
Climatic Category	IIEC 60068–1, 55/110/56					
Self-Inductance L (Lead Length ~ 2 mm)	Lead Space (mm)	10	15	22.5	27.5	37.5
	L (nH) ≈	9	10	18	18	20
Dissipation Factor tanδ	Typical value at 25°C ±5°C					
	1 kHz			0.001		
Insulation Resistance	Typical value at +25°C, 100 VDC 60 seconds					
	Minimum Values Between Terminals					
	C ≤ 0.33 µF				≥ 100,000 MΩ	
	C > 0.33 µF				≥ 30,000 MΩ • µF	
Test Voltage Between Terminals	1.6 x V_R applied for 2 seconds at 25°C ±5°C					

Maximum Voltage (V_{rms}) vs. Frequency (Sinusoidal Waveform/T ≤ 40ºC)

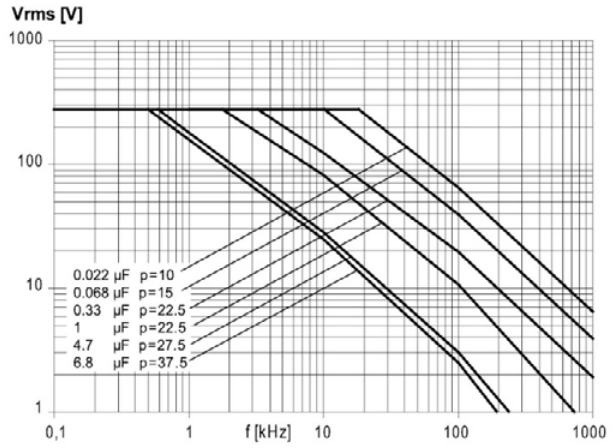
420Vdc / 220Vac



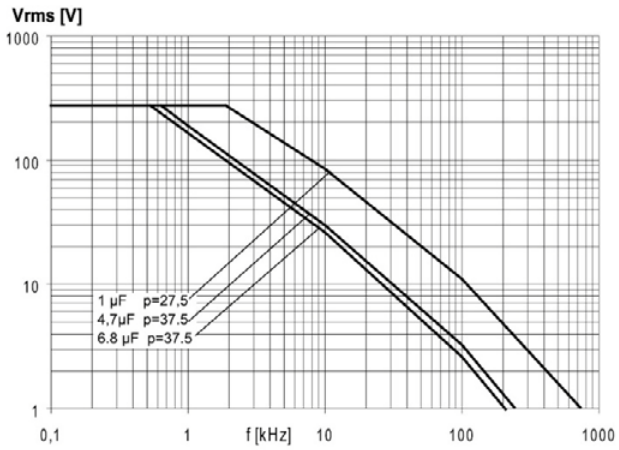
520Vdc / 250Vac



630Vdc / 275Vac

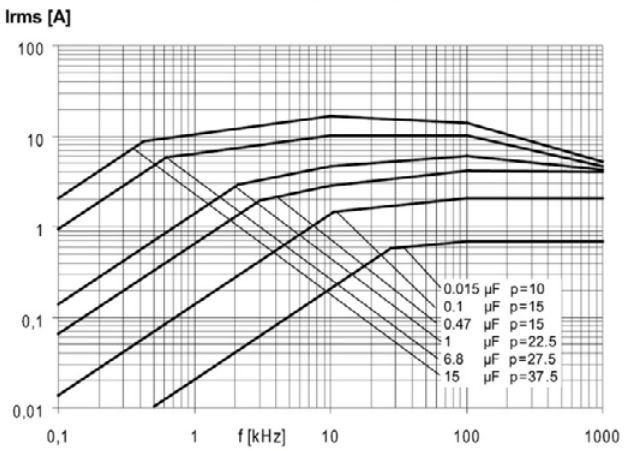


1000Vdc / 275Vac

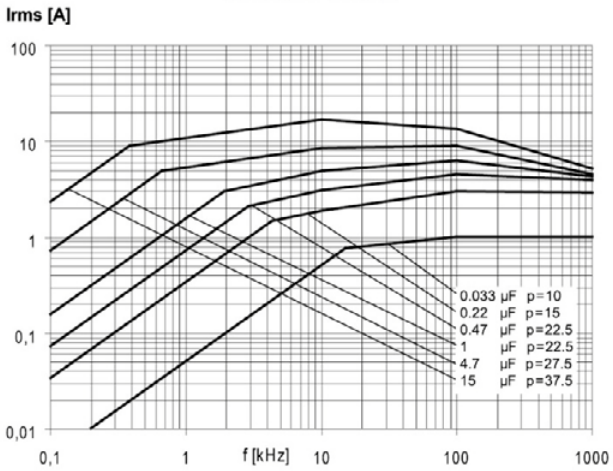


Maximum Current (I_{rms}) vs. Frequency (Sinusoidal Waveform/T ≤ 40ºC)

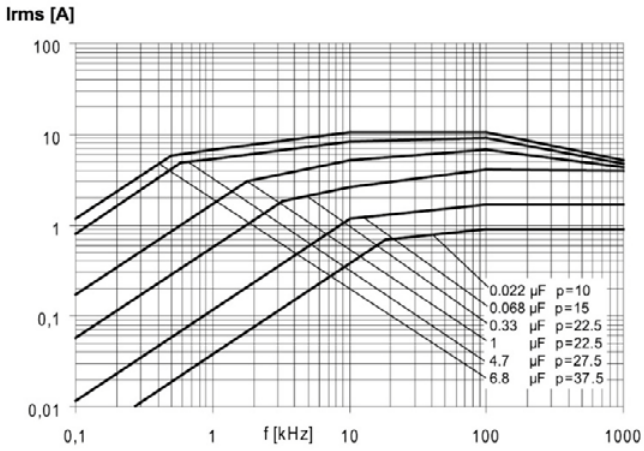
420Vdc / 220Vac



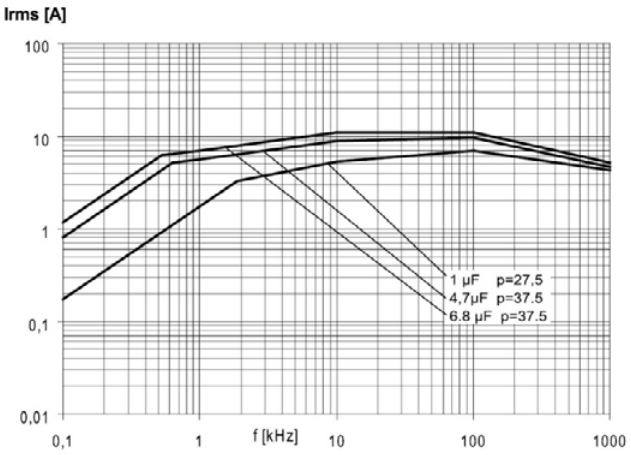
520Vdc / 250Vac



630Vdc / 275Vac



1000Vdc / 275Vac



Environmental Test Data

Test	IEC Publication	Procedure	Requirements
Voltage Proof	60384–1 Clause 4.6	1.6 x V_R after 60 seconds	The capacitors must withstand the voltage without breakdowns or flashovers and without decreased insulation resistance below the value in each detail specification. No visible damage
	Clause 4.6 2.3	2 x V_R (minimum 400 VDC to case) after 60 seconds	As above
Vibration	60068–2–6 Test Fc	6 hours with 10 – 500 Hz and 0.75 mm amplitude or 98 m/s^2 depending on frequency	No visible damage tanδ ≤ 1.2 x stated value at 100 kHz Δ C/C ≤ ±0.5 %
Bump	60068–2–29 Test Eb	4,000 bumps with 390 m/s^2 mounted on PCB	Δ C/C ≤ ±0.5% tanδ ≤ 1.2 x stated value at 100 kHz Insulation resistance: ≥ 100,000 MΩ for C_R ≤ 0.33 µF ≥ 30,000 MΩ • µF for C_R > 0.33 µF
Resistance to Soldering Heat	60068–2–20 Method 1A	Solder bath at + 260°C ±5°C with screening	Immersion of the terminations into the solder bath shall be completed in a time not exceeding 1 second and the terminations shall remain immersed to the specified depth for 10 + 1 second and then be withdrawn. Δ C/C ≤ ±1.0% tanδ increase < 0.001 No visible damage
Climatic Sequence	60384–1 Paragraph 4:21	60068–2.2 dry heat 16 hours 60068–2–34 damp heat, one cycle 60068–2–1 Test Aa 2 hours	Insulation resistance: ≥ 100,000 MΩ for C_R ≤ 0.33 µF ≥ 30,000 MΩ • µF for C_R > 0.33 µF Δ C/C ≤ ±0.5% tanδ ≤ 1.2 x stated value at 100 kHz
Damp Heat Steady State	60068–2–3 Test Ca	+40°C and 90 – 95% RH	56 days no visible damage Insulation resistance: ≥ 50,000 MΩ for C_R ≤ 0.33 µF ≥ 15,000 MΩ • µF for C_R > 0.33 µF Δ C/C ≤ ±1% tanδ ≤ 1.2 x stated value at 100 kHz
Endurance, AC		1,000 hours at +85°C and 1.25 x V_R AC	No visible damage Δ C/C ≤ ±3% tanδ ≤ 1.5 x stated value at 100 kHz Insulation resistance: ≥ 100,000 MΩ for C_R ≤ 0.33 µF ≥ 30,000 MΩ • µF for C_R > 0.33 µF
Charge and Discharge	60384–17 Paragraph 4.13	10,000 pulses and with (2 x) dV/dt according to detail specification	tanδ (100 kHz) ≤ 2 x stated value (100 kHz) Δ C/C ≤ ± 0.5% Insulation resistance: ≥ 50,000 MΩ for C_R ≤ 0.33 µF ≥ 15,000 MΩ • µF for C_R > 0.33 µF

Environmental Compliance

All KEMET pulse capacitors are RoHS Compliant.

RoHS Compliant

Table 1 – Ratings & Part Number Reference

VDC	VAC	Cap Value (µF)	Dimensions in mm			Lead Spacing (p)	dV/dt (V/µs)	Max K_0 (V^2/µs)	New KEMET Part Number	Legacy Part Number
			B	H	L					
420	220	0.015	4.0	9.0	13.0	10.0	250	210 E3	71MF2150(1)00(2)	R71MF2150(1)00(2)
420	220	0.022	4.0	9.0	13.0	10.0	250	210 E3	71MF2220(1)00(2)	R71MF2220(1)00(2)
420	220	0.033	4.0	9.0	13.0	10.0	250	210 E3	71MF2330(1)00(2)	R71MF2330(1)00(2)
420	220	0.047	4.0	9.0	13.0	10.0	250	210 E3	71MF2470(1)00(2)	R71MF2470(1)00(2)
420	220	0.068	4.0	9.0	13.0	10.0	250	210 E3	71MF2680(1)30(2)	R71MF2680(1)30(2)
420	220	0.10	4.0	9.0	13.0	10.0	250	210 E3	71MF3100(1)30(2)	R71MF3100(1)30(2)
420	220	0.15	5.0	11.0	13.0	10.0	250	210 E3	71MF3150(1)30(2)	R71MF3150(1)30(2)
420	220	0.22	6.0	12.0	13.0	10.0	250	210 E3	71MF3220(1)30(2)	R71MF3220(1)30(2)
420	220	0.10	5.0	11.0	18.0	15.0	160	134 E3	71MI3100(1)00(2)	R71MI3100(1)00(2)
420	220	0.15	5.0	11.0	18.0	15.0	160	134 E3	71MI3150(1)00(2)	R71MI3150(1)00(2)
420	220	0.22	5.0	11.0	18.0	15.0	160	134 E3	71MI3220(1)00(2)	R71MI3220(1)00(2)
420	220	0.33	6.0	12.0	18.0	15.0	160	134 E3	71MI3330(1)00(2)	R71MI3330(1)00(2)
420	220	0.47	7.5	13.5	18.0	15.0	160	134 E3	71MI3470(1)00(2)	R71MI3470(1)00(2)
420	220	0.47	6.0	17.5	18.0	15.0	160	134 E3	71MI3470(1)10(2)	R71MI3470(1)10(2)
420	220	0.47	9.0	12.5	18.0	15.0	160	134 E3	71MI3470(1)20(2)	R71MI3470(1)20(2)
420	220	0.68	6.0	17.5	18.0	15.0	160	134 E3	71MI3680(1)40(2)	R71MI3680(1)40(2)
420	220	0.68	8.5	14.5	18.0	15.0	160	134 E3	71MI3680(1)30(2)	R71MI3680(1)30(2)
420	220	0.68	13.0	12.0	18.0	15.0	160	134 E3	71MI3680(1)20(2)	R71MI3680(1)20(2)
420	220	1.0	7.5	18.5	18.0	15.0	160	134 E3	71MI4100(1)40M	R71MI4100(1)40M
420	220	1.0	10.0	16.0	18.0	15.0	160	134 E3	71MI4100(1)30(2)	R71MI4100(1)30(2)
420	220	1.5	11.0	19.0	18.0	15.0	160	134 E3	71MI4150(1)30(2)	R71MI4150(1)30(2)
420	220	0.22	6.0	15.0	26.5	22.5	100	84 E3	71MN3220(1)00(2)	R71MN3220(1)00(2)
420	220	0.33	6.0	15.0	26.5	22.5	100	84 E3	71MN3330(1)00(2)	R71MN3330(1)00(2)
420	220	0.47	6.0	15.0	26.5	22.5	100	84 E3	71MN3470(1)00(2)	R71MN3470(1)00(2)
420	220	0.68	6.0	15.0	26.5	22.5	100	84 E3	71MN3680(1)00(2)	R71MN3680(1)00(2)
420	220	1.0	7.0	16.0	26.5	22.5	100	84 E3	71MN4100(1)30(2)	R71MN4100(1)30(2)
420	220	1.5	8.5.	17.0	26.5	22.5	100	84 E3	71MN4150(1)30M	R71MN4150(1)30M
420	220	1.5	10.0	18.5	26.5	22.5	100	84 E3	71MN4150(1)00(2)	R71MN4150(1)00(2)
420	220	2.2	10.0	18.5	26.5	22.5	100	84 E3	71MN4220(1)40M	R71MN4220(1)40M
420	220	2.2	11.0	20.0	26.5	22.5	100	84 E3	71MN4220(1)30(2)	R71MN4220(1)30(2)
420	220	3.3	13.0	22.0	26.5	22.5	100	84 E3	71MN4330(1)30(2)	R71MN4330(1)30(2)
420	220	0.68	9.0	17.0	32.0	27.5	80	67 E3	71MR3680(1)00(2)	R71MR3680(1)00(2)
420	220	1.0	9.0	17.0	32.0	27.5	80	67 E3	71MR4100(1)00(2)	R71MR4100(1)00(2)
420	220	1.5	11.0	20.0	32.0	27.5	80	67 E3	71MR4150(1)00(2)	R71MR4150(1)00(2)
420	220	2.2	13.0	22.0	32.0	27.5	80	67 E3	71MR4220(1)00(2)	R71MR4220(1)00(2)
420	220	3.3	14.0	28.0	32.0	27.5	80	67 E3	71MR4330(1)30(2)	R71MR4330(1)30(2)
420	220	4.7	18.0	33.0	32.0	27.5	80	67 E3	71MR4470(1)00(2)	R71MR4470(1)00(2)
420	220	6.8	22.0	37.0	32.0	27.5	80	67 E3	71MR4680(1)00(2)	R71MR4680(1)00(2)
420	220	3.3	11.0	22.0	41.5	37.5	60	50 E3	71MW4330(1)00(2)	R71MW4330(1)00(2)
420	220	4.7	16.0	28.5	41.5	37.5	60	50 E3	71MW4470(1)00(2)	R71MW4470(1)00(2)
420	220	6.8	19.0	32.0	41.5	37.5	60	50 E3	71MW4680(1)00(2)	R71MW4680(1)00(2)
420	220	10.0	20.0	40.0	41.5	37.5	60	50 E3	71MW5100(1)00(2)	R71MW5100(1)00(2)
420	220	15.0	24.0	44.0	41.5	37.5	60	50 E3	71MW5150(1)00(2)	R71MW5150(1)00(2)
420	220	22.0	30.0	45.0	41.5	37.5	60	50 E3	71MW5220(1)00(2)	R71MW5220(1)00(2)
520	250	0.010	4.0	9.0	13.0	10.0	300	312 E3	71VF2100(1)00(2)	R71VF2100(1)00(2)
520	250	0.015	4.0	9.0	13.0	10.0	300	312 E3	71VF2150(1)00(2)	R71VF2150(1)00(2)
520	250	0.022	4.0	9.0	13.0	10.0	300	312 E3	71VF2220(1)00(2)	R71VF2220(1)00(2)
520	250	0.033	4.0	9.0	13.0	10.0	300	312 E3	71VF2330(1)00(2)	R71VF2330(1)00(2)
520	250	0.047	4.0	9.0	13.0	10.0	300	312 E3	71VF2470(1)30(2)	R71VF2470(1)30(2)
520	250	0.068	4.0	9.0	13.0	10.0	300	312 E3	71VF2680(1)30(2)	R71VF2680(1)30(2)
520	250	0.10	5.0	11.0	13.0	10.0	300	312 E3	71VF3100(1)30(2)	R71VF3100(1)30(2)
520	250	0.15	6.0	12.0	13.0	10.0	300	312 E3	71VF3150(1)30(2)	R71VF3150(1)30(2)
520	250	0.10	5.0	11.0	18.0	15.0	200	208 E3	71VI3100(1)00(2)	R71VI3100(1)00(2)
520	250	0.15	5.0	11.0	18.0	15.0	200	208 E3	71VI3150(1)30(2)	R71VI3150(1)30(2)
520	250	0.22	6.0	12.0	18.0	15.0	200	208 E3	71VI3220(1)30(2)	R71VI3220(1)30(2)
520	250	0.22	6.0	17.5	18.0	15.0	200	208 E3	71VI3220(1)10(2)	R71VI3220(1)10(2)
520	250	0.33	6.0	17.5	18.0	15.0	200	208 E3	71VI3330(1)40(2)	R71VI3330(1)40(2)
520	250	0.33	7.5	13.5	18.0	15.0	200	208 E3	71VI3330(1)30(2)	R71VI3330(1)30(2)
520	250	0.33	9.0	12.5	18.0	15.0	200	208 E3	71VI3330(1)20(2)	R71VI3330(1)20(2)
520	250	0.47	8.5	14.5	18.0	15.0	200	208 E3	71VI3470(1)30(2)	R71VI3470(1)30(2)
VDC	VAC	Cap Value (µF)	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/µs)	Max K_0 (V^2/µs)	New KEMET Part Number	Legacy Part Number

(1) Insert lead and packaging code. See Ordering Options Table for available options.
(2) J = 5%, K = 10%, M = 20%.

Roll Over for Order Info.

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Cap Value (µF)	Dimensions in mm			Lead Spacing (p)	dV/dt (V/µs)	Max K_0 (V^2/µs)	New KEMET Part Number	Legacy Part Number
			B	H	L					
520	250	0.47	7.5	18.5	18.0	15.0	200	208 E3	71VI3470(1)10(2)	R71VI3470(1)10(2)
520	250	0.47	13.0	12.0	18.0	15.0	200	208 E3	71VI3470(1)20(2)	R71VI3470(1)20(2)
520	250	0.68	10.0	16.0	18.0	15.0	200	208 E3	71VI3680(1)30(2)	R71VI3680(1)30(2)
520	250	1.0	11.0	19.0	18.0	15.0	200	208 E3	71VI4100(1)30M	R71VI4100(1)30M
520	250	0.22	6.0	15.0	26.5	22.5	120	125 E3	71VN3220(1)00(2)	R71VN3220(1)00(2)
520	250	0.33	6.0	15.0	26.5	22.5	120	125 E3	71VN3330(1)00(2)	R71VN3330(1)00(2)
520	250	0.47	6.0	15.0	26.5	22.5	120	125 E3	71VN3470(1)30(2)	R71VN3470(1)30(2)
520	250	0.68	7.0	16.0	26.5	22.5	120	125 E3	71VN3680(1)30(2)	R71VN3680(1)30(2)
520	250	1.0	10.0	18.5	26.5	22.5	120	125 E3	71VN4100(1)30(2)	R71VN4100(1)30(2)
520	250	1.5	11.0	20.0	26.5	22.5	120	125 E3	71VN4150(1)30(2)	R71VN4150(1)30(2)
520	250	2.2	13.0	22.0	26.5	22.5	120	125 E3	71VN4220(1)30(2)	R71VN4220(1)30(2)
520	250	0.68	9.0	17.0	32.0	27.5	100	104 E3	71VR3680(1)00(2)	R71VR3680(1)00(2)
520	250	1.0	9.0	17.0	32.0	27.5	100	104 E3	71VR4100(1)30(2)	R71VR4100(1)30(2)
520	250	1.0	11.0	20.0	32.0	27.5	100	104 E3	71VR4100(1)00(2)	R71VR4100(1)00(2)
520	250	1.5	11.0	20.0	32.0	27.5	100	104 E3	71VR4150(1)00(2)	R71VR4150(1)00(2)
520	250	2.2	13.0	25.0	32.0	27.5	100	104 E3	71VR4220(1)30(2)	R71VR4220(1)30(2)
520	250	2.2	14.0	28.0	32.0	27.5	100	104 E3	71VR4220(1)00(2)	R71VR4220(1)00(2)
520	250	3.3	14.0	28.0	32.0	27.5	100	104 E3	71VR4330(1)30(2)	R71VR4330(1)30(2)
520	250	3.3	18.0	33.0	32.0	27.5	100	104 E3	71VR4330(1)00(2)	R71VR4330(1)00(2)
520	250	4.7	18.0	33.0	32.0	27.5	100	104 E3	71VR4470(1)30(2)	R71VR4470(1)30(2)
520	250	4.7	22.0	37.0	32.0	27.5	100	104 E3	71VR4470(1)00(2)	R71VR4470(1)00(2)
520	250	6.8	22.0	37.0	32.0	27.5	100	104 E3	71VR4680(1)30(2)	R71VR4680(1)30(2)
520	250	2.2	11.0	22.0	41.5	37.5	70	73 E3	71VW4220(1)00(2)	R71VW4220(1)00(2)
520	250	3.3	13.0	24.0	41.5	37.5	70	73 E3	71VW4330(1)30(2)	R71VW4330(1)30(2)
520	250	3.3	16.0	28.5	41.5	37.5	70	73 E3	71VW4330(1)00(2)	R71VW4330(1)00(2)
520	250	4.7	16.0	28.5	41.5	37.5	70	73 E3	71VW4470(1)00(2)	R71VW4470(1)00(2)
520	250	6.8	19.0	32.0	41.5	37.5	70	73 E3	71VW4680(1)30(2)	R71VW4680(1)30(2)
520	250	6.8	20.0	40.0	41.5	37.5	70	73 E3	71VW4680(1)00(2)	R71VW4680(1)00(2)
520	250	10.0	20.0	40.0	41.5	37.5	70	73 E3	71VW5100(1)30(2)	R71VW5100(1)30(2)
520	250	10.0	24.0	44.0	41.5	37.5	70	73 E3	71VW5100(1)00(2)	R71VW5100(1)00(2)
520	250	15.0	24.0	44.0	41.5	37.5	70	73 E3	71VW5150(1)30(2)	R71VW5150(1)30(2)
520	250	15.0	30.0	45.0	41.5	37.5	70	73 E3	71VW5150(1)00(2)	R71VW5150(1)00(2)
520	250	22.0	30.0	45.0	41.5	37.5	70	73 E3	71VW5220(1)00(2)	R71VW5220(1)00(2)
630	275	0.010	4.0	9.0	13.0	10.0	400	504 E3	71PF2100(1)30(2)	R71PF2100(1)30(2)
630	275	0.015	4.0	9.0	13.0	10.0	400	504 E3	71PF2150(1)30(2)	R71PF2150(1)30(2)
630	275	0.022	4.0	9.0	13.0	10.0	400	504 E3	71PF2220(1)30(2)	R71PF2220(1)30(2)
630	275	0.033	5.0	11.0	13.0	10.0	400	504 E3	71PF2330(1)00(2)	R71PF2330(1)00(2)
630	275	0.047	5.0	11.0	13.0	10.0	400	504 E3	71PF2470(1)30(2)	R71PF2470(1)30(2)
630	275	0.068	6.0	12.0	13.0	10.0	400	504 E3	71PF2680(1)30(2)	R71PF2680(1)30(2)
630	275	0.1	6.0	12.0	13.0	10.0	400	504 E3	71PF3100(1)30M	R71PF3100(1)30M
630	275	0.010	5.0	11.0	18.0	15.0	250	315 E3	71PI2100(1)00(2)	R71PI2100(1)00(2)
630	275	0.015	5.0	11.0	18.0	15.0	250	315 E3	71PI2150(1)00(2)	R71PI2150(1)00(2)
630	275	0.022	5.0	11.0	18.0	15.0	250	315 E3	71PI2220(1)00(2)	R71PI2220(1)00(2)
630	275	0.033	5.0	11.0	18.0	15.0	250	315 E3	71PI2330(1)00(2)	R71PI2330(1)00(2)
630	275	0.047	5.0	11.0	18.0	15.0	250	315 E3	71PI2470(1)00(2)	R71PI2470(1)00(2)
630	275	0.068	5.0	11.0	18.0	15.0	250	315 E3	71PI2680(1)00(2)	R71PI2680(1)00(2)
630	275	0.10	5.0	11.0	18.0	15.0	250	315 E3	71PI3100(1)30(2)	R71PI3100(1)30(2)
630	275	0.15	6.0	12.0	18.0	15.0	250	315 E3	71PI3150(1)30(2)	R71PI3150(1)30(2)
630	275	0.15	6.0	17.5	18.0	15.0	250	315 E3	71PI3150(1)40(2)	R71PI3150(1)40(2)
630	275	0.22	7.5	13.5	18.0	15.0	250	315 E3	71PI3220(1)30(2)	R71PI3220(1)30(2)
630	275	0.22	6.0	17.5	18.0	15.0	250	315 E3	71PI3220(1)10(2)	R71PI3220(1)10(2)
630	275	0.22	9.0	12.5	18.0	15.0	250	315 E3	71PI3220(1)20(2)	R71PI3220(1)20(2)
630	275	0.33	8.5	14.5	18.0	15.0	250	315 E3	71PI3330(1)30(2)	R71PI3330(1)30(2)
630	275	0.33	7.5	18.5	18.0	15.0	250	315 E3	71PI3330(1)10(2)	R71PI3330(1)10(2)
630	275	0.33	9.0	12.5	18.0	15.0	250	315 E3	71PI3330(1)40M	R71PI3330(1)40M
630	275	0.33	13.0	12.0	18.0	15.0	250	315 E3	71PI3330(1)20(2)	R71PI3330(1)20(2)
630	275	0.47	7.5	18.5	18.0	15.0	250	315 E3	71PI3470(1)40M	R71PI3470(1)40M
630	275	0.47	10.0	16.0	18.0	15.0	250	315 E3	71PI3470(1)30M	R71PI3470(1)30M
630	275	0.68	11.0	19.0	18.0	15.0	250	315 E3	71PI3680(1)30M	R71PI3680(1)30M
630	275	0.15	6.0	15.0	26.5	22.5	160	202 E3	71PN3150(1)00(2)	R71PN3150(1)00(2)
VDC	VAC	Cap Value (µF)	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/µs)	Max K_0 (V^2/µs)	New KEMET Part Number	Legacy Part Number

(1) Insert lead and packaging code. See Ordering Options Table for available options.
(2) J = 5%, K = 10%, M = 20%.

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Cap Value (µF)	Dimensions in mm			Lead Spacing (p)	dV/dt (V/µs)	Max K_0 (V^2/µs)	New KEMET Part Number	Legacy Part Number
			B	H	L					
630	275	0.22	6.0	15.0	26.5	22.5	160	202 E3	71PN3220(1)00(2)	R71PN3220(1)00(2)
630	275	0.33	6.0	15.0	26.5	22.5	160	202 E3	71PN3330(1)30(2)	R71PN3330(1)30(2)
630	275	0.47	7.0	16.0	26.5	22.5	160	202 E3	71PN3470(1)30(2)	R71PN3470(1)30(2)
630	275	0.68	10.0	18.5	26.5	22.5	160	202 E3	71PN3680(1)30(2)	R71PN3680(1)30(2)
630	275	1.0	10.0	18.5	26.5	22.5	160	202 E3	71PN4100(1)40M	R71PN4100(1)40M
630	275	1.0	11.0	20.0	26.5	22.5	160	202 E3	71PN4100(1)30(2)	R71PN4100(1)30(2)
630	275	0.68	9.0	17.0	32.0	27.5	115	145 E3	71PR3680(1)00(2)	R71PR3680(1)00(2)
630	275	1.0	11.0	20.0	32.0	27.5	115	145 E3	71PR4100(1)00(2)	R71PR4100(1)00(2)
630	275	1.5	13.0	22.0	32.0	27.5	115	145 E3	71PR4150(1)00(2)	R71PR4150(1)00(2)
630	275	2.2	14.0	28.0	32.0	27.5	115	145 E3	71PR4220(1)00(2)	R71PR4220(1)00(2)
630	275	3.3	18.0	33.0	32.0	27.5	115	145 E3	71PR4330(1)00(2)	R71PR4330(1)00(2)
630	275	4.7	22.0	37.0	32.0	27.5	115	145 E3	71PR4470(1)00(2)	R71PR4470(1)00(2)
630	275	1.5	11.0	22.0	41.5	37.5	80	100 E3	71PW4150(1)00(2)	R71PW4150(1)00(2)
630	275	2.2	13.0	24.0	41.5	37.5	80	100 E3	71PW4220(1)00(2)	R71PW4220(1)00(2)
630	275	3.3	16.0	28.5	41.5	37.5	80	100 E3	71PW4330(1)00(2)	R71PW4330(1)00(2)
630	275	4.7	19.0	32.0	41.5	37.5	80	100 E3	71PW4470(1)00(2)	R71PW4470(1)00(2)
630	275	6.8	20.0	40.0	41.5	37.5	80	100 E3	71PW4680(1)00(2)	R71PW4680(1)00(2)
630	275	10.0	24.0	44.0	41.5	37.5	80	100 E3	71PW5100(1)00(2)	R71PW5100(1)00(2)
630	275	15.0	30.0	45.0	41.5	37.5	80	100 E3	71PW5150(1)00(2)	R71PW5150(1)00(2)
1000	275	0.22	9.0	17.0	32.0	27.5	180	360 E3	71QR3220(1)00(2)	R71QR3220(1)00(2)
1000	275	0.27	9.0	17.0	32.0	27.5	180	360 E3	71QR3270(1)00(2)	R71QR3270(1)00(2)
1000	275	0.33	9.0	17.0	32.0	27.5	180	360 E3	71QR3330(1)10(2)	R71QR3330(1)10(2)
1000	275	0.33	11.0	20.0	32.0	27.5	180	360 E3	71QR3330(1)00(2)	R71QR3330(1)00(2)
1000	275	0.39	9.0	17.0	32.0	27.5	180	360 E3	71QR3390(1)10(2)	R71QR3390(1)10(2)
1000	275	0.39	11.0	20.0	32.0	27.5	180	360 E3	71QR3390(1)00(2)	R71QR3390(1)00(2)
1000	275	0.47	9.0	17.0	32.0	27.5	180	360 E3	71QR3470(1)10(2)	R71QR3470(1)10(2)
1000	275	0.47	13.0	22.0	32.0	27.5	180	360 E3	71QR3470(1)00(2)	R71QR3470(1)00(2)
1000	275	0.56	9.0	17.0	32.0	27.5	180	360 E3	71QR3560(1)10(2)	R71QR3560(1)10(2)
1000	275	0.56	13.0	22.0	32.0	27.5	180	360 E3	71QR3560(1)00(2)	R71QR3560(1)00(2)
1000	275	0.68	11.0	20.0	32.0	27.5	180	360 E3	71QR3680(1)10(2)	R71QR3680(1)10(2)
1000	275	0.68	14.0	28.0	32.0	27.5	180	360 E3	71QR3680(1)00(2)	R71QR3680(1)00(2)
1000	275	0.82	11.0	20.0	32.0	27.5	180	360 E3	71QR3820(1)10(2)	R71QR3820(1)10(2)
1000	275	0.82	14.0	28.0	32.0	27.5	180	360 E3	71QR3820(1)00(2)	R71QR3820(1)00(2)
1000	275	1.0	13.0	22.0	32.0	27.5	180	360 E3	71QR4100(1)10(2)	R71QR4100(1)10(2)
1000	275	1.0	18.0	33.0	32.0	27.5	180	360 E3	71QR4100(1)00(2)	R71QR4100(1)00(2)
1000	275	1.2	13.0	25.0	32.0	27.5	180	360 E3	71QR4120(1)10(2)	R71QR4120(1)10(2)
1000	275	1.2	18.0	33.0	32.0	27.5	180	360 E3	71QR4120(1)00(2)	R71QR4120(1)00(2)
1000	275	1.5	14.0	28.0	32.0	27.5	180	360 E3	71QR4150(1)10(2)	R71QR4150(1)10(2)
1000	275	1.5	18.0	33.0	32.0	27.5	180	360 E3	71QR4150(1)00(2)	R71QR4150(1)00(2)
1000	275	1.8	14.0	28.0	32.0	27.5	180	360 E3	71QR4180(1)10(2)	R71QR4180(1)10(2)
1000	275	1.8	22.0	37.0	32.0	27.5	180	360 E3	71QR4180(1)00(2)	R71QR4180(1)00(2)
1000	275	2.2	18.0	33.0	32.0	27.5	180	360 E3	71QR4220(1)10(2)	R71QR4220(1)10(2)
1000	275	2.2	22.0	37.0	32.0	27.5	180	360 E3	71QR4220(1)00(2)	R71QR4220(1)00(2)
1000	275	2.7	18.0	33.0	32.0	27.5	180	360 E3	71QR4270(1)10(2)	R71QR4270(1)10(2)
1000	275	3.3	22.0	37.0	32.0	27.5	180	360 E3	71QR4330(1)10(2)	R71QR4330(1)10(2)
1000	275	3.9	22.0	37.0	32.0	27.5	180	360 E3	71QR4390(1)10(2)	R71QR4390(1)10(2)
1000	275	0.68	11.0	22.0	41.5	37.5	150	300 E3	71QW3680(1)00(2)	R71QW3680(1)00(2)
1000	275	0.82	13.0	24.0	41.5	37.5	150	300 E3	71QW3820(1)00(2)	R71QW3820(1)00(2)
1000	275	1.0	11.0	22.0	41.5	37.5	150	300 E3	71QW4100(1)10(2)	R71QW4100(1)10(2)
1000	275	1.0	13.0	24.0	41.5	37.5	150	300 E3	71QW4100(1)00(2)	R71QW4100(1)00(2)
1000	275	1.2	11.0	22.0	41.5	37.5	150	300 E3	71QW4120(1)10(2)	R71QW4120(1)10(2)
1000	275	1.2	16.0	28.5	41.5	37.5	150	300 E3	71QW4120(1)00(2)	R71QW4120(1)00(2)
1000	275	1.5	11.0	22.0	41.5	37.5	150	300 E3	71QW4150(1)10(2)	R71QW4150(1)10(2)
1000	275	1.5	16.0	28.5	41.5	37.5	150	300 E3	71QW4150(1)00(2)	R71QW4150(1)00(2)
1000	275	1.8	13.0	24.0	41.5	37.5	150	300 E3	71QW4180(1)10(2)	R71QW4180(1)10(2)
1000	275	1.8	19.0	32.0	41.5	37.5	150	300 E3	71QW4180(1)00(2)	R71QW4180(1)00(2)
1000	275	2.2	16.0	28.5	41.5	37.5	120	240 E3	71QW4220(1)10(2)	R71QW4220(1)10(2)
1000	275	2.2	19.0	32.0	41.5	37.5	120	240 E3	71QW4220(1)00(2)	R71QW4220(1)00(2)
1000	275	2.7	16.0	28.5	41.5	37.5	120	240 E3	71QW4270(1)10(2)	R71QW4270(1)10(2)
1000	275	2.7	20.0	40.0	41.5	37.5	120	240 E3	71QW4270(1)00(2)	R71QW4270(1)00(2)
VDC	VAC	Cap Value (µF)	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/µs)	Max K_0 (V^2/µs)	New KEMET Part Number	Legacy Part Number

(1) Insert lead and packaging code. See Ordering Options Table for available options.
(2) J = 5%, K = 10%, M = 20%.

Roll Over for Order Info.

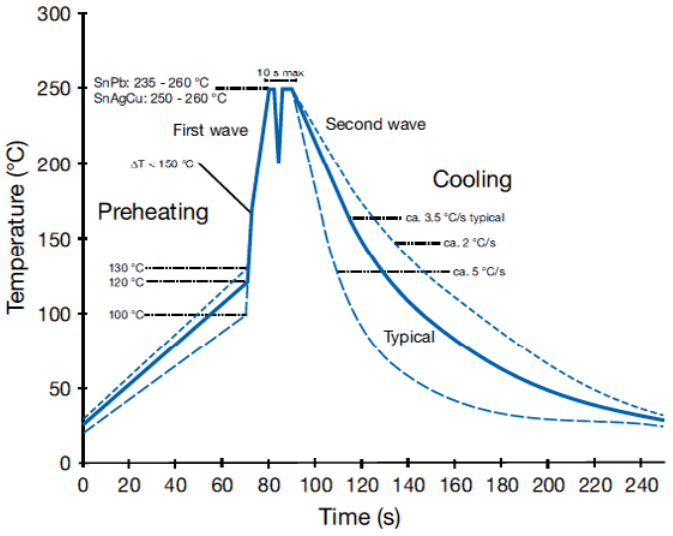
Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Cap Value (µF)	Dimensions in mm			Lead Spacing (p)	dV/dt (V/µs)	Max K_0 (V^2/µs)	New KEMET Part Number	Legacy Part Number
			B	H	L					
1000	275	3.3	19.0	32.0	41.5	37.5	120	240 E3	71QW4330(1)10(2)	R71QW4330(1)10(2)
1000	275	3.3	24.0	44.0	41.5	37.5	120	240 E3	71QW4330(1)00(2)	R71QW4330(1)00(2)
1000	275	3.9	19.0	32.0	41.5	37.5	120	240 E3	71QW4390(1)10(2)	R71QW4390(1)10(2)
1000	275	3.9	24.0	44.0	41.5	37.5	120	240 E3	71QW4390(1)00(2)	R71QW4390(1)00(2)
1000	275	4.7	20.0	40.0	41.5	37.5	80	160 E3	71QW4470(1)10(2)	R71QW4470(1)10(2)
1000	275	4.7	24.0	44.0	41.5	37.5	80	160 E3	71QW4470(1)00(2)	R71QW4470(1)00(2)
1000	275	5.6	20.0	40.0	41.5	37.5	80	160 E3	71QW4560(1)10(2)	R71QW4560(1)10(2)
1000	275	5.6	30.0	45.0	41.5	37.5	80	160 E3	71QW4560(1)00(2)	R71QW4560(1)00(2)
1000	275	6.8	24.0	44.0	41.5	37.5	80	160 E3	71QW4680(1)10(2)	R71QW4680(1)10(2)
1000	275	8.2	24.0	44.0	41.5	37.5	80	160 E3	71QW4820(1)10(2)	R71QW4820(1)10(2)
VDC	VAC	Cap Value (µF)	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/µs)	Max K_0 (V^2/µs)	New KEMET Part Number	Legacy Part Number

(1) Insert lead and packaging code. See Ordering Options Table for available options.
(2) J = 5%, K = 10%, M = 20%.

Soldering Process

The implementation of the RoHS Directive has required the selection SnAuCu (SAC) alloys or SnCu alloys as primary solder. This has increased the liquidus temperature from that of 183ºC for SnPb eutectic alloy to 217ºC – 221ºC for the new alloys. As a result, the heat stress to components, even in wave soldering, has increased considerably due to higher pre-heat and wave temperatures. Polypropylene capacitors are especially sensitive to heat (melting point of polypropylene is 160ºC – 170ºC). Wave soldering can be destructive especially for mechanically small polypropylene capacitors and great care must be taken during soldering. The solder profiles from KEMET are highly recommended. You may also refer to the wave soldering curve from IEC Publication 61760–1 Edition 2. Please consult KEMET with any questions.



Marking

- KEMET's logo
- Series
- Capacitance
- Capacitance tolerance
- Rated DC voltage
- Manufacturing date code

Packaging Quantities

Lead Spacing	Thickness (mm)	Height (mm)	Length (mm)	Bulk Short Leads	Bulk Long Leads	Standard Reel ø 355 mm	Large Reel ø 500 mm	Ammo	Pizza
10	4	9	13	2000	2200	750	1500	1000	
	5	11	13	1300	2000	600	1250	800	
	6	12	13	1000	1800	500	1000	680	
15	4	10	18	2500	1500	750	1500	1000	1411
	5	11	18	1000	1250	600	1250	800	1139
	6	12	18	1750	1000	500	1000	680	935
	7.5	13.5	18	1000	800	350	800	500	748
	6	17.5	18	1000	800	500	1000	680	935
	7.5	14.5	18	1000	750	350	800	500	748
	8.5	14.5	18	1000	650	300	700	440	663
	9	12.5	18	1000	700	270	650	410	629
	7.5	18.5	18	900	600	350	800	500	748
	10	16	18	750	550	300	600	380	561
	13	12	18	750	520	200	480	280	425
	11	19	18	450	400	250	500	340	510
22.5	6	15	26.5	1404	702	300	700	464	660
	7	16	26.5	1188	594	250	550	380	564
	8.5	17	26.5	972	486	250	450	280	468
	10	18.5	26.5	810	405	160	350	235	396
	11	20	26.5	630	378	190	350	217	360
	13	22	26.5	540	324	150	300	200	300
27.5	9	17	32	816	408		450		
	10	20	32	600	360		350		
	11	20	32	560	336		350		
	13	22	32	480	288		300		
	13	25	32	480	288				
	14	28	32	352	176				
	15	24.5	32	400	240				
	18	33	32	256	128				
	22	37	32	168	112				

General Purpose, Pulse and DC Transient Suppression

PHE429 Series Single Metallized Polypropylene Film, Optimized for SMPS PFC Applications

The Capacitance Company
KEMET
CHARGED.

Overview

The PHE429 Series is a metallized polypropylene film encapsulated with self-extinguishing resin in a box of material meeting the requirements of UL 94 V–0.

Applications

Typical applications include power factor correction and pulse applications.

Benefits

- Rated voltage: 420 – 630 VDC
- Rated voltage: 220 – 275 VAC
- Capacitance range: 0.047 – 0.47 µF
- Lead spacing: 15 mm
- Capacitance tolerance: ±10%, other tolerances on request
- Climatic category: 55/110/56, IEC 60068–1
- Tape and reel packaging in accordance with IEC 60286–2
- RoHS Compliant and lead-free terminations
- Category temperature range of -55˚C to +110˚C

Legacy Part Number System

PHE429	K	B	6100	K	R06
Series	Rated Voltage (VDC)	Lead Spacing (mm)	Capacitance Code (pF)	Capacitance Tolerance	Lead and Packaging Code
Metallized Polypropylene	K = 420 M = 630	B = 15.0	Digits 2 – 4 indicate the first three digits of the capacitance value. First digit indicates the number of zeros to be added.	K = ±10% Other tolerances on request	See Ordering Options Table

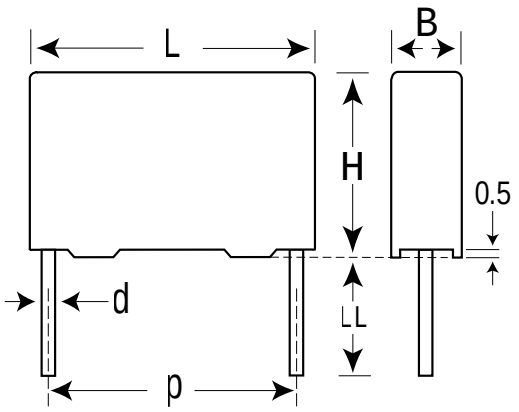
New KEMET Part Number System

F	429	B	D	104	K	420	C
Capacitor Class	Series	Lead Spacing (mm)	Size Code	Capacitance Code (pF)	Capacitance Tolerance	Rated Voltage (VDC)	Lead and Packaging Code
F = Film	Metallized Polypropylene	B = 15.0	See Dimension Table	First two digits indicate the two most significant digits of the capacitance value in picofarads. The third digit is the number of following zeros.	K = ±10% Other tolerances on request	420 = 420 630 = 630	See Ordering Options Table

Ordering Options Table

Lead Spacing Nominal (mm)	Type of Leads and Packaging	Lead Length (mm)	KEMET Lead and Packaging Code	Legacy Lead and Packaging Code
15	Standard Lead and Packaging Options			
	Bulk (Bag) – Short Leads	6 +0/-1	C	R06
	Bulk (Bag) – Max Length Leads	30 +5/-0	A	R30
	Other Lead and Packaging Options			
	Bulk (Bag) – Max Length Leads	30 +5/-0	ALW0L	R30
	Tape & Reel (Standard Reel)	H_0= 18.5 +/-0.5	L	R17T0
	Tape & Reel (Large Reel)	H_0= 18.5 +/-0.5	P	R17T1
Native 15 formed to 7.5	Ammo Pack	H_0= 16.5 +/-0.5	XLAF1	R25XA
	Tape & Reel (Standard Reel)	H_0= 16.5 +/-0.5	XLTF1	R25X2

Dimensions – Millimeters



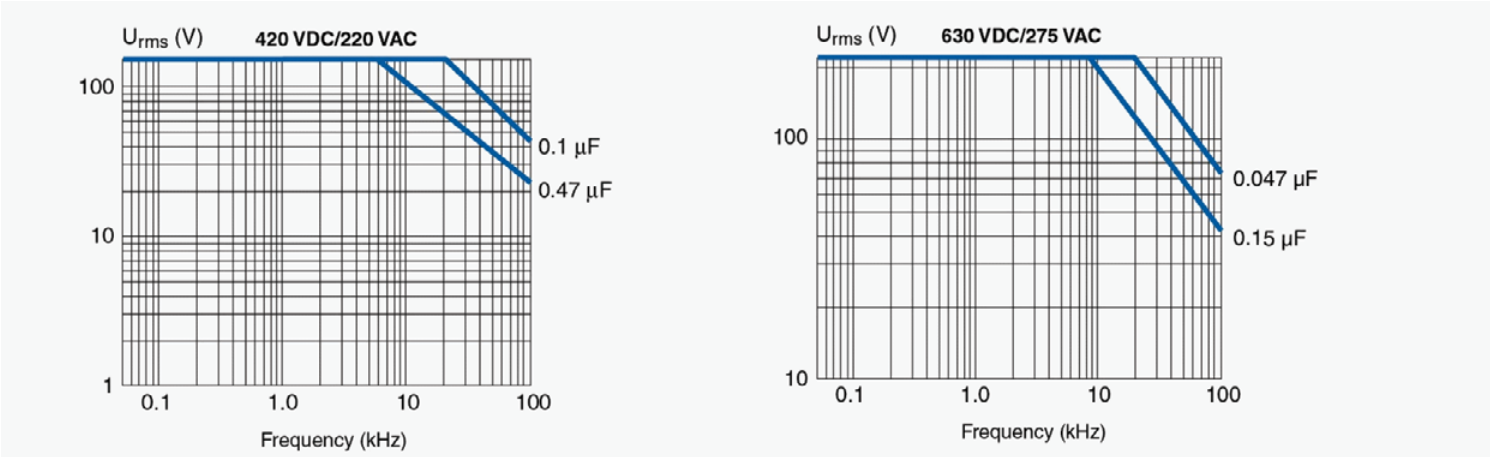
KEMET Size Code	Legacy Size Code	p		B		H		L		d	
		Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance
BD	B04	15	+/-0.4	5.5	Maximum	10.5	Maximum	18	Maximum	0.8	+/-0.05
BG	B15	15	+/-0.4	6	Maximum	12	Maximum	18	Maximum	0.8	+/-0.05
BJ	B10	15	+/-0.4	6.5	Maximum	12.5	Maximum	18	Maximum	0.8	+/-0.05
BL	B06	15	+/-0.4	7.5	Maximum	14.5	Maximum	18	Maximum	0.8	+/-0.05
BM	B12	15	+/-0.4	8	Maximum	15	Maximum	18	Maximum	0.8	+/-0.05

Note: See Ordering Options Table for lead length (LL) options.

Performance Characteristics

Voltage Range (VDC)	420	630
Voltage Range (VAC)	220	275
Capacitance Range (µF)	0.1 – 0.47	0.047 – 0.15
Capacitance Tolerance	±10%, other tolerances on request	
Category Temperature Range	-55°C to +110°C	
Rated Temperature	+85°C	
Voltage Derating	The rated voltage is decreased with 1.3%/°C between +85°C and +110°C	
Climatic Category	IEC 60068–1, 55/110/56	
Maximum Pulse Steepness	dV/dt according to Table 1. For peak to peak voltages lower than rated voltage ($V_{PP} < V_R$), the specified dV/dt can be multiplied by the factor V_R/V_{PP}.	
Self-Inductance	Approximately 6 nH/cm for the total length of capacitor winding and the leads	
Dissipation Factor tanδ	Maximum Values at +23°C	
	1 kHz	0.001
Insulation Resistance	Measured at +23°C, 100 VDC 60 seconds for V_R < 500 VDC and at 500 VDC for V_R ≥ 500 VDC	
	Minimum Values Between Terminals	
	C ≤ 0.33 µF	≥ 100,000 MΩ
	C > 0.33 µF	≥ 30,000 MΩ • µF
	Minimum Values Between Terminals and Case	
		≥ 100,000 MΩ

Derating of V_{rms} vs. Frequency, +85ºC Ambient Temperature and 10ºC Internal Heating, Typical Values



Environmental Test Data

Test	IEC Publication	Procedure	Requirements
Voltage Proof	60384–1 Clause 4.6	1.6 x V_R after 60 seconds	The capacitors must withstand the voltage without breakdowns or flashovers and without decreased insulation resistance below the value in each detail specification. No visible damage
	Clause 4.6 2.3	2 x V_R (minimum 400 VDC to case) after 60 seconds	As above
Vibration	60068–2–6 Test Fc	6 hours with 10 – 500 Hz and 0.75 mm amplitude or 98 m/s^2 depending on frequency	No visible damage tanδ ≤ 1.2 x stated value at 100 kHz Δ C/C ≤ ±0.5 %
Bump	60068–2–29 Test Eb	4,000 bumps with 390 m/s^2 mounted on PCB	Δ C/C ≤ ±0.5% tanδ ≤ 1.2 x stated value at 100 kHz Insulation resistance: ≥ 100,000 MΩ for C_R ≤ 0.33 µF ≥ 30,000 MΩ • µF for C_R > 0.33 µF
Resistance to Soldering Heat	60068–2–20 Method 1A	Solder bath at + 260°C ±5°C with screening	Immersion of the terminations into the solder bath shall be completed in a time not exceeding 1 second and the terminations shall remain immersed to the specified depth for 10 + 1 second and then be withdrawn. Δ C/C ≤ ±1.0% tanδ increase < 0.001 No visible damage
Climatic Sequence	60384–1 Paragraph 4:21	60068–2.2 dry heat 16 hours 60068–2–34 damp heat, one cycle 60068–2–1 Test Aa 2 hours	Insulation resistance: ≥ 100,000 MΩ for C_R ≤ 0.33 µF ≥ 30,000 MΩ • µF for C_R > 0.33 µF Δ C/C ≤ ±0.5% tanδ ≤ 1.2 x stated value at 100 kHz
Damp Heat Steady State	60068–2–3 Test Ca	+40°C and 90 – 95% RH	56 days no visible damage Insulation resistance: ≥ 50,000 MΩ for C_R ≤ 0.33 µF ≥ 15,000 MΩ • µF for C_R > 0.33 µF Δ C/C ≤ ±1% tanδ ≤ 1.2 x stated value at 100 kHz
Endurance, AC		1,000 hours at +85°C and 1.25 x V_R AC	No visible damage Δ C/C ≤ ±3% tanδ ≤ 1.5 x stated value at 100 kHz Insulation resistance: ≥ 100,000 MΩ for C_R ≤ 0.33 µF ≥ 30,000 MΩ • µF for C_R > 0.33 µF
Charge and Discharge	60384–17 Paragraph 4.13	10,000 pulses and with (2 x) dV/dt according to detail specification	tanδ (100 kHz) ≤ 2 x stated value (100 kHz) Δ C/C ≤ ±0.5% Insulation resistance: ≥ 50,000 MΩ for C_R ≤ 0.33 µF ≥ 15,000 MΩ • µF for C_R > 0.33 µF

Environmental Compliance

All KEMET pulse capacitors are RoHS Compliant.

RoHS Compliant

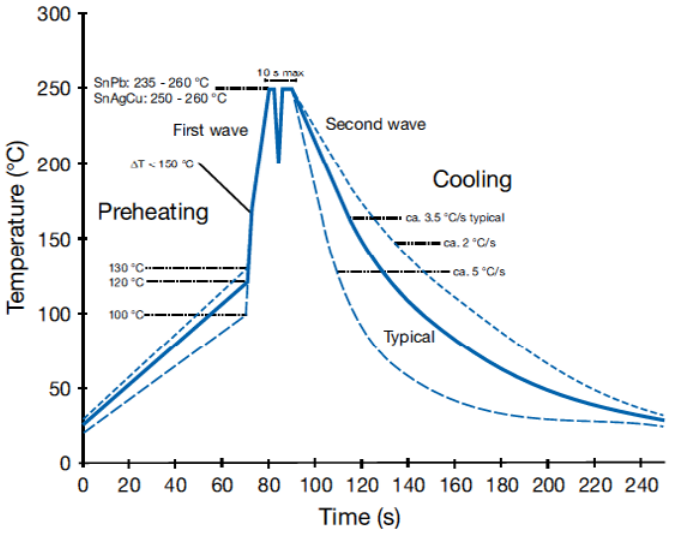
Table 1 – Ratings & Part Number Reference

VDC	VAC	Cap Value (µF)	Dimensions in mm			Lead Space	dV/dt (V/µs)	Size Code (New/Legacy)	R_{thha} °C/W 85°C 0.2m/s	New KEMET Part Number	Legacy Part Number
			B	H	L						
420	220	0.10	5.5	10.5	18.0	15	150	BD/B04	99	F429BD104K420(1)	PHE429KB6100K(1)
420	220	0.15	5.5	10.5	18.0	15	150	BD/B04	99	F429BD154K420(1)	PHE429KB6150K(1)
420	220	0.22	6.0	12.0	18.0	15	150	BG/B15	83	F429BG224K420(1)	PHE429KB6220K(1)
420	220	0.33	7.5	14.5	18.0	15	150	BL/B06	74	F429BL334K420(1)	PHE429KB6330K(1)
420	220	0.47	8.0	15.0	18.0	15	150	BM/B12	71	F429BM474K420(1)	PHE429KB6470K(1)
630	420	0.047	5.5	10.5	18.0	15	250	BD/B04	99	F429BD473K630(1)	PHE429MB5470K(1)
630	420	0.068	5.5	10.5	18.0	15	250	BD/B04	99	F429BD683K630(1)	PHE429MB5680K(1)
630	420	0.10	5.5	10.5	18.0	15	250	BD/B04	99	F429BD104K630(1)	PHE429MB6100K(1)
630	420	0.15	6.5	12.5	18.0	15	250	BJ/B10	84	F429BJ154K630(1)	PHE429MB6150K(1)
VDC	VAC	Cap Value (µF)	B (mm)	H (mm)	L (mm)	Lead Space	dV/dt (V/µs)	Size Code (New/Legacy)	R_{thha} °C/W 85°C 0.2m/s	New KEMET Part Number	Legacy Part Number

(1) Insert lead and packaging code. See Ordering Options Table for available options.

Soldering Process

The implementation of the RoHS Directive has required the selection SnAuCu (SAC) alloys or SnCu alloys as primary solder. This has increased the liquidus temperature from that of 183°C for SnPb eutectic alloy to 217°C – 221°C for the new alloys. As a result, the heat stress to components, even in wave soldering, has increased considerably due to higher pre-heat and wave temperatures. Polypropylene capacitors are especially sensitive to heat (melting point of polypropylene is 160°C – 170°C). Wave soldering can be destructive especially for mechanically small polypropylene capacitors and great care must be taken during soldering. The solder profiles from KEMET are highly recommended. You may also refer to the wave soldering curve from IEC Publication 61760–1 Edition 2. Please consult KEMET with any questions.



Marking

- KEMET's logo
- Series
- Capacitance
- Capacitance tolerance
- Rated DC voltage
- Manufacturing date code

Packaging Quantities

KEMET Size Code	Legacy Size Code	Lead Spacing	Thickness (mm)	Height (mm)	Length (mm)	Bulk Short Leads	Bulk Long Leads	Standard Reel ø 360 mm	Large Reel ø 500 mm	Standard Reel Formed	Ammo Formed
BD	B04	15	5.5	10.5	18	1000	800	600	1200	550	570
BE	B05		5.5	12.5	18	1000	800	600	1200	550	570
BL	B06		7.5	14.5	18	800	400	400	800	350	378
BJ	B10		6.5	12.5	18	1000	600	500	1000	450	480
BQ	B11		8.5	16	18	600	400	400	800	350	324
BM	B12		8	15	18	600	400	400	800	350	351
BV	B14		9.5	17.5	18	500	300	350	700	250	297
BG	B15		6	12	18	1000	800	500	1000	450	520
BY	B16		11	19	18	450	250	300	600	250	252
BU	B17		13	12.5	18	400	300	250	500	200	216

A70 Series Single Metallized Polypropylene Film, Axial

Overview

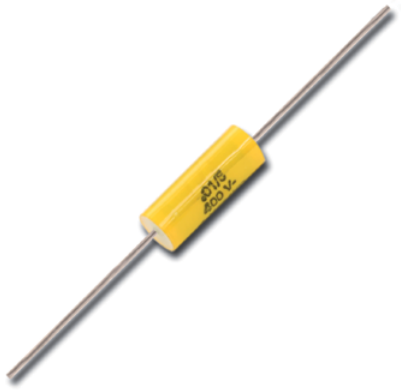
The A70 Series is a metallized polypropylene film encapsulated with an aluminum layer deposited by evaporation under vacuum. Protection consists of polyester tape wrapping and thermosetting resin end fill.

Applications

Typical applications include temperature compensation circuits, timing, oscillator circuits, power factor correction and coupling capacitors in switched mode power supply (SMPS) applications.

Benefits

- Rated voltage: 160 – 630 VDC
- Rated voltage: 90 – 250 VAC
- Capacitance range: 0.001 – 4.7 µF
- Diameter: 5 – 21.5 mm
- Length: 11 – 33 mm
- Capacitance tolerance: ±5%, ±10%, ±20%
- Climatic category: 55/105/56, IEC 60068–1
- Tape and reel packaging in accordance with IEC 60286–1
- RoHS Compliant and lead-free terminations
- Category temperature range of -55˚C to +105˚C



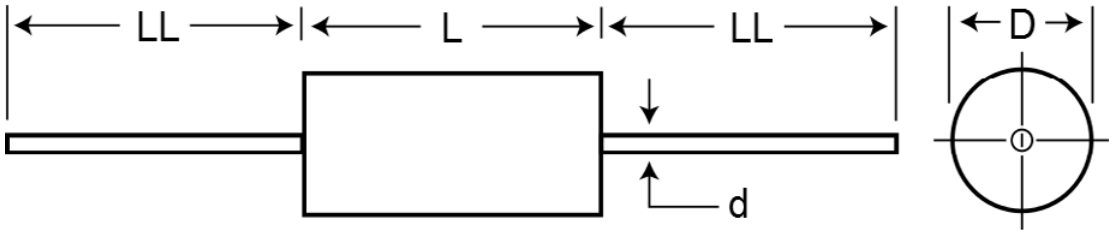
Part Number System

A70	G	F	2220	AA	00	J
Series	Rated Voltage (VDC)	Length (mm)	Capacitance Code (pF)	Lead and Packaging Code	Internal Use	Capacitance Tolerance
Metallized Polypropylene	G = 160 I = 250 M = 400 P = 630	F = 11 H= 14 K = 20.5 Q = 28 T = 33	Digits 2 – 4 indicate the first three digits of the capacitance value. First digit indicates the number of zeros to be added.	See Ordering Options Table	00 (Standard)	J = ±5% K = ±10% M = ±20%

Ordering Options Table

Type of Leads and Packaging	Lead Length (mm)	Lead and Packaging Code
Bulk (Bag) – Straight Leads	40 +/-5	AA
Tape & Reel (Standard Reel)		26

Dimensions – Millimeters



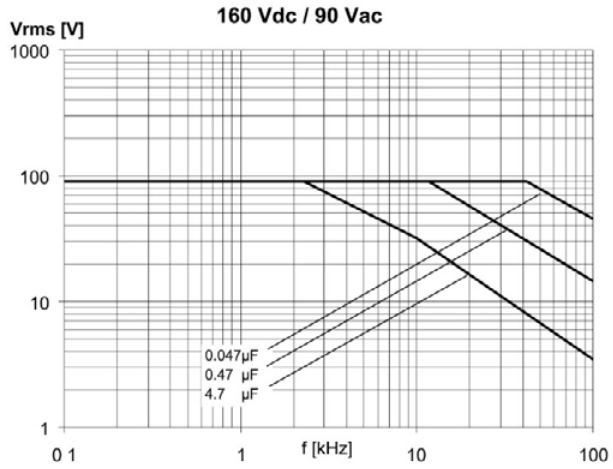
D		L		d	
Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance
5	Maximum	11	Maximum	0.5	+/-0.05
5.5	Maximum	14	Maximum	0.6	+/-0.05
6	Maximum	14	Maximum	0.6	+/-0.05
6.5	Maximum	14	Maximum	0.6	+/-0.05
7	Maximum	14	Maximum	0.6	+/-0.05
7	Maximum	20.5	Maximum	0.6	+/-0.05
7.5	Maximum	14	Maximum	0.8	+/-0.05
7.5	Maximum	20.5	Maximum	0.8	+/-0.05
8	Maximum	20.5	Maximum	0.8	+/-0.05
8	Maximum	28	Maximum	0.8	+/-0.05
8.5	Maximum	14	Maximum	0.8	+/-0.05
8.5	Maximum	20.5	Maximum	0.8	+/-0.05
8.5	Maximum	28	Maximum	0.8	+/-0.05
9	Maximum	20.5	Maximum	0.8	+/-0.05
9.5	Maximum	28	Maximum	0.8	+/-0.05
10	Maximum	28	Maximum	0.8	+/-0.05
11	Maximum	28	Maximum	0.8	+/-0.05
11.5	Maximum	28	Maximum	0.8	+/-0.05
12	Maximum	33	Maximum	0.8	+/-0.05
12.5	Maximum	33	Maximum	0.8	+/-0.05
13	Maximum	28	Maximum	0.8	+/-0.05
13.5	Maximum	33	Maximum	0.8	+/-0.05
14.5	Maximum	33	Maximum	0.8	+/-0.05
15	Maximum	33	Maximum	0.8	+/-0.05
Note: See Ordering Options Table for lead length (LL) options.					

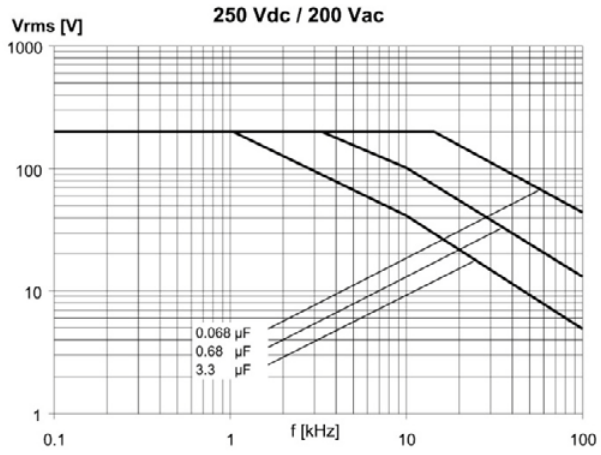
D		L		d	
Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance
16.5	Maximum	33	Maximum	1	+/-0.05
17	Maximum	33	Maximum	1	+/-0.05
17.5	Maximum	33	Maximum	1	+/-0.05
18	Maximum	33	Maximum	1	+/-0.05
20	Maximum	33	Maximum	1	+/-0.05
21	Maximum	33	Maximum	1	+/-0.05
21.5	Maximum	33	Maximum	1	+/-0.05
Note: See Ordering Options Table for lead length (LL) options.					

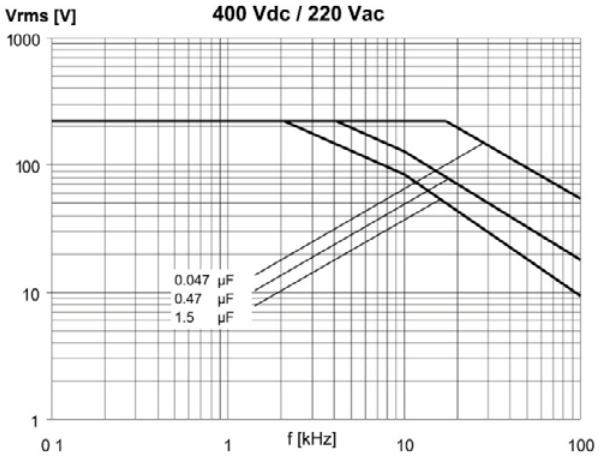
Performance Characteristics

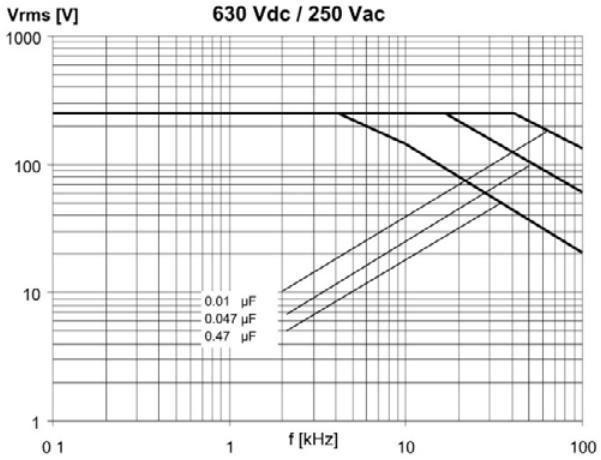
Voltage Range (VDC)	160	250	400	630
Voltage Range (VAC)	90	200	220	250
Capacitance Range (µF)	0.022 – 4.7	0.01 – 3.3	0.0068 – 1.5	0.001 – 0.68
Capacitance Values	IEC E6 Values			
Capacitance Tolerance	±5%, ±10%, ±20%			
Category Temperature Range	-55°C to +105°C			
Rated Temperature	+85°C			
Voltage Derating	The rated voltage is decreased with 1.25%/°C between +85°C and +105°C			
Climatic Category	IEC 60068–1, 55/105/56			
Self-Inductance	Approximately 1 nH/mm for the total length of capacitor winding and the leads			
Dissipation Factor tanδ	Measured at 25°C ± 5°C			
		C ≤ 0.1 µF	0.1 µF < C ≤ 1 µF	C ≥ 1 µF
	1 kHz	0.0006	0.0006	0.0006
	10 kHz	0.001	0.002	
	100 kHz	0.003		
Insulation Resistance	Typical Value at +25°C, 100 VDC 60 seconds			
	Minimum Values Between Terminals:			
	C ≤ 0.33 µF		≥ 100,000 MΩ	
	C > 0.33 µF		≥ 30,000 MΩ • µF	
Test Voltage Between Terminals	1.6 x V_R applied for 2 seconds at 25°C ± 5°C			

Maximum Voltage (V_{rms}) vs. Frequency (Sinusoidal Waveform/T ≤ 40ºC)

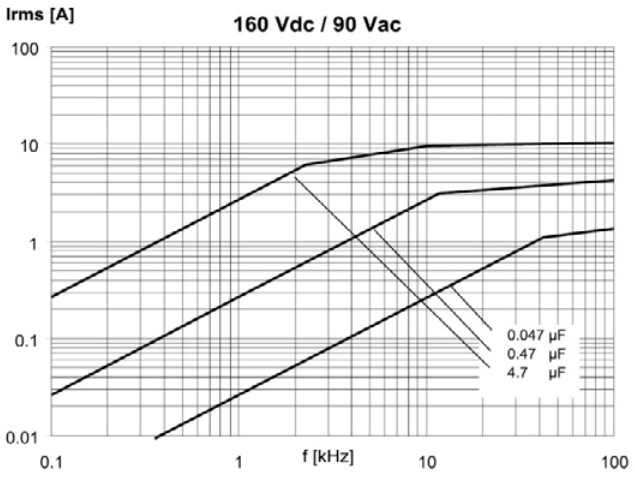


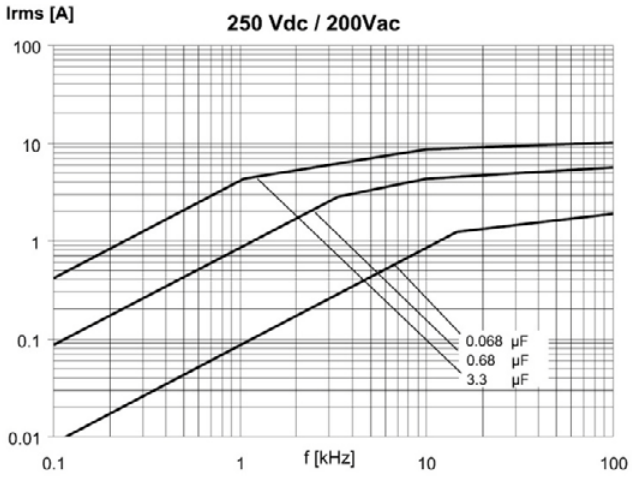


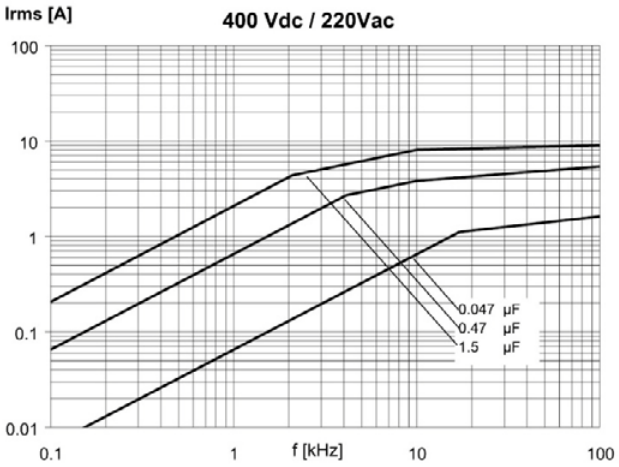


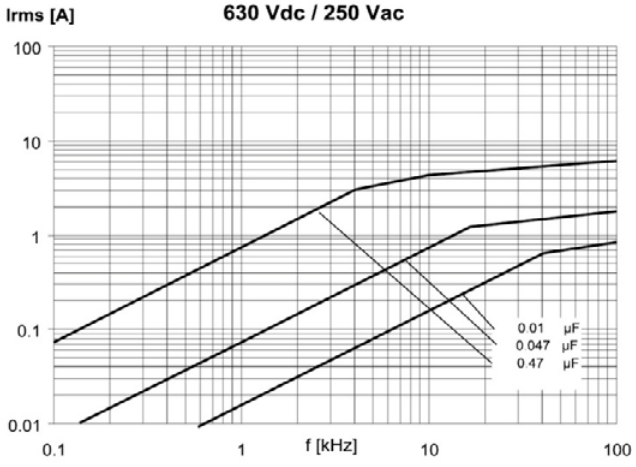


Maximum Current (I_{rms}) vs. Frequency (Sinusoidal Waveform/T ≤ 40ºC)









Environmental Test Data

Test	IEC Publication	Procedure	Requirements
Voltage Proof	60384–1 Clause 4.6	1.6 x V_R after 60 seconds	The capacitors must withstand the voltage without breakdowns or flashovers and without decreased insulation resistance below the value in each detail specification. No visible damage
	Clause 4.6 2.3	2 x V_R (minimum 400 VDC to case) after 60 seconds	As above
Resistance to Soldering Heat	60068–2–20 Method 1A	Solder bath at + 260°C ±5°C with screening	Immersion of the terminations into the solder bath shall be completed in a time not exceeding 1 second and the terminations shall remain immersed to the specified depth for 10 + 1 second and then be withdrawn. Δ C/C ≤ ±1.0% tanδ increase < 0.001 No visible damage
Climatic Sequence	60384–1 Paragraph 4:21	60068–2.2 dry heat 16 hours 60068–2–34 damp heat, one cycle 60068–2–1 Test Aa 2 hours	Insulation resistance: ≥ 100,000 MΩ for C_R ≤ 0.33 µF ≥ 30,000 MΩ • µF for C_R > 0.33 µF Δ C/C ≤ ±0.5% tanδ ≤ 1.2 x stated value at 100 kHz
Damp Heat Steady State	60068–2–3 Test Ca	+40°C and 90 – 95% RH	56 days no visible damage Insulation resistance: ≥ 50,000 MΩ for C_R ≤ 0.33 µF ≥ 15,000 MΩ • µF for C_R > 0.33 µF Δ C/C ≤ ±1% tanδ ≤ 1.2 x stated value at 100 kHz
Endurance, AC		1,000 hours at +85°C and 1.25 x V_R AC	No visible damage Δ C/C ≤ ±3% tanδ ≤ 1.5 x stated value at 100 kHz Insulation resistance: ≥ 100,000 MΩ for C_R ≤ 0.33 µF ≥ 30,000 MΩ • µF for C_R > 0.33 µF

Environmental Compliance

All KEMET pulse capacitors are RoHS Compliant.

RoHS Compliant

Table 1 – Ratings & Part Number Reference

VDC	VAC	Cap Value (µF)	Dimensions in mm		dV/dt (V/µs)	Max K_0 (V^2/µs)	New KEMET Part Number	Legacy Part Number
			D	L				
160	90	0.022	5.0	11.0	5	160 E3	70GF2220(1)00(2)	A70GF2220(1)00(2)
160	90	0.033	5.0	11.0	5	160 E3	70GF2330(1)00(2)	A70GF2330(1)00(2)
160	90	0.047	5.0	11.0	5	160 E3	70GF2470(1)00(2)	A70GF2470(1)00(2)
160	90	0.068	5.5	14.0	5	160 E3	70GH2680(1)00(2)	A70GH2680(1)00(2)
160	90	0.10	5.5	14.0	5	160 E3	70GH3100(1)00(2)	A70GH3100(1)00(2)
160	90	0.15	6.5	14.0	5	160 E3	70GH3150(1)00(2)	A70GH3150(1)00(2)
160	90	0.22	7.5	14.0	5	160 E3	70GH3220(1)00(2)	A70GH3220(1)00(2)
160	90	0.33	7.0	20.5	3	160 E3	70GK3330(1)00(2)	A70GK3330(1)00(2)
160	90	0.47	8.0	20.5	3	160 E3	70GK3470(1)00(2)	A70GK3470(1)00(2)
160	90	0.68	8.0	28.0	2	160 E3	70GQ3680(1)00(2)	A70GQ3680(1)00(2)
160	90	1.0	9.5	28.0	2	160 E3	70GQ4100(1)00(2)	A70GQ4100(1)00(2)
160	90	1.5	11.0	28.0	2	160 E3	70GQ4150(1)00(2)	A70GQ4150(1)00(2)
160	90	2.2	12.0	33.0	1	160 E3	70GT4220(1)00(2)	A70GT4220(1)00(2)
160	90	3.3	14.5	33.0	1	160 E3	70GT4330(1)00(2)	A70GT4330(1)00(2)
160	90	4.7	17.0	33.0	1	160 E3	70GT4470(1)00(2)	A70GT4470(1)00(2)
250	200	0.010	5.0	11.0	11.0	250 E3	70IF2100(1)00(2)	A70IF2100(1)00(2)
250	200	0.015	5.0	11.0	11.0	250 E3	70IF2150(1)00(2)	A70IF2150(1)00(2)
250	200	0.022	5.5	14.0	10.0	250 E3	70IH2220(1)00(2)	A70IH2220(1)00(2)
250	200	0.033	5.5	14.0	10.0	250 E3	70IH2330(1)00(2)	A70IH2330(1)00(2)
250	200	0.047	6.0	14.0	10.0	250 E3	70IH2470(1)00(2)	A70IH2470(1)00(2)
250	200	0.068	7.0	14.0	10.0	250 E3	70IH2680(1)00(2)	A70IH2680(1)00(2)
250	200	0.10	8.5	14.0	10.0	250 E3	70IH3100(1)00(2)	A70IH3100(1)00(2)
250	200	0.15	7.5	20.5	7.0	250 E3	70IK3150(1)00(2)	A70IK3150(1)00(2)
250	200	0.22	9.0	20.5	7.0	250 E3	70IK3220(1)00(2)	A70IK3220(1)00(2)
250	200	0.33	8.5	28.0	4.0	250 E3	70IQ3330(1)00(2)	A70IQ3330(1)00(2)
250	200	0.47	10.0	28.0	4.0	250 E3	70IQ3470(1)00(2)	A70IQ3470(1)00(2)
250	200	0.68	11.5	28.0	4.0	250 E3	70IQ3680(1)00(2)	A70IQ3680(1)00(2)
250	200	1.0	12.5	33.0	2.5	250 E3	70IT4100(1)00(2)	A70IT4100(1)00(2)
250	200	1.5	15.0	33.0	2.5	250 E3	70IT4150(1)00(2)	A70IT4150(1)00(2)
250	200	2.2	18.0	33.0	2.5	250 E3	70IT4220(1)00(2)	A70IT4220(1)00(2)
250	200	3.3	21.5	33.0	2.5	250 E3	70IT4330(1)00(2)	A70IT4330(1)00(2)
400	220	0.0068	5.0	11.0	25.0	400 E3	70MF1680(1)00(2)	A70MF1680(1)00(2)
400	220	0.010	5.5	14.0	13.5	400 E3	70MH2100(1)00(2)	A70MH2100(1)00(2)
400	220	0.015	6.0	14.0	13.5	400 E3	70MH2150(1)00(2)	A70MH2150(1)00(2)
400	220	0.022	6.0	14.0	13.5	400 E3	70MH2220(1)00(2)	A70MH2220(1)00(2)
400	220	0.033	6.5	14.0	13.5	400 E3	70MH2330(1)00(2)	A70MH2330(1)00(2)
400	220	0.047	8.0	14.0	13.5	400 E3	70MH2470(1)00(2)	A70MH2470(1)00(2)
400	220	0.068	7.0	20.5	10.0	400 E3	70MK2680(1)00(2)	A70MK2680(1)00(2)
400	220	0.10	8.0	20.5	10.0	400 E3	70MK3100(1)00(2)	A70MK3100(1)00(2)
400	220	0.15	8.0	28.0	6.5	400 E3	70MQ3150(1)00(2)	A70MQ3150(1)00(2)
400	220	0.22	9.5	28.0	6.5	400 E3	70MQ3220(1)00(2)	A70MQ3220(1)00(2)
400	220	0.33	11.0	28.0	6.5	400 E3	70MQ3330(1)00(2)	A70MQ3330(1)00(2)
400	220	0.47	13.0	28.0	6.5	400 E3	70MQ3470(1)00(2)	A70MQ3470(1)00(2)
400	220	0.68	13.5	33.0	4.0	400 E3	70MT3680(1)00(2)	A70MT3680(1)00(2)
400	220	1.0	16.5	33.0	4.0	400 E3	70MT4100(1)00(2)	A70MT4100(1)00(2)
400	220	1.5	20.0	33.0	4.0	400 E3	70MT4150(1)00(2)	A70MT4150(1)00(2)
630	250	0.0010	5.0	11.0	30	630 E3	70PF1100(1)00(2)	A70PF1100(1)00(2)
630	250	0.0015	5.0	11.0	30	630 E3	70PF1150(1)00(2)	A70PF1150(1)00(2)
630	250	0.0022	5.0	11.0	30	630 E3	70PF1220(1)00(2)	A70PF1220(1)00(2)
630	250	0.0033	5.0	11.0	30	630 E3	70PF1330(1)00(2)	A70PF1330(1)00(2)
630	250	0.0047	5.0	11.0	30	630 E3	70PF1470(1)00(2)	A70PF1470(1)00(2)
630	250	0.0068	5.5	14.0	20	630 E3	70PH1680(1)00(2)	A70PH1680(1)00(2)
630	250	0.010	6.0	14.0	20	630 E3	70PH2100(1)00(2)	A70PH2100(1)00(2)
630	250	0.015	7.0	14.0	20	630 E3	70PH2150(1)00(2)	A70PH2150(1)00(2)
630	250	0.022	8.5	14.0	20	630 E3	70PH2220(1)00(2)	A70PH2220(1)00(2)
630	250	0.033	7.5	20.5	15	630 E3	70PK2330(1)00(2)	A70PK2330(1)00(2)
630	250	0.047	8.5	20.5	15	630 E3	70PK2470(1)00(2)	A70PK2470(1)00(2)
630	250	0.068	8.5	28.0	10	630 E3	70PQ2680(1)00(2)	A70PQ2680(1)00(2)
630	250	0.10	10.0	28.0	10	630 E3	70PQ3100(1)00(2)	A70PQ3100(1)00(2)
630	250	0.15	11.5	28.0	10	630 E3	70PQ3150(1)00(2)	A70PQ3150(1)00(2)
VDC	VAC	Cap Value (µF)	B (mm)	H (mm)	dV/dt (V/µs)	Max K_0 (V^2/µs)	New KEMET Part Number	Legacy Part Number

(1) Insert lead and packaging code. See Ordering Options Table for available options.
(2) J = 5%, K = 10%, M = 20%.

Roll Over for Order Info.

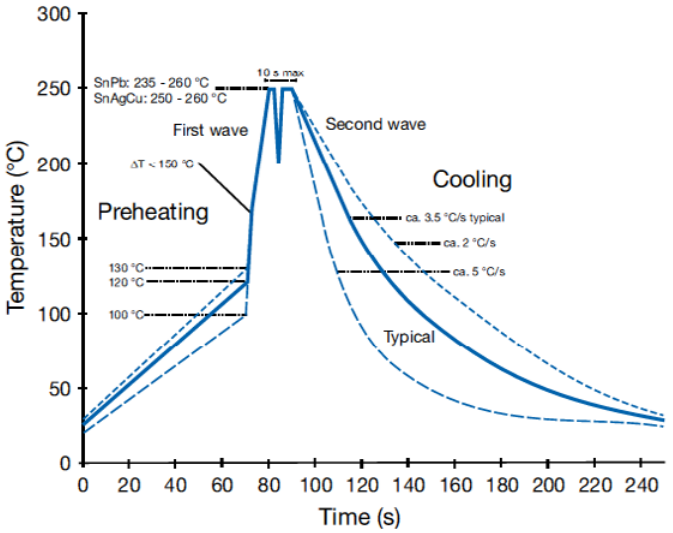
Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Cap Value (µF)	Dimensions in mm		dV/dt (V/µs)	Max K_0 (V^2/µs)	New KEMET Part Number	Legacy Part Number
			D	L				
630	250	0.22	12.5	33.0	6	630 E3	70PT3220(1)00(2)	A70PT3220(1)00(2)
630	250	0.33	15.0	33.0	6	630 E3	70PT3330(1)00(2)	A70PT3330(1)00(2)
630	250	0.47	17.5	33.0	6	630 E3	70PT3470(1)00(2)	A70PT3470(1)00(2)
630	250	0.68	21.0	33.0	6	630 E3	70PT3680(1)00(2)	A70PT3680(1)00(2)
VDC	VAC	Cap Value (µF)	B (mm)	H (mm)	dV/dt (V/µs)	Max K_0 (V^2/µs)	New KEMET Part Number	Legacy Part Number

(1) Insert lead and packaging code. See Ordering Options Table for available options.
(2) J = 5%, K = 10%, M = 20%.

Soldering Process

The implementation of the RoHS Directive has required the selection SnAuCu (SAC) alloys or SnCu alloys as primary solder. This has increased the liquidus temperature from that of 183ºC for SnPb eutectic alloy to 217ºC – 221ºC for the new alloys. As a result, the heat stress to components, even in wave soldering, has increased considerably due to higher pre-heat and wave temperatures. Polypropylene capacitors are especially sensitive to heat (melting point of polypropylene is 160ºC – 170ºC). Wave soldering can be destructive especially for mechanically small polypropylene capacitors and great care must be taken during soldering. The solder profiles from KEMET are highly recommended. You may also refer to the wave soldering curve from IEC Publication 61760–1 Edition 2. Please consult KEMET with any questions.



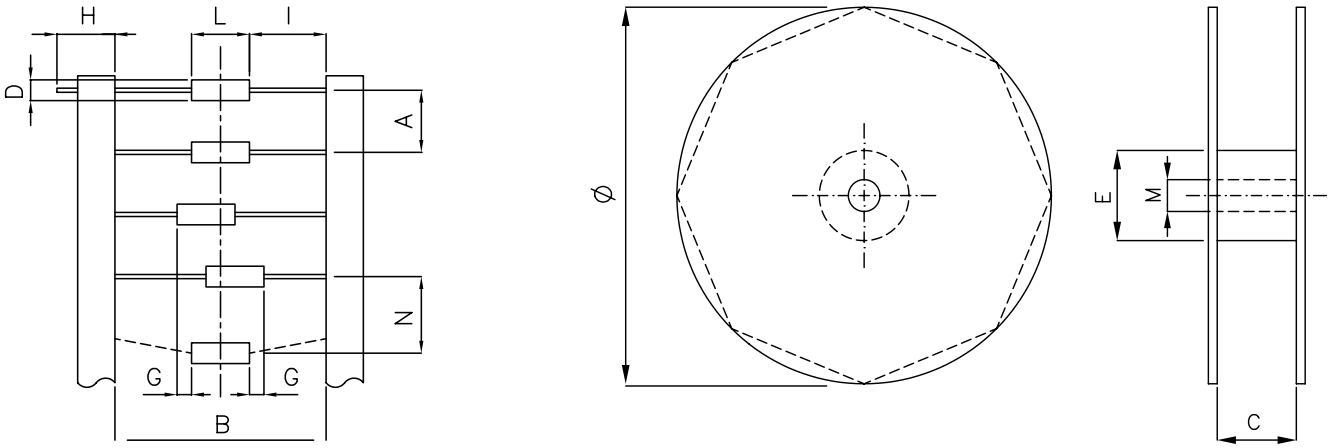
Marking

- KEMET's logo
- Series
- Dielectric code MKP
- Capacitance
- Capacitance tolerance
- Rated DC voltage

Packaging Quantities

Diameter	Length	Bulk Long Leads	Standard Reel ø 355 mm
5	11	1500	3000
5.5	14	1500	1500
6	14	1200	1300
6.5	14	1200	1300
7	14	1500	1000
7	20.5	1250	1100
7.5	14	1500	1000
7.5	20.5	1000	1000
8	20.5	1000	900
8	28	500	900
8.5	14	1000	800
8.5	20.5	750	800
8.5	28	500	800
9	20.5	750	800
9.5	28	500	600
10	28	500	600
11	28	500	400
11.5	28	300	400
12	33	300	400
12.5	33	300	400
13	28	300	400
13.5	33	300	300
14.5	33	300	300
15	33	300	300
16.5	33	200	250
17	33	200	200
17.5	33	200	200
18	33	200	200
20	33	150	150
21	33	100	
21.5	33	100	

Lead Taping & Packaging (IEC 60286–1)



Taping Specification

Description	Symbol	Dimensions (mm)
Component diameter	D	4.5 – 19.5
Body length	L	11 – 33
Component lead spacing	A(1)	See Table 1
Reel core diameter	E	85
Arbor hole diameter	M	30
Reel diameter	ø	355 maximum
Tape width	H	6 ± 0.5/9 ± 1(2)
Body location (lateral deviation)	G	≤ 0.7
Body location (longitudinal deviation)	N	≤ 1.2
Tape spacing	B	See Table 2
Lead length from the component body to the adhesive tape	I	≥ 20
Distance between reel flanges	C	See Table 2

(1) Maximum cumulative feed hole error 1.5 mm per 6 parts.
(2) 9 ±1 for capacitor with L ≥ 31.5.

Table 1

Dimensions in mm	
Diameter	$A^{\pm 0.5}$
≤ 5	5
5.1 – 9.5	10
9.6 – 14.7	15
14.8 – 19.5	15

Table 2

Dimensions in mm			
Length	Class	$B^{\pm 1.5}$	C
≤ 11	I	52.4	75
14 – 20.5	II	63.6	86
≥ 26	III	73	98

PHE450 Series Double Metallized Polypropylene Film

Overview

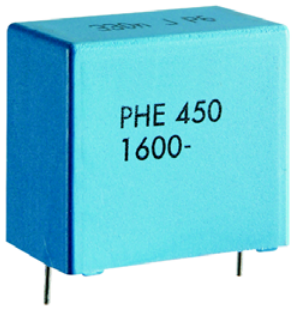
The PHE450 Series is a polypropylene dielectric with double metallized polyester film as electrodes. The capacitor is encapsulated in self-extinguishing resin in a box of material meeting the requirements of UL 94 V–0.

Applications

Typical applications include high frequency applications with high current stress such as deflection circuits in televisions and protection circuits in switched mode power supply (SMPS) and electronic ballasts.

Benefits

- Rated voltage: 250 – 3,000 VDC
- Rated voltage: 180 – 1,000 VAC
- Capacitance range: 0.00033 – 10 µF
- Lead spacing: 7.5 – 37.5 mm
- Capacitance tolerance: ±5%, other tolerances on request
- Climatic category: 55/105/56, IEC 60068–1
- Tape and reel packaging in accordance with IEC 60286–2
- RoHS Compliant and lead-free terminations
- Category temperature range of -55˚C to +105˚C



Legacy Part Number System

PHE450	P	B	5180	J	B04	R06
Series	Rated Voltage (VDC)	Lead Spacing (mm)	Capacitance Code (pF)	Capacitance Tolerance	Optional Box Code	Lead and Packaging Code
Metallized Polypropylene	H = 250 K = 400 M = 630 P = 1000 R = 1600 S = 2000 T = 2500 X = 3000	K = 7.5 A = 10.0 B = 15.0 D = 22.5 F = 27.5 R = 37.5	Digits 2 – 4 indicate the first three digits of the capacitance value. First digit indicates the number of zeros to be added.	J = ±5% On request: F = ±1% G = ±2% H = ±2.5% K = ±10% M = ±20%	See Dimension Table	See Ordering Options Table

New KEMET Part Number System

F	450	B	D	183	J	1K0	C
Capacitor Class	Series	Lead Spacing (mm)	Size Code	Capacitance Code (pF)	Capacitance Tolerance	Rated Voltage (VDC)	Lead and Packaging Code
F = Film	Metallized Polypropylene	K = 7.5 A = 10.0 B = 15.0 D = 22.5 F = 27.5 R = 37.5	See Dimension Table	First two digits indicate the two most significant digits of the capacitance value in picofarads. The third digit is the number of following zeros.	J = ±5% On request: F = ±1% G = ±2% H = ±2.5% K = ±10% M = ±20%	250 = 250 400 = 400 630 = 630 1K0 = 1000 1K6 = 1600 2K0 = 2000 2K5 = 2500 3K0 = 3000	See Ordering Options Table

Ordering Options Table

Lead Spacing Nominal (mm)	Type of Leads and Packaging	Lead Length (mm)	KEMET Lead and Packaging Code	Legacy Lead and Packaging Code
7.5	Standard Lead and Packaging Options			
	Bulk (Bag) – Short Leads	5 +0/-1	C	R05
	Ammo Pack	H_0= 18.5 +/-0.5	R	R17TA
	Bulk (Bag) – Long Leads	17 +0/-1	A	R17
	Other Lead and Packaging Options			
	Bulk (Bag) – Max Length Leads	20 +5/-0	ALL0L	R20
	Tape & Reel (Standard Reel)	H_0= 18.5 +/-0.5	L	R17T0
	Tape & Reel (Large Reel)	H_0= 18.5 +/-0.5	P	R17T1
10	Standard Lead and Packaging Options			
	Bulk (Bag) – Short Leads	5 +0/-1	C	R05
	Bulk (Bag) – Long Leads	17 +0/-1	A	R17
	Other Lead and Packaging Options			
	Bulk (Bag) – Max Length Leads	20 +5/-0	ALL0L	R20
	Tape & Reel (Standard Reel)	H_0= 18.5 +/-0.5	L	R17T0
	Tape & Reel (Large Reel)	H_0= 18.5 +/-0.5	P	R17T1
15	Standard Lead and Packaging Options			
	Bulk (Bag) – Short Leads	6 +0/-1	C	R06
	Bulk (Bag) – Long Leads	17 +0/-1	A	R17
	Other Lead and Packaging Options			
	Bulk (Bag) – Max Length Leads	25 +5/-0	ALR0L	R25
	Tape & Reel (Standard Reel)	H_0= 18.5 +/-0.5	L	R17T0
	Tape & Reel (Large Reel)	H_0= 18.5 +/-0.5	P	R17T1
Native 15 formed to 7.5	Ammo Pack	H_0= 16.5 +/-0.5	XLAF1	R25XA
	Tape & Reel (Standard Reel)	H_0= 16.5 +/-0.5	XLTF1	R25X2
22.5	Standard Lead and Packaging Options			
	Bulk (Tray) – Short Leads	6 +0/-1	C	R06L2(1)
	Other Lead and Packaging Options			
	Bulk (Tray) – Max Length Leads	30 +5/-0	ALW0L	R30
	Tape & Reel (Standard Reel)	H_0= 18.5 +/-0.5	L	R17T0
	Tape & Reel (Large Reel)	H_0= 18.5 +/-0.5	P	R17T1
	Pizza Pack	6 +0/-1	Z	R06L2(1)

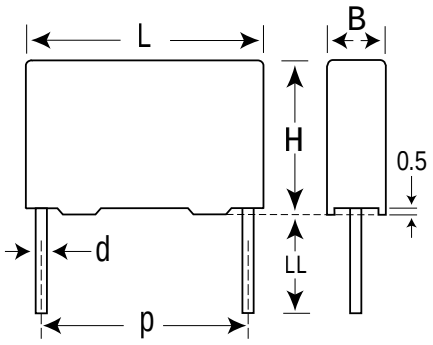
(1) Please specify Bulk (Tray) or Pizza Packaging.

Ordering Options Table cont'd

Lead Spacing Nominal (mm)	Type of Leads and Packaging	Lead Length (mm)	KEMET Lead and Packaging Code	Legacy Lead and Packaging Code
27.5	Standard Lead and Packaging Options			
	Bulk (Tray) – Straight Leads	6 +0/-1	C	R06L2(1)
	Other Lead and Packaging Options			
	Bulk (Tray) – Max Length Leads	30 +5/-0	ALW0L	R30
	Tape & Reel (Large Reel)	H_0 = 18.5 +/-0.5	P	R17T1
	Pizza Pack	6 +0/-1	Z	R06L2(1)
37.5	Standard Lead and Packaging Options			
	Bulk (Tray) – Short Leads	6 +0/-1	C	R06L2(1)
	Other Lead and Packaging Options			
	Bulk (Tray) – Max Length Leads	30 +5/-0	ALW0L	R30
	Pizza Pack	6 +0/-1	Z	R06L2(1)

(1) Please specify Bulk (Tray) or Pizza Packaging.

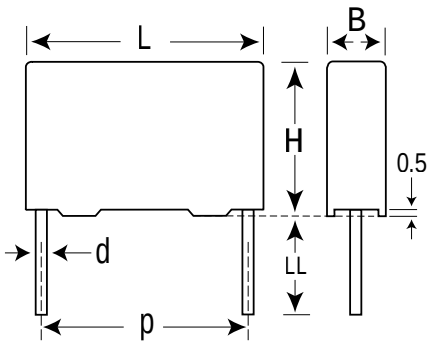
Dimensions – Millimeters



KEMET Size Code	Legacy Size Code	p		B		H		L		d	
		Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance
KG	K01	7.5	+/-0.4	4	Maximum	8	Maximum	10	Maximum	0.6	+/-0.05
KK	K03	7.5	+/-0.4	5	Maximum	11	Maximum	10	Maximum	0.6	+/-0.05
KM	K04	7.5	+/-0.4	6	Maximum	12	Maximum	10.5	Maximum	0.6	+/-0.05
AG	A01	10	+/-0.4	4	Maximum	9	Maximum	13	Maximum	0.6	+/-0.05
AH	A02	10	+/-0.4	4.5	Maximum	10.5	Maximum	13	Maximum	0.6	+/-0.05
AK	A03	10	+/-0.4	5	Maximum	11	Maximum	13	Maximum	0.6	+/-0.05
AP	A04	10	+/-0.4	6	Maximum	12	Maximum	13	Maximum	0.6	+/-0.05

Note: See Ordering Options Table for lead length (LL) options.

Dimensions – Millimeters cont'd



KEMET Size Code	Legacy Size Code	p		B		H		L		d	
		Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance
BD	B04	15	+/-0.4	5.5	Maximum	10.5	Maximum	18	Maximum	0.8	+/-0.05
BE	B05	15	+/-0.4	5.5	Maximum	12.5	Maximum	18	Maximum	0.8	+/-0.05
BL	B06	15	+/-0.4	7.5	Maximum	14.5	Maximum	18	Maximum	0.8	+/-0.05
BJ	B10	15	+/-0.4	6.5	Maximum	12.5	Maximum	18	Maximum	0.8	+/-0.05
BQ	B11	15	+/-0.4	8.5	Maximum	16	Maximum	18	Maximum	0.8	+/-0.05
BM	B12	15	+/-0.4	8	Maximum	15	Maximum	18	Maximum	0.8	+/-0.05
BV	B14	15	+/-0.4	9.5	Maximum	17.5	Maximum	18	Maximum	0.8	+/-0.05
BY	B16	15	+/-0.4	11	Maximum	19	Maximum	18	Maximum	0.8	+/-0.05
DD	D13	22.5	+/-0.4	6.5	Maximum	14.5	Maximum	26	Maximum	0.8	+/-0.05
DH	D14	22.5	+/-0.4	8	Maximum	16	Maximum	26	Maximum	0.8	+/-0.05
DM	D15	22.5	+/-0.4	9	Maximum	18.5	Maximum	26	Maximum	0.8	+/-0.05
DT	D16	22.5	+/-0.4	11	Maximum	21.5	Maximum	26	Maximum	0.8	+/-0.05
DF	D17	22.5	+/-0.4	7	Maximum	16.5	Maximum	26	Maximum	0.8	+/-0.05
DR	D18	22.5	+/-0.4	10.5	Maximum	19	Maximum	26	Maximum	0.8	+/-0.05
DY	D19	22.5	+/-0.4	15.5	Maximum	24.5	Maximum	26	Maximum	0.8	+/-0.05
DW	D20	22.5	+/-0.4	13.5	Maximum	23	Maximum	26	Maximum	0.8	+/-0.05
FK	F03	27.5	+/-0.4	13.5	Maximum	23	Maximum	31.5	Maximum	0.8	+/-0.05
FE	F11	27.5	+/-0.4	10.5	Maximum	20.5	Maximum	31.5	Maximum	0.8	+/-0.05
FG	F12	27.5	+/-0.4	11.5	Maximum	22.5	Maximum	31.5	Maximum	0.8	+/-0.05
FM	F13	27.5	+/-0.4	14.5	Maximum	24.5	Maximum	31.5	Maximum	0.8	+/-0.05
FR	F14	27.5	+/-0.4	17.5	Maximum	28	Maximum	31.5	Maximum	0.8	+/-0.05
FS	F15	27.5	+/-0.4	19	Maximum	29	Maximum	31.5	Maximum	0.8	+/-0.05
FV	F16	27.5	+/-0.4	21	Maximum	30	Maximum	31.5	Maximum	0.8	+/-0.05
FH	F17	27.5	+/-0.4	21	Maximum	12.5	Maximum	31.5	Maximum	0.8	+/-0.05
FT	F18	27.5	+/-0.4	31	Maximum	19	Maximum	31.5	Maximum	0.8	+/-0.05
FQ	F19	27.5	+/-0.4	27.5	Maximum	16	Maximum	31.5	Maximum	0.8	+/-0.05
RK	R02	37.5	+/-0.4	16.5	Maximum	32	Maximum	41	Maximum	1	+/-0.05
RM	R03	37.5	+/-0.4	19	Maximum	36	Maximum	41	Maximum	1	+/-0.05
RH	R04	37.5	+/-0.4	15	Maximum	26	Maximum	41	Maximum	1	+/-0.05
RF	R05	37.5	+/-0.4	13	Maximum	24	Maximum	41	Maximum	1	+/-0.05
RP	R06	37.5	+/-0.4	21	Maximum	38	Maximum	41	Maximum	1	+/-0.05
RS	R08	37.5	+/-0.4	28	Maximum	43	Maximum	41	Maximum	1	+/-0.05

Note: See Ordering Options Table for lead length (LL) options.

Performance Characteristics

Sections	1	1	1	2	1	2	2	2	3	3
Voltage Range (VDC)	250	400	630	630	1000	1000	1600	2000	2500	3000
Voltage Range (VAC)	180	250	300	400	375	600	650	700	900	1000
Capacitance Range (µF)	0.00033 – 0.033	0.00033 – 5.6	0.00033 – 0.039	0.01 – 3.3	0.00033 – 0.018	0.0039 – 2.2	0.0027 – 1	0.001 – 0.68	0.0010 – 0.33	0.001 – 0.033
Capacitance Values	In accordance with IEC E12 series									
Capacitance Tolerance	±5%, other tolerances on request									
Category Temperature Range	-55°C to +105°C									
Rated Temperature	+85°C									
Voltage Derating	The rated voltage is decreased with 1.3%/°C between +85°C and +105°C									
Climatic Category	IEC 60068–1, 55/105/56/B									
Passive Flammability	Category B according to IEC 60065									
Maximum Pulse Steepness	dV/dt according to Table 1. For peak to peak voltages lower than rated voltage ($V_{PP} < V_R$), the specified dV/dt can be multiplied by the factor V_R/V_{PP}.									
Self-Inductance	Approximately 6 nH/cm for the total length of capacitor winding and the leads									

Dissipation Factor tanδ

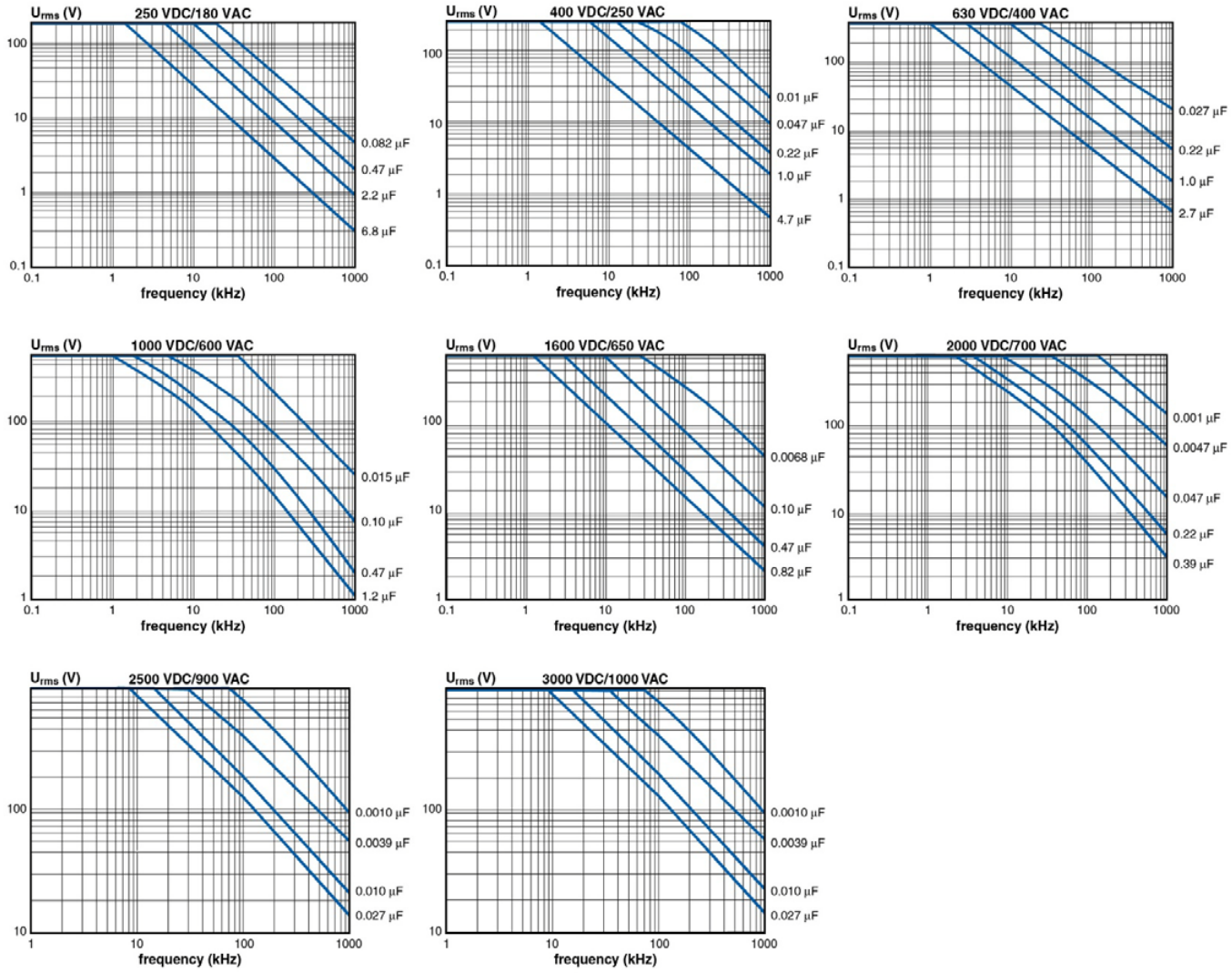
Maximum Values at +23°C			
	C ≤ 0.1 µF	0.1 µF < C ≤ 1.0 µF	C > 1.0 µF
1 kHz	0.0003	0.0003	0.0003
10 kHz	0.0004	0.0006	–
100 kHz	0.0015	–	–

Insulation Resistance

Measured at +23°C, 100 VDC 60 seconds for $V_R < 500$ VDC and at 500 VDC for $V_R \geq 500$ VDC

Minimum Values Between Terminals	
C ≤ 0.33 µF	≥ 100 000 MΩ
C > 0.33 µF	≥ 30 000 MΩ • µF
Minimum Values Between Terminals and Case	
	≥ 100 000 MΩ

Derating of V_{rms} vs. Frequency, +85ºC Ambient Temperature and 10ºC Internal Heating, Typical Values



Environmental Test Data

Test	IEC Publication	Procedure	Requirements
Voltage Proof	60384–1 Clause 4.6	1.6 x V_R after 60 seconds	The capacitors must withstand the voltage without breakdowns or flashovers and without decreased insulation resistance below the value in each detail specification. No visible damage.
	Clause 4.6 2.3	2 x V_R (minimum 400 VDC to case) after 60 seconds	As above
Vibration	60068–2–6 Test Fc	6 hours with 10 – 500 Hz and 0.75 mm amplitude or 98 m/s^2 depending on frequency	No visible damage tanδ ≤ 1.2 x stated value at 100 kHz Δ C/C ≤ ±0.5 %
Bump	60068–2–29 Test Eb	4,000 bumps with 390 m/s^2 mounted on PCB	Δ C/C ≤ ±0.5% tanδ ≤ 1.2 x stated value at 100 kHz Insulation resistance: ≥ 100,000 MΩ for C_R ≤ 0.33 µF ≥ 30,000 MΩ • µF for C_R > 0.33 µF
Resistance to Soldering Heat	60068–2–20 Method 1A	Solder bath at + 260°C ±5°C with screening	Immersion of the terminations into the solder bath shall be completed in a time not exceeding 1 second and the terminations shall remain immersed to the specified depth for 10 + 1 second and then be withdrawn. Δ C/C ≤ ±1.0 % tanδ increase < 0.001 No visible damage
Climatic Sequence	60384–1 Paragraph 4:21	60068–2.2 dry heat 16 hours 60068–2–34 damp heat, one cycle 60068–2–1 Test Aa 2 hours	Insulation resistance: ≥ 100,000 MΩ for C_R ≤ 0.33 µF ≥ 30,000 MΩ • µF for C_R > 0.33 µF Δ C/C ≤ ±0.5 % tanδ ≤ 1.2 x stated value at 100 kHz
Damp Heat Steady State	60068–2–3 Test Ca	+40°C and 90 – 95% RH	56 days no visible damage Insulation resistance: ≥ 50,000 MΩ for C_R ≤ 0.33 µF ≥ 15,000 MΩ • µF for C_R > 0.33 µF Δ C/C ≤ ±1% tanδ ≤ 1.2 x stated value at 100 kHz
Endurance, AC		1,000 hours at +85°C and 1.25 x V_R AC	No visible damage Δ C/C ≤ ±3% tanδ ≤ 1.5 x stated value at 100 kHz Insulation resistance: ≥ 100,000 MΩ for C_R ≤ 0.33 µF ≥ 30,000 MΩ • µF for C_R > 0.33 µF
Charge and Discharge	60384–17 Paragraph 4.13	10,000 pulses and with (2 x) dV/dt according to detail specification	tanδ (100 kHz) ≤ 2 x stated value (100 kHz) Δ C/C ≤ ±0.5% Insulation resistance: ≥ 50,000 MΩ for C_R ≤ 0.33 µF ≥ 15,000 MΩ • µF for C_R > 0.33 µF

Environmental Compliance

All KEMET pulse capacitors are RoHS Compliant.

RoHS Compliant

Table 1 – Ratings & Part Number Reference

VDC	VAC	Cap Value (µF)	Dimensions in mm			Lead Spacing (p)	dV/dt (V/µs)	Size Code (New/ Legacy)	R_{thha} °C/W 85°C 0.2m/s	New KEMET Part Number	Legacy Part Number
			B	H	L						
250	180	0.00033	4.0	8.0	10.0	7.5	2000	KG/K01	160	F450KG331J250(1)	PHE450HK3330J(1)
250	180	0.00039	4.0	8.0	10.0	7.5	2000	KG/K01	160	F450KG391J250(1)	PHE450HK3390J(1)
250	180	0.00047	4.0	8.0	10.0	7.5	2000	KG/K01	160	F450KG471J250(1)	PHE450HK3470J(1)
250	180	0.00056	4.0	8.0	10.0	7.5	2000	KG/K01	160	F450KG561J250(1)	PHE450HK3560J(1)
250	180	0.00068	4.0	8.0	10.0	7.5	2000	KG/K01	160	F450KG681J250(1)	PHE450HK3680J(1)
250	180	0.00082	4.0	8.0	10.0	7.5	2000	KG/K01	160	F450KG821J250(1)	PHE450HK3820J(1)
250	180	0.0010	4.0	8.0	10.0	7.5	2000	KG/K01	160	F450KG102J250(1)	PHE450HK4100J(1)
250	180	0.0012	4.0	8.0	10.0	7.5	2000	KG/K01	160	F450KG122J250(1)	PHE450HK4120J(1)
250	180	0.0015	4.0	8.0	10.0	7.5	2000	KG/K01	160	F450KG152J250(1)	PHE450HK4150J(1)
250	180	0.0018	4.0	8.0	10.0	7.5	2000	KG/K01	160	F450KG182J250(1)	PHE450HK4180J(1)
250	180	0.0022	4.0	8.0	10.0	7.5	2000	KG/K01	160	F450KG222J250(1)	PHE450HK4220J(1)
250	180	0.0027	4.0	8.0	10.0	7.5	2000	KG/K01	160	F450KG272J250(1)	PHE450HK4270J(1)
250	180	0.0033	4.0	8.0	10.0	7.5	2000	KG/K01	160	F450KG332J250(1)	PHE450HK4330J(1)
250	180	0.0039	4.0	8.0	10.0	7.5	2000	KG/K01	160	F450KG392J250(1)	PHE450HK4390J(1)
250	180	0.0047	4.0	8.0	10.0	7.5	1400	KG/K01	160	F450KG472J250(1)	PHE450HK4470J(1)
250	180	0.0056	4.0	8.0	10.0	7.5	1400	KG/K01	160	F450KG562J250(1)	PHE450HK4560J(1)
250	180	0.0068	4.0	8.0	10.0	7.5	1400	KG/K01	160	F450KG682J250(1)	PHE450HK4680J(1)
250	180	0.0082	4.0	8.0	10.0	7.5	1400	KG/K01	160	F450KG822J250(1)	PHE450HK4820J(1)
250	180	0.010	4.0	8.0	10.0	7.5	1200	KG/K01	160	F450KG103J250(1)	PHE450HK5100J(1)
250	180	0.012	4.0	8.0	10.0	7.5	1200	KG/K01	160	F450KG123J250(1)	PHE450HK5120J(1)
250	180	0.015	4.0	8.0	10.0	7.5	800	KG/K01	160	F450KG153J250(1)	PHE450HK5150J(1)
250	180	0.018	4.0	8.0	10.0	7.5	800	KG/K01	160	F450KG183J250(1)	PHE450HK5180J(1)
250	180	0.022	4.0	8.0	10.0	7.5	800	KG/K01	160	F450KG223J250(1)	PHE450HK5220J(1)
250	180	0.027	5.0	11.0	10.0	7.5	800	KK/K03	160	F450KK273J250(1)	PHE450HK5270J(1)
250	180	0.033	5.0	11.0	10.0	7.5	800	KK/K03	160	F450KK333J250(1)	PHE450HK5330J(1)
250	180	0.039	5.0	11.0	10.0	7.5	800	KK/K03	160	F450KK393J250(1)	PHE450HK5390J(1)
250	180	0.047	5.0	11.0	10.0	7.5	800	KK/K03	160	F450KK473J250(1)	PHE450HK5470J(1)
250	180	0.056	5.0	11.0	10.0	7.5	800	KK/K03	160	F450KK563J250(1)	PHE450HK5560J(1)
250	180	0.068	6.0	12.0	10.5	7.5	800	KM/K04	160	F450KM683J250(1)	PHE450HK5680J(1)
250	180	0.0010	4.0	9.0	13.0	10	1400	AG/A01	142	F450AG102J250(1)	PHE450HA4100J(1)
250	180	0.0012	4.0	9.0	13.0	10	1400	AG/A01	142	F450AG122J250(1)	PHE450HA4120J(1)
250	180	0.0015	4.0	9.0	13.0	10	1400	AG/A01	142	F450AG152J250(1)	PHE450HA4150J(1)
250	180	0.0018	4.0	9.0	13.0	10	1400	AG/A01	142	F450AG182J250(1)	PHE450HA4180J(1)
250	180	0.0022	4.0	9.0	13.0	10	1400	AG/A01	142	F450AG222J250(1)	PHE450HA4220J(1)
250	180	0.0027	4.0	9.0	13.0	10	1400	AG/A01	142	F450AG272J250(1)	PHE450HA4270J(1)
250	180	0.0033	4.0	9.0	13.0	10	1400	AG/A01	142	F450AG332J250(1)	PHE450HA4330J(1)
250	180	0.0039	4.0	9.0	13.0	10	1400	AG/A01	142	F450AG392J250(1)	PHE450HA4390J(1)
250	180	0.0047	4.0	9.0	13.0	10	1400	AG/A01	142	F450AG472J250(1)	PHE450HA4470J(1)
250	180	0.0056	4.0	9.0	13.0	10	1400	AG/A01	142	F450AG562J250(1)	PHE450HA4560J(1)
250	180	0.0068	4.0	9.0	13.0	10	1400	AG/A01	142	F450AG682J250(1)	PHE450HA4680J(1)
250	180	0.0082	4.0	9.0	13.0	10	1200	AG/A01	142	F450AG822J250(1)	PHE450HA4820J(1)
250	180	0.010	4.0	9.0	13.0	10	1200	AG/A01	142	F450AG103J250(1)	PHE450HA5100J(1)
250	180	0.012	4.0	9.0	13.0	10	1200	AG/A01	142	F450AG123J250(1)	PHE450HA5120J(1)
250	180	0.015	4.0	9.0	13.0	10	1200	AG/A01	142	F450AG153J250(1)	PHE450HA5150J(1)
250	180	0.018	4.0	9.0	13.0	10	1100	AG/A01	142	F450AG183J250(1)	PHE450HA5180J(1)
250	180	0.022	4.0	9.0	13.0	10	1100	AG/A01	142	F450AG223J250(1)	PHE450HA5220J(1)
250	180	0.027	4.0	9.0	13.0	10	1100	AG/A01	142	F450AG273J250(1)	PHE450HA5270J(1)
250	180	0.033	4.0	9.0	13.0	10	700	AG/A01	142	F450AG333J250(1)	PHE450HA5330J(1)
250	180	0.039	4.0	9.0	13.0	10	700	AG/A01	142	F450AG393J250(1)	PHE450HA5390J(1)
250	180	0.047	4.0	9.0	13.0	10	700	AG/A01	142	F450AG473J250(1)	PHE450HA5470J(1)
250	180	0.056	4.5	10.5	13.0	10	700	AH/A02	122	F450AH563J250(1)	PHE450HA5560J(1)
250	180	0.068	4.5	10.5	13.0	10	700	AH/A02	122	F450AH683J250(1)	PHE450HA5680J(1)
250	180	0.082	5.0	11.0	13.0	10	700	AK/A03	116	F450AK823J250(1)	PHE450HA5820J(1)
250	180	0.10	6.0	12.0	13.0	10	700	AP/A04	105	F450AP104J250(1)	PHE450HA6100J(1)
250	180	0.12	6.0	12.0	13.0	10	700	AP/A04	105	F450AP124J250(1)	PHE450HA6120J(1)
250	180	0.047	5.5	10.5	18.0	15	1000	BD/B04	100	F450BD473J250(1)	PHE450HB5470J(1)
250	180	0.056	5.5	10.5	18.0	15	1000	BD/B04	100	F450BD563J250(1)	PHE450HB5560J(1)
250	180	0.068	5.5	10.5	18.0	15	1000	BD/B04	100	F450BD683J250(1)	PHE450HB5680J(1)
250	180	0.082	5.5	10.5	18.0	15	600	BD/B04	101	F450BD823J250(1)	PHE450HB5820J(1)
VDC	VAC	Cap Value (µF)	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/ µs)	Size Code (New/Legacy)	R_{thha} °C/W 85°C 0.2m/s	New KEMET Part Number	Legacy Part Number

(1) Insert lead and packaging code. See Ordering Options Table for available options.

Roll Over for Order Info.

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Cap Value (µF)	Dimensions in mm			Lead Spacing (p)	dV/dt (V/µs)	Size Code (New/ Legacy)	R_{thha} °C/W 85°C 0.2m/s	New KEMET Part Number	Legacy Part Number
			B	H	L						
250	180	0.10	5.5	10.5	18.0	15	600	BD/B04	100	F450BD104J250(1)	PHE450HB6100J(1)
250	180	0.12	5.5	10.5	18.0	15	600	BD/B04	99	F450BD124J250(1)	PHE450HB6120J(1)
250	180	0.15	5.5	12.5	18.0	15	600	BE/B05	85	F450BE154J250(1)	PHE450HB6150J(1)
250	180	0.18	6.5	12.5	18.0	15	600	BJ/B10	83	F450BJ184J250(1)	PHE450HB6180J(1)
250	180	0.22	7.5	14.5	18.0	15	600	BL/B06	74	F450BL224J250(1)	PHE450HB6220J(1)
250	180	0.27	7.5	14.5	18.0	15	600	BL/B06	73	F450BL274J250(1)	PHE450HB6270J(1)
250	180	0.33	8.0	15.0	18.0	15	600	BM/B12	67	F450BM334J250(1)	PHE450HB6330J(1)
250	180	0.39	8.5	16.0	18.0	15	600	BQ/B11	65	F450BQ394J250(1)	PHE450HB6390J(1)
250	180	0.47	9.5	17.5	18.0	15	600	BV/B14	60	F450BV474J250(1)	PHE450HB6470J(1)
250	180	0.18	6.5	14.5	26.0	22.5	600	DD/D13	58	F450DD184J250(1)	PHE450HD6180J(1)
250	180	0.22	6.5	14.5	26.0	22.5	400	DD/D13	60	F450DD224J250(1)	PHE450HD6220J(1)
250	180	0.27	6.5	14.5	26.0	22.5	400	DD/D13	59	F450DD274J250(1)	PHE450HD6270J(1)
250	180	0.33	6.5	14.5	26.0	22.5	400	DD/D13	58	F450DD334J250(1)	PHE450HD6330J(1)
250	180	0.39	7.0	16.5	26.0	22.5	400	DF/D17	54	F450DF394J250(1)	PHE450HD6390J(1)
250	180	0.47	7.0	16.5	26.0	22.5	400	DF/D17	53	F450DF474J250(1)	PHE450HD6470J(1)
250	180	0.56	9.0	18.5	26.0	22.5	400	DM/D15	49	F450DM564J250(1)	PHE450HD6560J(1)
250	180	0.68	9.0	18.5	26.0	22.5	400	DM/D15	47	F450DM684J250(1)	PHE450HD6680J(1)
250	180	0.82	10.5	19.0	26.0	22.5	400	DR/D18	43	F450DR824J250(1)	PHE450HD6820J(1)
250	180	1.0	11.0	21.5	26.0	22.5	400	DT/D16	40	F450DT105J250(1)	PHE450HD7100J(1)
250	180	1.2	13.5	23.0	26.0	22.5	400	DW/D20	38	F450DW125J250(1)	PHE450HD7120J(1)
250	180	1.5	13.5	23.0	26.0	22.5	400	DW/D20	36	F450DW155J250(1)	PHE450HD7150J(1)
250	180	1.8	15.5	24.5	26.0	22.5	400	DY/D19	36	F450DY185J250(1)	PHE450HD7180J(1)
250	180	0.82	10.5	20.5	31.5	27.5	300	FE/F11	38	F450FE824J250(1)	PHE450HF6820J(1)
250	180	1.0	10.5	20.5	31.5	27.5	300	FE/F11	38	F450FE105J250(1)	PHE450HF7100J(1)
250	180	1.2	10.5	20.5	31.5	27.5	300	FE/F11	37	F450FE125J250(1)	PHE450HF7120J(1)
250	180	1.2	21.0	12.5	31.5	27.5	300	FH/F17	37	F450FH125J250(1)	PHE450HT7120J(1)
250	180	1.5	11.5	22.5	31.5	27.5	300	FG/F12	34	F450FG155J250(1)	PHE450HF7150J(1)
250	180	1.8	13.5	23.0	31.5	27.5	300	FK/F03	32	F450FK185J250(1)	PHE450HF7180J(1)
250	180	2.2	14.5	24.5	31.5	27.5	300	FM/F13	31	F450FM225J250(1)	PHE450HF7220J(1)
250	180	2.2	27.5	16.0	31.5	27.5	300	FQ/F19	31	F450FQ225J250(1)	PHE450HT7220J(1)
250	180	2.7	17.5	28.0	31.5	27.5	300	FR/F14	27	F450FR275J250(1)	PHE450HF7270J(1)
250	180	3.3	19.0	29.0	31.5	27.5	300	FS/F15	25	F450FS335J250(1)	PHE450HF7330J(1)
250	180	3.9	21.0	30.0	31.5	27.5	300	FV/F16	23	F450FV395J250(1)	PHE450HF7390J(1)
250	180	3.9	31.0	19.0	31.5	27.5	300	FT/F18	23	F450FT395J250(1)	PHE450HT7390J(1)
250	180	1.8	13.0	24.0	41.0	37.5	200	RF/R05	28	F450RF185J250(1)	PHE450HR7180J(1)
250	180	2.2	13.0	24.0	41.0	37.5	200	RF/R05	28	F450RF225J250(1)	PHE450HR7220J(1)
250	180	2.7	13.0	24.0	41.0	37.5	200	RF/R05	27	F450RF275J250(1)	PHE450HR7270J(1)
250	180	3.3	15.0	26.0	41.0	37.5	200	RH/R04	25	F450RH335J250(1)	PHE450HR7330J(1)
250	180	3.9	16.5	32.0	41.0	37.5	200	RK/R02	22	F450RK395J250(1)	PHE450HR7390J(1)
250	180	4.7	16.5	32.0	41.0	37.5	200	RK/R02	22	F450RK475J250(1)	PHE450HR7470J(1)
250	180	5.6	19.0	36.0	41.0	37.5	200	RM/R03	18	F450RM565J250(1)	PHE450HR7560J(1)
250	180	6.8	21.0	38.0	41.0	37.5	200	RP/R06	17	F450RP685J250(1)	PHE450HR7680J(1)
250	180	8.2	28.0	43.0	41.0	37.5	200	RS/R08	17	F450RS825J250(1)	PHE450HR7820J(1)
250	180	10	28.0	43.0	41.0	37.5	200	RS/R08	17	F450RS106J250(1)	PHE450HR8100J(1)
400	250	0.00033	4.0	8.0	10.0	7.5	2000	KG/K01	160	F450KG331J400(1)	PHE450KK3330J(1)
400	250	0.00039	4.0	8.0	10.0	7.5	2000	KG/K01	160	F450KG391J400(1)	PHE450KK3390J(1)
400	250	0.00047	4.0	8.0	10.0	7.5	2000	KG/K01	160	F450KG471J400(1)	PHE450KK3470J(1)
400	250	0.00056	4.0	8.0	10.0	7.5	2000	KG/K01	160	F450KG561J400(1)	PHE450KK3560J(1)
400	250	0.00068	4.0	8.0	10.0	7.5	2000	KG/K01	160	F450KG681J400(1)	PHE450KK3680J(1)
400	250	0.00082	4.0	8.0	10.0	7.5	2000	KG/K01	160	F450KG821J400(1)	PHE450KK3820J(1)
400	250	0.0010	4.0	8.0	10.0	7.5	2000	KG/K01	160	F450KG102J400(1)	PHE450KK4100J(1)
400	250	0.0012	4.0	8.0	10.0	7.5	2000	KG/K01	160	F450KG122J400(1)	PHE450KK4120J(1)
400	250	0.0015	4.0	8.0	10.0	7.5	2000	KG/K01	160	F450KG152J400(1)	PHE450KK4150J(1)
400	250	0.0018	4.0	8.0	10.0	7.5	2000	KG/K01	160	F450KG182J400(1)	PHE450KK4180J(1)
400	250	0.0022	4.0	8.0	10.0	7.5	2000	KG/K01	160	F450KG222J400(1)	PHE450KK4220J(1)
400	250	0.0027	4.0	8.0	10.0	7.5	2000	KG/K01	160	F450KG272J400(1)	PHE450KK4270J(1)
400	250	0.0033	4.0	8.0	10.0	7.5	2000	KG/K01	160	F450KG332J400(1)	PHE450KK4330J(1)
400	250	0.0039	4.0	8.0	10.0	7.5	2000	KG/K01	160	F450KG392J400(1)	PHE450KK4390J(1)
400	250	0.0047	4.0	8.0	10.0	7.5	1400	KG/K01	160	F450KG472J400(1)	PHE450KK4470J(1)
VDC	VAC	Cap Value (µF)	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/ µs)	Size Code (New/Legacy)	R_{thha} °C/W 85°C 0.2m/s	New KEMET Part Number	Legacy Part Number

(1) Insert lead and packaging code. See Ordering Options Table for available options.

Roll Over for Order Info.

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Cap Value (µF)	Dimensions in mm			Lead Spacing (p)	dV/dt (V/µs)	Size Code (New/ Legacy)	R_{thha} °C/W 85°C 0.2m/s	New KEMET Part Number	Legacy Part Number
			B	H	L						
400	250	0.0056	4.0	8.0	10.0	7.5	1400	KG/K01	160	F450KG562J400(1)	PHE450KK4560J(1)
400	250	0.0068	4.0	8.0	10.0	7.5	1400	KG/K01	160	F450KG682J400(1)	PHE450KK4680J(1)
400	250	0.0082	4.0	8.0	10.0	7.5	1400	KG/K01	160	F450KG822J400(1)	PHE450KK4820J(1)
400	250	0.010	4.0	8.0	10.0	7.5	1200	KG/K01	160	F450KG103J400(1)	PHE450KK5100J(1)
400	250	0.012	4.0	8.0	10.0	7.5	1200	KG/K01	160	F450KG123J400(1)	PHE450KK5120J(1)
400	250	0.015	5.0	11.0	10.0	7.5	1200	KK/K03	160	F450KK153J400(1)	PHE450KK5150J(1)
400	250	0.018	5.0	11.0	10.0	7.5	1200	KK/K03	160	F450KK183J400(1)	PHE450KK5180J(1)
400	250	0.022	5.0	11.0	10.0	7.5	1200	KK/K03	160	F450KK223J400(1)	PHE450KK5220J(1)
400	250	0.027	5.0	11.0	10.0	7.5	1200	KK/K03	160	F450KK273J400(1)	PHE450KK5270J(1)
400	250	0.033	5.0	11.0	10.0	7.5	1200	KK/K03	160	F450KK333J400(1)	PHE450KK5330J(1)
400	250	0.039	6.0	12.0	10.5	7.5	1200	KM/K04	160	F450KM393J400(1)	PHE450KK5390J(1)
400	250	0.047	6.0	12.0	10.5	7.5	1200	KM/K04	160	F450KM473J400(1)	PHE450KK5470J(1)
400	250	0.0010	4.0	9.0	13.0	10	1400	AG/A01	142	F450AG102J400(1)	PHE450KA4100J(1)
400	250	0.0012	4.0	9.0	13.0	10	1400	AG/A01	142	F450AG122J400(1)	PHE450KA4120J(1)
400	250	0.0015	4.0	9.0	13.0	10	1400	AG/A01	142	F450AG152J400(1)	PHE450KA4150J(1)
400	250	0.0018	4.0	9.0	13.0	10	1400	AG/A01	142	F450AG182J400(1)	PHE450KA4180J(1)
400	250	0.0022	4.0	9.0	13.0	10	1400	AG/A01	142	F450AG222J400(1)	PHE450KA4220J(1)
400	250	0.0027	4.0	9.0	13.0	10	1400	AG/A01	142	F450AG272J400(1)	PHE450KA4270J(1)
400	250	0.0033	4.0	9.0	13.0	10	1400	AG/A01	142	F450AG332J400(1)	PHE450KA4330J(1)
400	250	0.0039	4.0	9.0	13.0	10	1400	AG/A01	142	F450AG392J400(1)	PHE450KA4390J(1)
400	250	0.0047	4.0	9.0	13.0	10	1400	AG/A01	142	F450AG472J400(1)	PHE450KA4470J(1)
400	250	0.0056	4.0	9.0	13.0	10	1400	AG/A01	142	F450AG562J400(1)	PHE450KA4560J(1)
400	250	0.0068	4.0	9.0	13.0	10	1400	AG/A01	142	F450AG682J400(1)	PHE450KA4680J(1)
400	250	0.0082	4.0	9.0	13.0	10	1200	AG/A01	142	F450AG822J400(1)	PHE450KA4820J(1)
400	250	0.010	4.0	9.0	13.0	10	1200	AG/A01	142	F450AG103J400(1)	PHE450KA5100J(1)
400	250	0.012	4.0	9.0	13.0	10	1200	AG/A01	142	F450AG123J400(1)	PHE450KA5120J(1)
400	250	0.015	4.0	9.0	13.0	10	1200	AG/A01	142	F450AG153J400(1)	PHE450KA5150J(1)
400	250	0.018	4.0	9.0	13.0	10	1100	AG/A01	142	F450AG183J400(1)	PHE450KA5180J(1)
400	250	0.022	4.0	9.0	13.0	10	1100	AG/A01	142	F450AG223J400(1)	PHE450KA5220J(1)
400	250	0.027	4.0	9.0	13.0	10	1100	AG/A01	142	F450AG273J400(1)	PHE450KA5270J(1)
400	250	0.033	4.5	10.5	13.0	10	1100	AH/A02	122	F450AH333J400(1)	PHE450KA5330J(1)
400	250	0.039	5.0	11.0	13.0	10	1100	AK/A03	116	F450AK393J400(1)	PHE450KA5390J(1)
400	250	0.047	6.0	12.0	13.0	10	1100	AP/A04	105	F450AP473J400(1)	PHE450KA5470J(1)
400	250	0.056	6.0	12.0	13.0	10	1100	AP/A04	105	F450AP563J400(1)	PHE450KA5560J(1)
400	250	0.033	5.5	10.5	18.0	15	2500	BD/B04	100	F450BD333J400(1)	PHE450KB5330J(1)
400	250	0.039	5.5	10.5	18.0	15	1000	BD/B04	100	F450BD393J400(1)	PHE450KB5390J(1)
400	250	0.047	5.5	10.5	18.0	15	1000	BD/B04	100	F450BD473J400(1)	PHE450KB5470J(1)
400	250	0.056	5.5	10.5	18.0	15	1000	BD/B04	100	F450BD563J400(1)	PHE450KB5560J(1)
400	250	0.068	5.5	10.5	18.0	15	1000	BD/B04	100	F450BD683J400(1)	PHE450KB5680J(1)
400	250	0.082	5.5	12.5	18.0	15	1000	BE/B05	99	F450BE823J400(1)	PHE450KB5820J(1)
400	250	0.10	6.5	12.5	18.0	15	1000	BJ/B10	85	F450BJ104J400(1)	PHE450KB6100J(1)
400	250	0.12	7.5	14.5	18.0	15	1000	BL/B06	75	F450BL124J400(1)	PHE450KB6120J(1)
400	250	0.15	7.5	14.5	18.0	15	1000	BL/B06	75	F450BL154J400(1)	PHE450KB6150J(1)
400	250	0.18	8.0	15.0	18.0	15	1000	BM/B12	71	F450BM184J400(1)	PHE450KB6180J(1)
400	250	0.22	9.5	17.5	18.0	15	1000	BV/B14	60	F450BV224J400(1)	PHE450KB6220J(1)
400	250	0.27	9.5	17.5	18.0	15	1000	BV/B14	59	F450BV274J400(1)	PHE450KB6270J(1)
400	250	0.12	6.5	14.5	26.0	22.5	600	DD/D13	58	F450DD124J400(1)	PHE450KD6120J(1)
400	250	0.15	6.5	14.5	26.0	22.5	600	DD/D13	58	F450DD154J400(1)	PHE450KD6150J(1)
400	250	0.18	6.5	14.5	26.0	22.5	600	DD/D13	58	F450DD184J400(1)	PHE450KD6180J(1)
400	250	0.22	7.0	16.5	26.0	22.5	600	DF/D17	52	F450DF224J400(1)	PHE450KD6220J(1)
400	250	0.27	7.0	16.5	26.0	22.5	600	DF/D17	52	F450DF274J400(1)	PHE450KD6270J(1)
400	250	0.33	9.0	18.5	26.0	22.5	600	DM/D15	48	F450DM334J400(1)	PHE450KD6330J(1)
400	250	0.39	9.0	18.5	26.0	22.5	600	DM/D15	48	F450DM394J400(1)	PHE450KD6390J(1)
400	250	0.47	10.5	19.0	26.0	22.5	600	DR/D18	45	F450DR474J400(1)	PHE450KD6470J(1)
400	250	0.56	11.0	21.5	26.0	22.5	600	DT/D16	40	F450DT564J400(1)	PHE450KD6560J(1)
400	250	0.68	13.5	23.0	26.0	22.5	600	DW/D20	35	F450DW684J400(1)	PHE450KD6680J(1)
400	250	0.82	13.5	23.0	26.0	22.5	600	DW/D20	35	F450DW824J400(1)	PHE450KD6820J(1)
400	250	1.0	15.5	24.5	26.0	22.5	600	DY/D19	33	F450DY105J400(1)	PHE450KD7100J(1)
400	250	0.47	10.5	20.5	31.5	27.5	500	FE/F11	38	F450FE474J400(1)	PHE450KF6470J(1)
VDC	VAC	Cap Value (µF)	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/ µs)	Size Code (New/Legacy)	R_{thha} °C/W 85°C 0.2m/s	New KEMET Part Number	Legacy Part Number

(1) Insert lead and packaging code. See Ordering Options Table for available options.

Roll Over for Order Info.

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Cap Value (µF)	Dimensions in mm			Lead Spacing (p)	dV/dt (V/µs)	Size Code (New/ Legacy)	R_{thha} °C/W 85°C 0.2m/s	New KEMET Part Number	Legacy Part Number
			B	H	L						
400	250	0.56	10.5	20.5	31.5	27.5	500	FE/F11	38	F450FE564J400(1)	PHE450KF6560J(1)
400	250	0.68	10.5	20.5	31.5	27.5	500	FE/F11	38	F450FE684J400(1)	PHE450KF6680J(1)
400	250	0.68	21.0	12.5	31.5	27.5	500	FH/F17	38	F450FH684J400(1)	PHE450KT6680J(1)
400	250	0.82	11.5	22.5	31.5	27.5	500	FG/F12	34	F450FG824J400(1)	PHE450KF6820J(1)
400	250	1.0	13.5	23.0	31.5	27.5	500	FK/F03	32	F450FK105J400(1)	PHE450KF7100J(1)
400	250	1.2	14.5	24.5	31.5	27.5	500	FM/F13	30	F450FM125J400(1)	PHE450KF7120J(1)
400	250	1.5	17.5	28.0	31.5	27.5	500	FR/F14	27	F450FR155J400(1)	PHE450KF7150J(1)
400	250	1.5	27.5	16.0	31.5	27.5	500	FQ/F19	27	F450FQ155J400(1)	PHE450KT7150J(1)
400	250	1.8	19.0	29.0	31.5	27.5	500	FS/F15	25	F450FS185J400(1)	PHE450KF7180J(1)
400	250	2.2	21.0	30.0	31.5	27.5	500	FV/F16	24	F450FV225J400(1)	PHE450KF7220J(1)
400	250	2.2	31.0	19.0	31.5	27.5	500	FT/F18	24	F450FT225J400(1)	PHE450KT7220J(1)
400	250	1.0	13.0	24.0	41.0	37.5	300	RF/R05	27	F450RF105J400(1)	PHE450KR7100J(1)
400	250	1.2	13.0	24.0	41.0	37.5	300	RF/R05	27	F450RF125J400(1)	PHE450KR7120J(1)
400	250	1.5	13.0	24.0	41.0	37.5	300	RF/R05	27	F450RF155J400(1)	PHE450KR7150J(1)
400	250	1.8	15.0	26.0	41.0	37.5	300	RH/R04	25	F450RH185J400(1)	PHE450KR7180J(1)
400	250	2.2	16.5	32.0	41.0	37.5	300	RK/R02	22	F450RK225J400(1)	PHE450KR7220J(1)
400	250	2.7	16.5	32.0	41.0	37.5	300	RK/R02	22	F450RK275J400(1)	PHE450KR7270J(1)
400	250	3.3	19.0	36.0	41.0	37.5	300	RM/R03	19	F450RM335J400(1)	PHE450KR7330J(1)
400	250	3.9	19.0	36.0	41.0	37.5	300	RM/R03	19	F450RM395J400(1)	PHE450KR7390J(1)
400	250	4.7	21.0	38.0	41.0	37.5	300	RP/R06	17	F450RP475J400(1)	PHE450KR7470J(1)
400	250	5.6	28.0	43.0	41.0	37.5	300	RS/R08	17	F450RS565J400(1)	PHE450KR7560J(1)
630	300	0.00039	4.0	8.0	10.0	7.5	2000	KG/K01	160	F450KG391J630(1)	PHE450MK3390J(1)
630	300	0.00047	4.0	8.0	10.0	7.5	2000	KG/K01	160	F450KG471J630(1)	PHE450MK3470J(1)
630	300	0.00056	4.0	8.0	10.0	7.5	2000	KG/K01	160	F450KG561J630(1)	PHE450MK3560J(1)
630	300	0.00068	4.0	8.0	10.0	7.5	2000	KG/K01	160	F450KG681J630(1)	PHE450MK3680J(1)
630	300	0.00082	4.0	8.0	10.0	7.5	2000	KG/K01	160	F450KG821J630(1)	PHE450MK3820J(1)
630	300	0.0010	4.0	8.0	10.0	7.5	2000	KG/K01	160	F450KG102J630(1)	PHE450MK4100J(1)
630	300	0.0012	4.0	8.0	10.0	7.5	2000	KG/K01	160	F450KG122J630(1)	PHE450MK4120J(1)
630	300	0.0015	4.0	8.0	10.0	7.5	2000	KG/K01	160	F450KG152J630(1)	PHE450MK4150J(1)
630	300	0.0018	4.0	8.0	10.0	7.5	2000	KG/K01	160	F450KG182J630(1)	PHE450MK4180J(1)
630	300	0.0022	4.0	8.0	10.0	7.5	2000	KG/K01	160	F450KG222J630(1)	PHE450MK4220J(1)
630	300	0.0027	4.0	8.0	10.0	7.5	2000	KG/K01	160	F450KG272J630(1)	PHE450MK4270J(1)
630	300	0.0033	4.0	8.0	10.0	7.5	2000	KG/K01	160	F450KG332J630(1)	PHE450MK4330J(1)
630	300	0.0039	4.0	8.0	10.0	7.5	2000	KG/K01	160	F450KG392J630(1)	PHE450MK4390J(1)
630	300	0.0047	4.0	8.0	10.0	7.5	1400	KG/K01	160	F450KG472J630(1)	PHE450MK4470J(1)
630	300	0.0056	4.0	8.0	10.0	7.5	1400	KG/K01	160	F450KG562J630(1)	PHE450MK4560J(1)
630	300	0.0068	4.0	8.0	10.0	7.5	1400	KG/K01	160	F450KG682J630(1)	PHE450MK4680J(1)
630	300	0.0082	4.0	8.0	10.0	7.5	1400	KG/K01	160	F450KG822J630(1)	PHE450MK4820J(1)
630	300	0.010	5.0	11.0	10.0	7.5	1400	KK/K03	160	F450KK103J630(1)	PHE450MK5100J(1)
630	300	0.012	5.0	11.0	10.0	7.5	1400	KK/K03	160	F450KK123J630(1)	PHE450MK5120J(1)
630	300	0.015	5.0	11.0	10.0	7.5	1400	KK/K03	160	F450KK153J630(1)	PHE450MK5150J(1)
630	300	0.018	5.0	11.0	10.0	7.5	1400	KK/K03	160	F450KK183J630(1)	PHE450MK5180J(1)
630	300	0.022	6.0	12.0	10.5	7.5	1400	KM/K04	160	F450KM223J630(1)	PHE450MK5220J(1)
630	300	0.0010	4.0	9.0	13.0	10	1400	AG/A01	142	F450AG102J630(1)	PHE450MA4100J(1)
630	300	0.0012	4.0	9.0	13.0	10	1400	AG/A01	142	F450AG122J630(1)	PHE450MA4120J(1)
630	300	0.0015	4.0	9.0	13.0	10	1400	AG/A01	142	F450AG152J630(1)	PHE450MA4150J(1)
630	300	0.0018	4.0	9.0	13.0	10	1400	AG/A01	142	F450AG182J630(1)	PHE450MA4180J(1)
630	300	0.0022	4.0	9.0	13.0	10	1400	AG/A01	142	F450AG222J630(1)	PHE450MA4220J(1)
630	300	0.0027	4.0	9.0	13.0	10	1400	AG/A01	142	F450AG272J630(1)	PHE450MA4270J(1)
630	300	0.0033	4.0	9.0	13.0	10	1400	AG/A01	142	F450AG332J630(1)	PHE450MA4330J(1)
630	300	0.0039	4.0	9.0	13.0	10	1400	AG/A01	142	F450AG392J630(1)	PHE450MA4390J(1)
630	300	0.0047	4.0	9.0	13.0	10	1400	AG/A01	142	F450AG472J630(1)	PHE450MA4470J(1)
630	300	0.0056	4.0	9.0	13.0	10	1400	AG/A01	142	F450AG562J630(1)	PHE450MA4560J(1)
630	300	0.0068	4.0	9.0	13.0	10	1400	AG/A01	142	F450AG682J630(1)	PHE450MA4680J(1)
630	300	0.0082	4.0	9.0	13.0	10	1200	AG/A01	142	F450AG822J630(1)	PHE450MA4820J(1)
630	300	0.010	4.0	9.0	13.0	10	1200	AG/A01	142	F450AG103J630(1)	PHE450MA5100J(1)
630	300	0.012	4.0	9.0	13.0	10	1200	AG/A01	142	F450AG123J630(1)	PHE450MA5120J(1)
630	300	0.015	4.0	9.0	13.0	10	1200	AG/A01	142	F450AG153J630(1)	PHE450MA5150J(1)
630	300	0.018	4.5	10.5	13.0	10	1200	AH/A02	122	F450AH183J630(1)	PHE450MA5180J(1)
VDC	VAC	Cap Value (µF)	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/ µs)	Size Code (New/Legacy)	R_{thha} °C/W 85°C 0.2m/s	New KEMET Part Number	Legacy Part Number

(1) Insert lead and packaging code. See Ordering Options Table for available options.

Roll Over for Order Info.

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Cap Value (µF)	Dimensions in mm			Lead Spacing (p)	dV/dt (V/µs)	Size Code (New/ Legacy)	R_{thha} °C/W 85°C 0.2m/s	New KEMET Part Number	Legacy Part Number
			B	H	L						
630	300	0.022	4.5	10.5	13.0	10	1200	AH/A02	122	F450AH223J630(1)	PHE450MA5220J(1)
630	300	0.027	5.0	11.0	13.0	10	1200	AK/A03	116	F450AK273J630(1)	PHE450MA5270J(1)
630	300	0.033	6.0	12.0	13.0	10	1200	AP/A04	105	F450AP333J630(1)	PHE450MA5330J(1)
630	300	0.039	6.0	12.0	13.0	10	1200	AP/A04	105	F450AP393J630(1)	PHE450MA5390J(1)
630	400	0.010	5.5	10.5	18.0	15	2500	BD/B04	99	F450BD103J630(1)	PHE450MB5100J(1)
630	400	0.012	5.5	10.5	18.0	15	2500	BD/B04	99	F450BD123J630(1)	PHE450MB5120J(1)
630	400	0.015	5.5	10.5	18.0	15	2500	BD/B04	100	F450BD153J630(1)	PHE450MB5150J(1)
630	400	0.018	5.5	10.5	18.0	15	2500	BD/B04	100	F450BD183J630(1)	PHE450MB5180J(1)
630	400	0.022	5.5	10.5	18.0	15	2500	BD/B04	100	F450BD223J630(1)	PHE450MB5220J(1)
630	400	0.027	5.5	10.5	18.0	15	2500	BD/B04	100	F450BD273J630(1)	PHE450MB5270J(1)
630	400	0.033	5.5	10.5	18.0	15	2500	BD/B04	100	F450BD333J630(1)	PHE450MB5330J(1)
630	400	0.039	5.5	12.5	18.0	15	2500	BE/B05	90	F450BE393J630(1)	PHE450MB5390J(1)
630	400	0.047	6.5	12.5	18.0	15	2500	BJ/B10	85	F450BJ473J630(1)	PHE450MB5470J(1)
630	400	0.056	6.5	12.5	18.0	15	2500	BJ/B10	85	F450BJ563J630(1)	PHE450MB5560J(1)
630	400	0.068	7.5	14.5	18.0	15	2500	BL/B06	75	F450BL683J630(1)	PHE450MB5680J(1)
630	400	0.082	8.0	15.0	18.0	15	2500	BM/B12	72	F450BM823J630(1)	PHE450MB5820J(1)
630	400	0.10	8.5	16.0	18.0	15	2500	BQ/B11	70	F450BQ104J630(1)	PHE450MB6100J(1)
630	400	0.12	9.5	17.5	18.0	15	2500	BV/B14	61	F450BV124J630(1)	PHE450MB6120J(1)
630	400	0.15	9.5	17.5	18.0	15	2500	BV/B14	61	F450BV154J630(1)	PHE450MB6150J(1)
630	400	0.033	6.5	14.5	26.0	22.5	1800	DD/D13	58	F450DD333J630(1)	PHE450MD5330J(1)
630	400	0.039	6.5	14.5	26.0	22.5	1800	DD/D13	58	F450DD393J630(1)	PHE450MD5390J(1)
630	400	0.047	6.5	14.5	26.0	22.5	1800	DD/D13	58	F450DD473J630(1)	PHE450MD5470J(1)
630	400	0.056	6.5	14.5	26.0	22.5	1800	DD/D13	58	F450DD563J630(1)	PHE450MD5560J(1)
630	400	0.068	6.5	14.5	26.0	22.5	1800	DD/D13	59	F450DD683J630(1)	PHE450MD5680J(1)
630	400	0.082	6.5	14.5	26.0	22.5	1800	DD/D13	59	F450DD823J630(1)	PHE450MD5820J(1)
630	400	0.10	6.5	14.5	26.0	22.5	1800	DD/D13	59	F450DD104J630(1)	PHE450MD6100J(1)
630	400	0.12	7.0	16.5	26.0	22.5	1800	DF/D17	55	F450DF124J630(1)	PHE450MD6120J(1)
630	400	0.15	7.0	16.5	26.0	22.5	1800	DF/D17	55	F450DF154J630(1)	PHE450MD6150J(1)
630	400	0.18	9.0	18.5	26.0	22.5	1800	DM/D15	50	F450DM184J630(1)	PHE450MD6180J(1)
630	400	0.22	9.0	18.5	26.0	22.5	1800	DM/D15	50	F450DM224J630(1)	PHE450MD6220J(1)
630	400	0.27	11.0	21.5	26.0	22.5	1800	DT/D16	45	F450DT274J630(1)	PHE450MD6270J(1)
630	400	0.33	11.0	21.5	26.0	22.5	1800	DT/D16	45	F450DT334J630(1)	PHE450MD6330J(1)
630	400	0.39	13.5	23.0	26.0	22.5	1800	DW/D20	40	F450DW394J630(1)	PHE450MD6390J(1)
630	400	0.47	13.5	23.0	26.0	22.5	1800	DW/D20	40	F450DW474J630(1)	PHE450MD6470J(1)
630	400	0.56	15.5	24.5	26.0	22.5	1800	DY/D19	34	F450DY564J630(1)	PHE450MD6560J(1)
630	400	0.22	10.5	20.5	31.5	27.5	1100	FE/F11	38	F450FE224J630(1)	PHE450MF6220J(1)
630	400	0.27	10.5	20.5	31.5	27.5	1100	FE/F11	38	F450FE274J630(1)	PHE450MF6270J(1)
630	400	0.33	10.5	20.5	31.5	27.5	1100	FE/F11	38	F450FE334J630(1)	PHE450MF6330J(1)
630	400	0.39	10.5	20.5	31.5	27.5	1100	FE/F11	38	F450FE394J630(1)	PHE450MF6390J(1)
630	400	0.39	21.0	12.5	31.5	27.5	1100	FH/F17	38	F450FH394J630(1)	PHE450MT6390J(1)
630	400	0.47	11.5	22.5	31.5	27.5	1100	FG/F12	35	F450FG474J630(1)	PHE450MF6470J(1)
630	400	0.56	13.5	23.0	31.5	27.5	1100	FK/F03	34	F450FK564J630(1)	PHE450MF6560J(1)
630	400	0.68	14.5	24.5	31.5	27.5	1100	FM/F13	33	F450FM684J630(1)	PHE450MF6680J(1)
630	400	0.82	17.5	28.0	31.5	27.5	1100	FR/F14	30	F450FR824J630(1)	PHE450MF6820J(1)
630	400	0.82	27.5	16.0	31.5	27.5	1100	FQ/F19	30	F450FQ824J630(1)	PHE450MT6820J(1)
630	400	1.0	17.5	28.0	31.5	27.5	1100	FR/F14	30	F450FR105J630(1)	PHE450MF7100J(1)
630	400	1.2	21.0	30.0	31.5	27.5	1100	FV/F16	25	F450FV125J630(1)	PHE450MF7120J(1)
630	400	1.2	31.0	19.0	31.5	27.5	1100	FT/F18	25	F450FT125J630(1)	PHE450MT7120J(1)
630	400	0.56	13.0	24.0	41.0	37.5	700	RF/R05	29	F450RF564J630(1)	PHE450MR6560J(1)
630	400	0.68	13.0	24.0	41.0	37.5	700	RF/R05	28	F450RF684J630(1)	PHE450MR6680J(1)
630	400	0.82	13.0	24.0	41.0	37.5	700	RF/R05	28	F450RF824J630(1)	PHE450MR6820J(1)
630	400	1.0	15.0	26.0	41.0	37.5	700	RH/R04	27	F450RH105J630(1)	PHE450MR7100J(1)
630	400	1.2	15.0	26.0	41.0	37.5	700	RH/R04	27	F450RH125J630(1)	PHE450MR7120J(1)
630	400	1.5	16.5	32.0	41.0	37.5	700	RK/R02	24	F450RK155J630(1)	PHE450MR7150J(1)
630	400	1.8	19.0	36.0	41.0	37.5	700	RM/R03	20	F450RM185J630(1)	PHE450MR7180J(1)
630	400	2.2	19.0	36.0	41.0	37.5	700	RM/R03	20	F450RM225J630(1)	PHE450MR7220J(1)
630	400	2.7	21.0	38.0	41.0	37.5	700	RP/R06	18	F450RP275J630(1)	PHE450MR7270J(1)
630	400	3.3	28.0	43.0	41.0	37.5	700	RS/R08	18	F450RS335J630(1)	PHE450MR7330J(1)
1000	375	0.00033	4.0	8.0	10.0	7.5	2000	KG/K01	160	F450KG331J1K0(1)	PHE450PK3330J(1)
VDC	VAC	Cap Value (µF)	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/ µs)	Size Code (New/Legacy)	R_{thha} °C/W 85°C 0.2m/s	New KEMET Part Number	Legacy Part Number

(1) Insert lead and packaging code. See Ordering Options Table for available options.

Roll Over for Order Info.

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Cap Value (µF)	Dimensions in mm			Lead Spacing (p)	dV/dt (V/µs)	Size Code (New/ Legacy)	R_{thha} °C/W 85°C 0.2m/s	New KEMET Part Number	Legacy Part Number
			B	H	L						
1000	375	0.00039	4.0	8.0	10.0	7.5	2000	KG/K01	160	F450KG391J1K0(1)	PHE450PK3390J(1)
1000	375	0.00047	4.0	8.0	10.0	7.5	2000	KG/K01	160	F450KG471J1K0(1)	PHE450PK3470J(1)
1000	375	0.00056	4.0	8.0	10.0	7.5	2000	KG/K01	160	F450KG561J1K0(1)	PHE450PK3560J(1)
1000	375	0.00068	4.0	8.0	10.0	7.5	2000	KG/K01	160	F450KG681J1K0(1)	PHE450PK3680J(1)
1000	375	0.00082	4.0	8.0	10.0	7.5	2000	KG/K01	160	F450KG821J1K0(1)	PHE450PK3820J(1)
1000	375	0.0010	4.0	8.0	10.0	7.5	2000	KG/K01	160	F450KG102J1K0(1)	PHE450PK4100J(1)
1000	375	0.0012	4.0	8.0	10.0	7.5	2000	KG/K01	160	F450KG122J1K0(1)	PHE450PK4120J(1)
1000	375	0.0015	4.0	8.0	10.0	7.5	2000	KG/K01	160	F450KG152J1K0(1)	PHE450PK4150J(1)
1000	375	0.0018	4.0	8.0	10.0	7.5	2000	KG/K01	160	F450KG182J1K0(1)	PHE450PK4180J(1)
1000	375	0.0022	4.0	8.0	10.0	7.5	2000	KG/K01	160	F450KG222J1K0(1)	PHE450PK4220J(1)
1000	600	0.0027	4.0	8.0	10.0	7.5	2000	KG/K01	160	F450KG272J1K0(1)	PHE450PK4270J(1)
1000	600	0.0033	4.0	8.0	10.0	7.5	2000	KG/K01	160	F450KG332J1K0(1)	PHE450PK4330J(1)
1000	600	0.0039	4.0	8.0	10.0	7.5	2000	KG/K01	160	F450KG392J1K0(1)	PHE450PK4390J(1)
1000	600	0.0047	5.0	11.0	10.0	7.5	2000	KK/K03	160	F450KK472J1K0(1)	PHE450PK4470J(1)
1000	600	0.0056	5.0	11.0	10.0	7.5	2000	KK/K03	160	F450KK562J1K0(1)	PHE450PK4560J(1)
1000	600	0.0068	5.0	11.0	10.0	7.5	2000	KK/K03	160	F450KK682J1K0(1)	PHE450PK4680J(1)
1000	600	0.0082	5.0	11.0	10.0	7.5	2000	KK/K03	160	F450KK822J1K0(1)	PHE450PK4820J(1)
1000	600	0.010	6.0	12.0	10.5	7.5	2000	KM/K04	160	F450KM103J1K0(1)	PHE450PK5100J(1)
1000	600	0.012	6.0	12.0	10.5	7.5	2000	KM/K04	160	F450KM123J1K0(1)	PHE450PK5120J(1)
1000	600	0.0010	4.0	9.0	13.0	10	1400	AG/A01	142	F450AG102J1K0(1)	PHE450PA4100J(1)
1000	600	0.0012	4.0	9.0	13.0	10	1400	AG/A01	142	F450AG122J1K0(1)	PHE450PA4120J(1)
1000	600	0.0015	4.0	9.0	13.0	10	1400	AG/A01	142	F450AG152J1K0(1)	PHE450PA4150J(1)
1000	600	0.0018	4.0	9.0	13.0	10	1400	AG/A01	142	F450AG182J1K0(1)	PHE450PA4180J(1)
1000	600	0.0022	4.0	9.0	13.0	10	1400	AG/A01	142	F450AG222J1K0(1)	PHE450PA4220J(1)
1000	600	0.0027	4.0	9.0	13.0	10	1400	AG/A01	142	F450AG272J1K0(1)	PHE450PA4270J(1)
1000	600	0.0033	4.0	9.0	13.0	10	1400	AG/A01	142	F450AG332J1K0(1)	PHE450PA4330J(1)
1000	600	0.0039	4.0	9.0	13.0	10	1400	AG/A01	142	F450AG392J1K0(1)	PHE450PA4390J(1)
1000	600	0.0047	4.0	9.0	13.0	10	1400	AG/A01	142	F450AG472J1K0(1)	PHE450PA4470J(1)
1000	600	0.0056	4.0	9.0	13.0	10	1400	AG/A01	142	F450AG562J1K0(1)	PHE450PA4560J(1)
1000	600	0.0068	4.0	9.0	13.0	10	1400	AG/A01	142	F450AG682J1K0(1)	PHE450PA4680J(1)
1000	600	0.0082	4.5	10.5	13.0	10	1400	AH/A02	122	F450AH822J1K0(1)	PHE450PA4820J(1)
1000	600	0.010	4.5	10.5	13.0	10	1400	AH/A02	122	F450AH103J1K0(1)	PHE450PA5100J(1)
1000	600	0.012	5.0	11.0	13.0	10	1400	AK/A03	116	F450AK123J1K0(1)	PHE450PA5120J(1)
1000	600	0.015	6.0	12.0	13.0	10	1400	AP/A04	105	F450AP153J1K0(1)	PHE450PA5150J(1)
1000	600	0.018	6.0	12.0	13.0	10	1400	AP/A04	105	F450AP183J1K0(1)	PHE450PA5180J(1)
1000	600	0.0039	5.5	10.5	18.0	15	2500	BD/B04	98	F450BD392J1K0(1)	PHE450PB4390J(1)
1000	600	0.0047	5.5	10.5	18.0	15	2500	BD/B04	98	F450BD472J1K0(1)	PHE450PB4470J(1)
1000	600	0.0056	5.5	10.5	18.0	15	2500	BD/B04	98	F450BD562J1K0(1)	PHE450PB4560J(1)
1000	600	0.0068	5.5	10.5	18.0	15	2500	BD/B04	99	F450BD682J1K0(1)	PHE450PB4680J(1)
1000	600	0.0082	5.5	10.5	18.0	15	2500	BD/B04	99	F450BD822J1K0(1)	PHE450PB4820J(1)
1000	600	0.010	5.5	10.5	18.0	15	2500	BD/B04	99	F450BD103J1K0(1)	PHE450PB5100J(1)
1000	600	0.012	5.5	10.5	18.0	15	2500	BD/B04	99	F450BD123J1K0(1)	PHE450PB5120J(1)
1000	600	0.015	5.5	10.5	18.0	15	2500	BD/B04	99	F450BD153J1K0(1)	PHE450PB5150J(1)
1000	600	0.018	5.5	10.5	18.0	15	2500	BD/B04	98	F450BD183J1K0(1)	PHE450PB5180JB04(1)
1000	600	0.022	5.5	10.5	18.0	15	2500	BD/B04	98	F450BD223J1K0(1)	PHE450PB5220JB04(1)
1000	600	0.027	5.5	12.5	18.0	15	2500	BE/B05	90	F450BE273J1K0(1)	PHE450PB5270JB05(1)
1000	600	0.033	6.5	12.5	18.0	15	2500	BJ/B10	87	F450BJ333J1K0(1)	PHE450PB5330JB10(1)
1000	600	0.039	7.5	14.5	18.0	15	2500	BL/B06	78	F450BL393J1K0(1)	PHE450PB5390J(1)
1000	600	0.047	7.5	14.5	18.0	15	2500	BL/B06	78	F450BL473J1K0(1)	PHE450PB5470JB06(1)
1000	600	0.056	8.0	15.0	18.0	15	2500	BM/B12	75	F450BM563J1K0(1)	PHE450PB5560JB12(1)
1000	600	0.068	8.5	16.0	18.0	15	2500	BQ/B11	70	F450BQ683J1K0(1)	PHE450PB5680JB11(1)
1000	600	0.082	9.5	17.5	18.0	15	2500	BV/B14	60	F450BV823J1K0(1)	PHE450PB5820JB11(1)
1000	600	0.10	11.0	19.0	18.0	15	2500	BY/B16	55	F450BY104J1K0(1)	PHE450PB6100JB11(1)
1000	600	0.12	11.0	19.0	18.0	15	2500	BY/B16	55	F450BY124J1K0(1)	PHE450PB6120JB11(1)
1000	600	0.022	6.5	14.5	26.0	22.5	1800	DD/D13	58	F450DD223J1K0(1)	PHE450PD5220J(1)
1000	600	0.027	6.5	14.5	26.0	22.5	1800	DD/D13	58	F450DD273J1K0(1)	PHE450PD5270J(1)
1000	600	0.033	6.5	14.5	26.0	22.5	1800	DD/D13	58	F450DD333J1K0(1)	PHE450PD5330J(1)
1000	600	0.039	6.5	14.5	26.0	22.5	1800	DD/D13	58	F450DD393J1K0(1)	PHE450PD5390J(1)
1000	600	0.047	6.5	14.5	26.0	22.5	1800	DD/D13	58	F450DD473J1K0(1)	PHE450PD5470J(1)
VDC	VAC	Cap Value (µF)	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/ µs)	Size Code (New/Legacy)	R_{thha} °C/W 85°C 0.2m/s	New KEMET Part Number	Legacy Part Number

(1) Insert lead and packaging code. See Ordering Options Table for available options.

Roll Over for Order Info.

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Cap Value (µF)	Dimensions in mm			Lead Spacing (p)	dV/dt (V/µs)	Size Code (New/ Legacy)	R_{thha} °C/W 85°C 0.2m/s	New KEMET Part Number	Legacy Part Number
			B	H	L						
1000	600	0.056	6.5	14.5	26.0	22.5	1800	DD/D13	58	F450DD563J1K0(1)	PHE450PD5560J(1)
1000	600	0.068	6.5	14.5	26.0	22.5	1800	DD/D13	55	F450DD683J1K0(1)	PHE450PD5680JD13(1)
1000	600	0.082	6.5	14.5	26.0	22.5	1800	DD/D13	54	F450DD823J1K0(1)	PHE450PD5820JD13(1)
1000	600	0.10	7.0	16.5	26.0	22.5	1800	DF/D17	52	F450DF104J1K0(1)	PHE450PD6100JD17(1)
1000	600	0.12	8.0	16.0	26.0	22.5	1800	DH/D14	52	F450DH124J1K0(1)	PHE450PD6120JD14(1)
1000	600	0.15	9.0	18.5	26.0	22.5	1800	DM/D15	49	F450DM154J1K0(1)	PHE450PD6150JD15(1)
1000	600	0.18	10.5	19.0	26.0	22.5	1800	DR/D18	46	F450DR184J1K0(1)	PHE450PD6180JD18(1)
1000	600	0.22	11.0	21.5	26.0	22.5	1800	DT/D16	44	F450DT224J1K0(1)	PHE450PD6220JD16(1)
1000	600	0.27	13.5	23.0	26.0	22.5	1800	DW/D20	40	F450DW274J1K0(1)	PHE450PD6270JD20(1)
1000	600	0.33	13.5	23.0	26.0	22.5	1800	DW/D20	40	F450DW334J1K0(1)	PHE450PD6330JD20(1)
1000	600	0.39	15.5	24.5	26.0	22.5	1800	DY/D19	35	F450DY394J1K0(1)	PHE450PD6390JD19(1)
1000	600	0.15	10.5	20.5	31.5	27.5	1300	FE/F11	38	F450FE154J1K0(1)	PHE450PF6150J(1)
1000	600	0.18	10.5	20.5	31.5	27.5	1300	FE/F11	38	F450FE184J1K0(1)	PHE450PF6180J(1)
1000	600	0.22	10.5	20.5	31.5	27.5	1300	FE/F11	36	F450FE224J1K0(1)	PHE450PF6220J(1)
1000	600	0.22	21.0	12.5	31.5	27.5	1300	FH/F17	36	F450FH224J1K0(1)	PHE450PT6220JF17(1)
1000	600	0.27	10.5	20.5	31.5	27.5	1300	FE/F11	36	F450FE274J1K0(1)	PHE450PF6270JF11(1)
1000	600	0.33	11.5	22.5	31.5	27.5	1300	FG/F12	35	F450FG334J1K0(1)	PHE450PF6330JF12(1)
1000	600	0.39	13.5	23.0	31.5	27.5	1300	FK/F03	34	F450FK394J1K0(1)	PHE450PF6390JF03(1)
1000	600	0.47	14.5	24.5	31.5	27.5	1300	FM/F13	34	F450FM474J1K0(1)	PHE450PF6470JF13(1)
1000	600	0.47	27.5	16.0	31.5	27.5	1300	FQ/F19	30	F450FQ474J1K0(1)	PHE450PT6470J(1)
1000	600	0.56	17.5	28.0	31.5	27.5	1300	FR/F14	28	F450FR564J1K0(1)	PHE450PF6560JF14(1)
1000	600	0.68	17.5	28.0	31.5	27.5	1300	FR/F14	28	F450FR684J1K0(1)	PHE450PF6680JF14(1)
1000	600	0.68	31.0	19.0	31.5	27.5	1300	FT/F18	25	F450FT684J1K0(1)	PHE450PT6680J(1)
1000	600	0.82	19.0	29.0	31.5	27.5	1300	FS/F15	25	F450FS824J1K0(1)	PHE450PF6820JF15(1)
1000	600	1.0	21.0	30.0	31.5	27.5	1300	FV/F16	25	F450FV105J1K0(1)	PHE450PF7100JF16(1)
1000	600	0.33	13.0	24.0	41.0	37.5	800	RF/R05	28	F450RF334J1K0(1)	PHE450PR6330J(1)
1000	600	0.39	13.0	24.0	41.0	37.5	800	RF/R05	28	F450RF394J1K0(1)	PHE450PR6390J(1)
1000	600	0.47	13.0	24.0	41.0	37.5	800	RF/R05	28	F450RF474J1K0(1)	PHE450PR6470J(1)
1000	600	0.56	13.0	24.0	41.0	37.5	800	RF/R05	27	F450RF564J1K0(1)	PHE450PR6560JR05(1)
1000	600	0.68	15.0	26.0	41.0	37.5	800	RH/R04	25	F450RH684J1K0(1)	PHE450PR6680JR04(1)
1000	600	0.82	16.5	32.0	41.0	37.5	800	RK/R02	25	F450RK824J1K0(1)	PHE450PR6820J(1)
1000	600	1.0	16.5	32.0	41.0	37.5	800	RK/R02	20	F450RK105J1K0(1)	PHE450PR7100JR02(1)
1000	600	1.2	19.0	36.0	41.0	37.5	800	RM/R03	19	F450RM125J1K0(1)	PHE450PR7120J(1)
1000	600	1.5	19.0	36.0	41.0	37.5	800	RM/R03	19	F450RM155J1K0(1)	PHE450PR7150JR03(1)
1000	600	1.8	21.0	38.0	41.0	37.5	800	RP/R06	19	F450RP185J1K0(1)	PHE450PR7180JR06(1)
1000	600	2.2	28.0	43.0	41.0	37.5	800	RS/R08	19	F450RS225J1K0(1)	PHE450PR7220JR08(1)
1600	650	0.0027	5.5	10.5	18.0	15	2500	BD/B04	98	F450BD272J1K6(1)	PHE450RB4270J(1)
1600	650	0.0033	5.5	10.5	18.0	15	2500	BD/B04	98	F450BD332J1K6(1)	PHE450RB4330J(1)
1600	650	0.0039	5.5	10.5	18.0	15	2500	BD/B04	98	F450BD392J1K6(1)	PHE450RB4390J(1)
1600	650	0.0047	5.5	10.5	18.0	15	2500	BD/B04	98	F450BD472J1K6(1)	PHE450RB4470J(1)
1600	650	0.0056	5.5	10.5	18.0	15	2500	BD/B04	98	F450BD562J1K6(1)	PHE450RB4560J(1)
1600	650	0.0068	5.5	10.5	18.0	15	2500	BD/B04	99	F450BD682J1K6(1)	PHE450RB4680J(1)
1600	650	0.0082	5.5	10.5	18.0	15	2500	BD/B04	99	F450BD822J1K6(1)	PHE450RB4820J(1)
1600	650	0.010	5.5	10.5	18.0	15	2500	BD/B04	99	F450BD103J1K6(1)	PHE450RB5100J(1)
1600	650	0.012	5.5	10.5	18.0	15	2500	BD/B04	99	F450BD123J1K6(1)	PHE450RB5120J(1)
1600	650	0.015	5.5	12.5	18.0	15	2500	BE/B05	90	F450BE153J1K6(1)	PHE450RB5150J(1)
1600	650	0.018	6.5	12.5	18.0	15	2500	BJ/B10	88	F450BJ183J1K6(1)	PHE450RB5180J(1)
1600	650	0.022	6.5	12.5	18.0	15	2500	BJ/B10	89	F450BJ223J1K6(1)	PHE450RB5220J(1)
1600	650	0.027	7.5	14.5	18.0	15	2500	BL/B06	80	F450BL273J1K6(1)	PHE450RB5270J(1)
1600	650	0.033	8.0	15.0	18.0	15	2500	BM/B12	75	F450BM333J1K6(1)	PHE450RB5330J(1)
1600	650	0.039	8.5	16.0	18.0	15	2500	BQ/B11	73	F450BQ393J1K6(1)	PHE450RB5390J(1)
1600	650	0.047	9.5	17.5	18.0	15	2500	BV/B14	60	F450BV473J1K6(1)	PHE450RB5470J(1)
1600	650	0.056	9.5	17.5	18.0	15	2500	BV/B14	60	F450BV563J1K6(1)	PHE450RB5560J(1)
1600	650	0.010	6.5	14.5	26.0	22.5	1800	DD/D13	60	F450DD103J1K6(1)	PHE450RD5100J(1)
1600	650	0.012	6.5	14.5	26.0	22.5	1800	DD/D13	60	F450DD123J1K6(1)	PHE450RD5120J(1)
1600	650	0.015	6.5	14.5	26.0	22.5	1800	DD/D13	60	F450DD153J1K6(1)	PHE450RD5150J(1)
1600	650	0.018	6.5	14.5	26.0	22.5	1800	DD/D13	58	F450DD183J1K6(1)	PHE450RD5180J(1)
1600	650	0.022	6.5	14.5	26.0	22.5	1800	DD/D13	58	F450DD223J1K6(1)	PHE450RD5220J(1)
1600	650	0.027	6.5	14.5	26.0	22.5	1800	DD/D13	58	F450DD273J1K6(1)	PHE450RD5270J(1)
VDC	VAC	Cap Value (µF)	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/ µs)	Size Code (New/Legacy)	R_{thha} °C/W 85°C 0.2m/s	New KEMET Part Number	Legacy Part Number

(1) Insert lead and packaging code. See Ordering Options Table for available options.

Roll Over for Order Info.

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Cap Value (µF)	Dimensions in mm			Lead Spacing (p)	dV/dt (V/µs)	Size Code (New/ Legacy)	R_{thha} °C/W 85°C 0.2m/s	New KEMET Part Number	Legacy Part Number
			B	H	L						
1600	650	0.033	6.5	14.5	26.0	22.5	1800	DD/D13	58	F450DD333J1K6(1)	PHE450RD5330J(1)
1600	650	0.039	6.5	14.5	26.0	22.5	1800	DD/D13	58	F450DD393J1K6(1)	PHE450RD5390J(1)
1600	650	0.047	7.0	16.5	26.0	22.5	1800	DF/D17	55	F450DF473J1K6(1)	PHE450RD5470J(1)
1600	650	0.056	7.0	16.5	26.0	22.5	1800	DF/D17	55	F450DF563J1K6(1)	PHE450RD5560J(1)
1600	650	0.068	9.0	18.5	26.0	22.5	1800	DM/D15	50	F450DM683J1K6(1)	PHE450RD5680J(1)
1600	650	0.082	9.0	18.5	26.0	22.5	1800	DM/D15	50	F450DM823J1K6(1)	PHE450RD5820J(1)
1600	650	0.10	10.5	19.0	26.0	22.5	1800	DR/D18	48	F450DR104J1K6(1)	PHE450RD6100J(1)
1600	650	0.12	11.0	21.5	26.0	22.5	1800	DT/D16	45	F450DT124J1K6(1)	PHE450RD6120J(1)
1600	650	0.15	13.5	23.0	26.0	22.5	1800	DW/D20	40	F450DW154J1K6(1)	PHE450RD6150J(1)
1600	650	0.18	13.5	23.0	26.0	22.5	1800	DW/D20	40	F450DW184J1K6(1)	PHE450RD6180J(1)
1600	650	0.22	15.5	24.5	26.0	22.5	1800	DY/D19	34	F450DY224J1K6(1)	PHE450RD6220J(1)
1600	650	0.082	10.5	20.5	31.5	27.5	1300	FE/F11	37	F450FE823J1K6(1)	PHE450RF5820J(1)
1600	650	0.10	10.5	20.5	31.5	27.5	1300	FE/F11	37	F450FE104J1K6(1)	PHE450RF6100J(1)
1600	650	0.10	21.0	12.5	31.5	27.5	1300	FH/F17	37	F450FH104J1K6(1)	PHE450RT6100J(1)
1600	650	0.12	10.5	20.5	31.5	27.5	1300	FE/F11	37	F450FE124J1K6(1)	PHE450RF6120J(1)
1600	650	0.15	11.5	22.5	31.5	27.5	1300	FG/F12	36	F450FG154J1K6(1)	PHE450RF6150J(1)
1600	650	0.18	13.5	23.0	31.5	27.5	1300	FK/F03	35	F450FK184J1K6(1)	PHE450RF6180J(1)
1600	650	0.22	14.5	24.5	31.5	27.5	1300	FM/F13	35	F450FM224J1K6(1)	PHE450RF6220J(1)
1600	650	0.22	27.5	16.0	31.5	27.5	1300	FQ/F19	35	F450FQ224J1K6(1)	PHE450RT6220J(1)
1600	650	0.27	17.5	28.0	31.5	27.5	1300	FR/F14	32	F450FR274J1K6(1)	PHE450RF6270J(1)
1600	650	0.33	19.0	29.0	31.5	27.5	1300	FS/F15	28	F450FS334J1K6(1)	PHE450RF6330J(1)
1600	650	0.33	31.0	19.0	31.5	27.5	1300	FT/F18	28	F450FT334J1K6(1)	PHE450RT6330J(1)
1600	650	0.39	21.0	30.0	31.5	27.5	1300	FV/F16	25	F450FV394J1K6(1)	PHE450RF6390J(1)
1600	650	0.18	13.0	24.0	41.0	37.5	800	RF/R05	27	F450RF184J1K6(1)	PHE450RR6180J(1)
1600	650	0.22	13.0	24.0	41.0	37.5	800	RF/R05	27	F450RF224J1K6(1)	PHE450RR6220J(1)
1600	650	0.27	13.0	24.0	41.0	37.5	800	RF/R05	27	F450RF274J1K6(1)	PHE450RR6270J(1)
1600	650	0.33	15.0	26.0	41.0	37.5	800	RH/R04	26	F450RH334J1K6(1)	PHE450RR6330J(1)
1600	650	0.39	16.5	32.0	41.0	37.5	800	RK/R02	24	F450RK394J1K6(1)	PHE450RR6390J(1)
1600	650	0.47	16.5	32.0	41.0	37.5	800	RK/R02	24	F450RK474J1K6(1)	PHE450RR6470J(1)
1600	650	0.56	16.5	32.0	41.0	37.5	800	RK/R02	20	F450RK564J1K6(1)	PHE450RR6560J(1)
1600	650	0.68	19.0	36.0	41.0	37.5	800	RM/R03	20	F450RM684J1K6(1)	PHE450RR6680J(1)
1600	650	0.82	21.0	38.0	41.0	37.5	800	RP/R06	18	F450RP824J1K6(1)	PHE450RR6820J(1)
1600	650	1.0	28.0	43.0	41.0	37.5	800	RS/R08	18	F450RS105J1K6(1)	PHE450RR7100JR08(1)
2000	700	0.0010	5.5	10.5	18.0	15	2500	BD/B04	98	F450BD102J2K0(1)	PHE450SB4100J(1)
2000	700	0.0012	5.5	10.5	18.0	15	2500	BD/B04	98	F450BD122J2K0(1)	PHE450SB4120J(1)
2000	700	0.0015	5.5	10.5	18.0	15	2500	BD/B04	98	F450BD152J2K0(1)	PHE450SB4150J(1)
2000	700	0.0018	5.5	10.5	18.0	15	2500	BD/B04	98	F450BD182J2K0(1)	PHE450SB4180J(1)
2000	700	0.0022	5.5	10.5	18.0	15	2500	BD/B04	98	F450BD222J2K0(1)	PHE450SB4220J(1)
2000	700	0.0027	5.5	10.5	18.0	15	2500	BD/B04	98	F450BD272J2K0(1)	PHE450SB4270J(1)
2000	700	0.0033	5.5	10.5	18.0	15	2500	BD/B04	98	F450BD332J2K0(1)	PHE450SB4330J(1)
2000	700	0.0039	5.5	10.5	18.0	15	2500	BD/B04	98	F450BD392J2K0(1)	PHE450SB4390J(1)
2000	700	0.0047	5.5	10.5	18.0	15	2500	BD/B04	98	F450BD472J2K0(1)	PHE450SB4470J(1)
2000	700	0.0056	5.5	10.5	18.0	15	2500	BD/B04	98	F450BD562J2K0(1)	PHE450SB4560J(1)
2000	700	0.0068	5.5	10.5	18.0	15	2500	BD/B04	98	F450BD682J2K0(1)	PHE450SB4680J(1)
2000	700	0.0082	5.5	12.5	18.0	15	2500	BE/B05	92	F450BE822J2K0(1)	PHE450SB4820J(1)
2000	700	0.010	6.5	12.5	18.0	15	2500	BJ/B10	90	F450BJ103J2K0(1)	PHE450SB5100J(1)
2000	700	0.012	7.5	14.5	18.0	15	2500	BL/B06	80	F450BL123J2K0(1)	PHE450SB5120J(1)
2000	700	0.015	7.5	14.5	18.0	15	2500	BL/B06	80	F450BL153J2K0(1)	PHE450SB5150J(1)
2000	700	0.018	8.0	15.0	18.0	15	2500	BM/B12	75	F450BM183J2K0(1)	PHE450SB5180J(1)
2000	700	0.022	8.5	16.0	18.0	15	2500	BQ/B11	70	F450BQ223J2K0(1)	PHE450SB5220J(1)
2000	700	0.027	9.5	17.5	18.0	15	2500	BV/B14	61	F450BV273J2K0(1)	PHE450SB5270J(1)
2000	700	0.0033	6.5	14.5	26.0	22.5	1800	DD/D13	60	F450DD332J2K0(1)	PHE450SD4330J(1)
2000	700	0.0039	6.5	14.5	26.0	22.5	1800	DD/D13	60	F450DD392J2K0(1)	PHE450SD4390J(1)
2000	700	0.0047	6.5	14.5	26.0	22.5	1800	DD/D13	60	F450DD472J2K0(1)	PHE450SD4470J(1)
2000	700	0.0056	6.5	14.5	26.0	22.5	1800	DD/D13	60	F450DD562J2K0(1)	PHE450SD4560J(1)
2000	700	0.0068	6.5	14.5	26.0	22.5	1800	DD/D13	60	F450DD682J2K0(1)	PHE450SD4680J(1)
2000	700	0.0082	6.5	14.5	26.0	22.5	1800	DD/D13	60	F450DD822J2K0(1)	PHE450SD4820J(1)
2000	700	0.010	6.5	14.5	26.0	22.5	1800	DD/D13	60	F450DD103J2K0(1)	PHE450SD5100J(1)
2000	700	0.012	6.5	14.5	26.0	22.5	1800	DD/D13	60	F450DD123J2K0(1)	PHE450SD5120J(1)
VDC	VAC	Cap Value (µF)	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/ µs)	Size Code (New/Legacy)	R_{thha} °C/W 85°C 0.2m/s	New KEMET Part Number	Legacy Part Number

(1) Insert lead and packaging code. See Ordering Options Table for available options.

Roll Over for Order Info.

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Cap Value (µF)	Dimensions in mm			Lead Spacing (p)	dV/dt (V/µs)	Size Code (New/ Legacy)	R_{thha} °C/W 85°C 0.2m/s	New KEMET Part Number	Legacy Part Number
			B	H	L						
2000	700	0.015	6.5	14.5	26.0	22.5	1800	DD/D13	60	F450DD153J2K0(1)	PHE450SD5150J(1)
2000	700	0.018	6.5	14.5	26.0	22.5	1800	DD/D13	58	F450DD183J2K0(1)	PHE450SD5180J(1)
2000	700	0.022	6.5	14.5	26.0	22.5	1800	DD/D13	58	F450DD223J2K0(1)	PHE450SD5220J(1)
2000	700	0.027	7.0	16.5	26.0	22.5	1800	DF/D17	55	F450DF273J2K0(1)	PHE450SD5270J(1)
2000	700	0.033	7.0	16.5	26.0	22.5	1800	DF/D17	55	F450DF333J2K0(1)	PHE450SD5330J(1)
2000	700	0.039	8.0	16.0	26.0	22.5	1800	DH/D14	53	F450DH393J2K0(1)	PHE450SD5390J(1)
2000	700	0.047	9.0	18.5	26.0	22.5	1800	DM/D15	52	F450DM473J2K0(1)	PHE450SD5470J(1)
2000	700	0.056	10.5	19.0	26.0	22.5	1800	DR/D18	50	F450DR563J2K0(1)	PHE450SD5560J(1)
2000	700	0.068	11.0	21.5	26.0	22.5	1800	DT/D16	45	F450DT683J2K0(1)	PHE450SD5680J(1)
2000	700	0.082	11.0	21.5	26.0	22.5	1800	DT/D16	45	F450DT823J2K0(1)	PHE450SD5820J(1)
2000	700	0.10	13.5	23.0	26.0	22.5	1800	DW/D20	40	F450DW104J2K0(1)	PHE450SD6100J(1)
2000	700	0.12	15.5	24.5	26.0	22.5	1800	DY/D19	35	F450DY124J2K0(1)	PHE450SD6120J(1)
2000	700	0.047	10.5	20.5	31.5	27.5	1300	FE/F11	37	F450FE473J2K0(1)	PHE450SF5470J(1)
2000	700	0.056	10.5	20.5	31.5	27.5	1300	FE/F11	37	F450FE563J2K0(1)	PHE450SF5560J(1)
2000	700	0.056	21.0	12.5	31.5	27.5	1300	FH/F17	37	F450FH563J2K0(1)	PHE450ST5560J(1)
2000	700	0.068	10.5	20.5	31.5	27.5	1300	FE/F11	36	F450FE683J2K0(1)	PHE450SF5680J(1)
2000	700	0.082	10.5	20.5	31.5	27.5	1300	FE/F11	35	F450FE823J2K0(1)	PHE450SF5820J(1)
2000	700	0.10	11.5	22.5	31.5	27.5	1300	FG/F12	34	F450FG104J2K0(1)	PHE450SF6100JF12(1)
2000	700	0.12	13.5	23.0	31.5	27.5	1300	FK/F03	32	F450FK124J2K0(1)	PHE450SF6120JF03(1)
2000	700	0.12	27.5	16.0	31.5	27.5	1300	FQ/F19	32	F450FQ124J2K0(1)	PHE450ST6120J(1)
2000	700	0.15	14.5	24.5	31.5	27.5	1300	FM/F13	30	F450FM154J2K0(1)	PHE450SF6150JF13(1)
2000	700	0.18	17.5	28.0	31.5	27.5	1300	FR/F14	28	F450FR184J2K0(1)	PHE450SF6180JF14(1)
2000	700	0.18	31.0	19.0	31.5	27.5	1300	FT/F18	28	F450FT184J2K0(1)	PHE450ST6180J(1)
2000	700	0.22	19.0	29.0	31.5	27.5	1300	FS/F15	26	F450FS224J2K0(1)	PHE450SF6220JF15(1)
2000	700	0.27	21.0	30.0	31.5	27.5	1300	FV/F16	25	F450FV274J2K0(1)	PHE450SF6270JF16(1)
2000	700	0.10	13.0	24.0	41.0	37.5	800	RF/R05	27	F450RF104J2K0(1)	PHE450SR6100J(1)
2000	700	0.12	13.0	24.0	41.0	37.5	800	RF/R05	27	F450RF124J2K0(1)	PHE450SR6120J(1)
2000	700	0.15	13.0	24.0	41.0	37.5	800	RF/R05	26	F450RF154J2K0(1)	PHE450SR6150JR05(1)
2000	700	0.18	13.0	24.0	41.0	37.5	800	RF/R05	26	F450RF184J2K0(1)	PHE450SR6180JR05(1)
2000	700	0.22	15.0	26.0	41.0	37.5	800	RH/R04	24	F450RH224J2K0(1)	PHE450SR6220JR04(1)
2000	700	0.27	16.5	32.0	41.0	37.5	800	RK/R02	22	F450RK274J2K0(1)	PHE450SR6270JR02(1)
2000	700	0.33	16.5	32.0	41.0	37.5	800	RK/R02	22	F450RK334J2K0(1)	PHE450SR6330JR02(1)
2000	700	0.39	19.0	36.0	41.0	37.5	800	RM/R03	18	F450RM394J2K0(1)	PHE450SR6390JR03(1)
2000	700	0.47	19.0	36.0	41.0	37.5	800	RM/R03	18	F450RM474J2K0(1)	PHE450SR6470JR03(1)
2000	700	0.56	21.0	38.0	41.0	37.5	800	RP/R06	18	F450RP564J2K0(1)	PHE450SR6560JR06(1)
2000	700	0.68	28.0	43.0	41.0	37.5	800	RS/R08	18	F450RS684J2K0(1)	PHE450SR6680JR08(1)
2500	900	0.0010	5.5	10.5	18.0	15	2500	BD/B04	98	F450BD102J2K5(1)	PHE450TB4100J(1)
2500	900	0.0012	5.5	10.5	18.0	15	2500	BD/B04	98	F450BD122J2K5(1)	PHE450TB4120J(1)
2500	900	0.0015	5.5	10.5	18.0	15	2500	BD/B04	98	F450BD152J2K5(1)	PHE450TB4150J(1)
2500	900	0.0018	5.5	10.5	18.0	15	2500	BD/B04	98	F450BD182J2K5(1)	PHE450TB4180J(1)
2500	900	0.0022	5.5	12.5	18.0	15	2500	BE/B05	92	F450BE222J2K5(1)	PHE450TB4220J(1)
2500	900	0.0027	6.5	12.5	18.0	15	2500	BJ/B10	90	F450BJ272J2K5(1)	PHE450TB4270J(1)
2500	900	0.0033	7.5	14.5	18.0	15	2500	BL/B06	80	F450BL332J2K5(1)	PHE450TB4330J(1)
2500	900	0.0039	7.5	14.5	18.0	15	2500	BL/B06	80	F450BL392J2K5(1)	PHE450TB4390J(1)
2500	900	0.0047	8.0	15.0	18.0	15	2500	BM/B12	75	F450BM472J2K5(1)	PHE450TB4470J(1)
2500	900	0.0056	8.5	16.0	18.0	15	2500	BQ/B11	70	F450BQ562J2K5(1)	PHE450TB4560J(1)
2500	900	0.0068	9.5	17.5	18.0	15	2500	BV/B14	60	F450BV682J2K5(1)	PHE450TB4680JB14(1)
2500	900	0.0082	9.5	17.5	18.0	15	2500	BV/B14	60	F450BV822J2K5(1)	PHE450TB4820J(1)
2500	900	0.010	11.0	19.0	18.0	15	2500	BY/B16	55	F450BY103J2K5(1)	PHE450TB5100JB16(1)
2500	900	0.0047	6.5	14.5	26.0	22.5	1800	DD/D13	60	F450DD472J2K5(1)	PHE450TD4470J(1)
2500	900	0.0056	6.5	14.5	26.0	22.5	1800	DD/D13	60	F450DD562J2K5(1)	PHE450TD4560J(1)
2500	900	0.0068	6.5	14.5	26.0	22.5	1800	DD/D13	60	F450DD682J2K5(1)	PHE450TD4680J(1)
2500	900	0.0082	6.5	14.5	26.0	22.5	1800	DD/D13	55	F450DD822J2K5(1)	PHE450TD4820JD13(1)
2500	900	0.010	7.0	16.5	26.0	22.5	1800	DF/D17	53	F450DF103J2K5(1)	PHE450TD5100JD17(1)
2500	900	0.012	8.0	16.0	26.0	22.5	1800	DH/D14	52	F450DH123J2K5(1)	PHE450TD5120JD14(1)
2500	900	0.015	9.0	18.5	26.0	22.5	1800	DM/D15	52	F450DM153J2K5(1)	PHE450TD5150J(1)
2500	900	0.018	9.0	18.5	26.0	22.5	1800	DM/D15	50	F450DM183J2K5(1)	PHE450TD5180JD15(1)
2500	900	0.022	10.5	19.0	26.0	22.5	1800	DR/D18	48	F450DR223J2K5(1)	PHE450TD5220JD18(1)
2500	900	0.027	11.0	21.5	26.0	22.5	1800	DT/D16	45	F450DT273J2K5(1)	PHE450TD5270JD16(1)
VDC	VAC	Cap Value (µF)	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/ µs)	Size Code (New/Legacy)	R_{thha} °C/W 85°C 0.2m/s	New KEMET Part Number	Legacy Part Number

(1) Insert lead and packaging code. See Ordering Options Table for available options.

Table 1 – Ratings & Part Number Reference cont'd

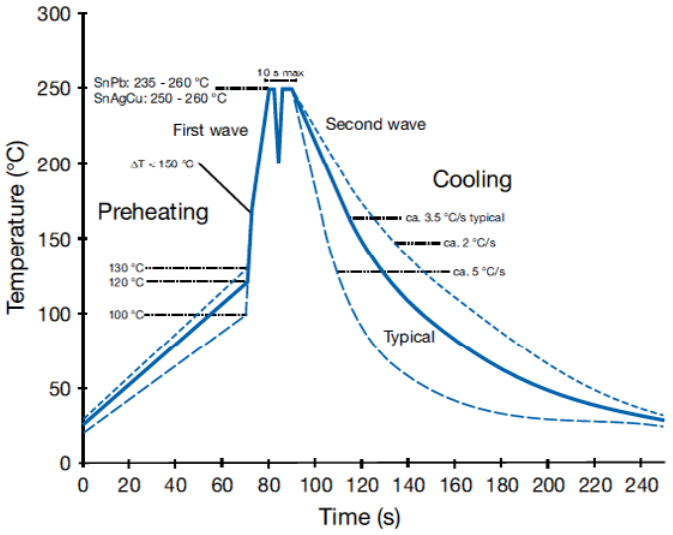
VDC	VAC	Cap Value (µF)	Dimensions in mm			Lead Spacing (p)	dV/dt (V/µs)	Size Code (New/ Legacy)	R_{thha} ºC/W 85ºC 0.2m/s	New KEMET Part Number	Legacy Part Number
			B	H	L						
2500	900	0.033	13.5	23.0	26.0	22.5	1800	DW/D20	38	F450DW333J2K5(1)	PHE450TD5330JD20(1)
2500	900	0.039	13.5	23.0	26.0	22.5	1800	DW/D20	38	F450DW393J2K5(1)	PHE450TD5390JD20(1)
2500	900	0.047	15.5	24.5	26.0	22.5	1800	DY/D19	35	F450DY473J2K5(1)	PHE450TD5470JD19(1)
2500	900	0.027	10.5	20.5	31.5	27.5	1300	FE/F11	38	F450FE273J2K5(1)	PHE450TF5270JF11(1)
2500	900	0.033	10.5	20.5	31.5	27.5	1300	FE/F11	38	F450FE333J2K5(1)	PHE450TF5330JF11(1)
2500	900	0.039	11.5	22.5	31.5	27.5	1300	FG/F12	36	F450FG393J2K5(1)	PHE450TF5390JF12(1)
2500	900	0.047	13.5	23.0	31.5	27.5	1300	FK/F03	35	F450FK473J2K5(1)	PHE450TF5470JF03(1)
2500	900	0.056	13.5	23.0	31.5	27.5	1300	FK/F03	35	F450FK563J2K5(1)	PHE450TF5560JF03(1)
2500	900	0.068	14.5	24.5	31.5	27.5	1300	FM/F13	34	F450FM683J2K5(1)	PHE450TF5680JF13(1)
2500	900	0.027	17.5	28.0	31.5	27.5	1300	FR/F14	30	F450FR273J2K5(1)	PHE450TF5270JF14(1)
2500	900	0.10	19.0	29.0	31.5	27.5	1300	FS/F15	28	F450FS104J2K5(1)	PHE450TF6100JF15(1)
2500	900	0.12	21.0	30.0	31.5	27.5	1300	FV/F16	25	F450FV124J2K5(1)	PHE450TF6120JF16(1)
2500	900	0.068	13.0	24.0	41.0	37.5	800	RF/R05	28	F450RF683J2K5(1)	PHE450TR5680JR05(1)
2500	900	0.082	13.0	24.0	41.0	37.5	800	RF/R05	28	F450RF823J2K5(1)	PHE450TR5820JR05(1)
2500	900	0.10	15.0	26.0	41.0	37.5	800	RH/R04	27	F450RH104J2K5(1)	PHE450TR6100JR04(1)
2500	900	0.12	15.0	26.0	41.0	37.5	800	RH/R04	27	F450RH124J2K5(1)	PHE450TR6120JR04(1)
2500	900	0.15	16.5	32.0	41.0	37.5	800	RK/R02	25	F450RK154J2K5(1)	PHE450TR6150JR02(1)
2500	900	0.18	19.0	36.0	41.0	37.5	800	RM/R03	20	F450RM184J2K5(1)	PHE450TR6180JR03(1)
2500	900	0.22	19.0	36.0	41.0	37.5	800	RM/R03	20	F450RM224J2K5(1)	PHE450TR6220JR03(1)
2500	900	0.22	21.0	38.0	41.0	37.5	800	RP/R06	19	F450RP224J2K5(1)	PHE450TR6220J(1)
2500	900	0.27	21.0	38.0	41.0	37.5	800	RP/R06	19	F450RP274J2K5(1)	PHE450TR6270JR06(1)
2500	900	0.33	28.0	43.0	41.0	37.5	800	RS/R08	19	F450RS334J2K5(1)	PHE450TR6330JR08(1)
3000	1000	0.0010	5.5	10.5	18.0	15	2500	BD/B04	98	F450BD102J3K0(1)	PHE450XB4100JB04(1)
3000	1000	0.0012	5.5	10.5	18.0	15	2500	BD/B04	98	F450BD122J3K0(1)	PHE450XB4120JB04(1)
3000	1000	0.0015	5.5	12.5	18.0	15	2500	BE/B05	92	F450BE152J3K0(1)	PHE450XB4150JB05(1)
3000	1000	0.0018	5.5	12.5	18.0	15	2500	BE/B05	90	F450BE182J3K0(1)	PHE450XB4180JB05(1)
3000	1000	0.0022	6.5	12.5	18.0	15	2500	BJ/B10	87	F450BJ222J3K0(1)	PHE450XB4220JB10(1)
3000	1000	0.0027	7.5	14.5	18.0	15	2500	BL/B06	80	F450BL272J3K0(1)	PHE450XB4270JB06(1)
3000	1000	0.0033	8.0	15.0	18.0	15	2500	BM/B12	75	F450BM332J3K0(1)	PHE450XB4330JB12(1)
3000	1000	0.0039	8.5	16.0	18.0	15	2500	BQ/B11	70	F450BQ392J3K0(1)	PHE450XB4390JB11(1)
3000	1000	0.0047	9.5	17.5	18.0	15	2500	BV/B14	61	F450BV472J3K0(1)	PHE450XB4470JB14(1)
3000	1000	0.0056	9.5	17.5	18.0	15	2500	BV/B14	60	F450BV562J3K0(1)	PHE450XB4560JB14(1)
3000	1000	0.0068	11.0	19.0	18.0	15	2500	BY/B16	55	F450BY682J3K0(1)	PHE450XB4680JB16(1)
3000	1000	0.0047	6.5	14.5	26.0	22.5	1800	DD/D13	58	F450DD472J3K0(1)	PHE450XD4470JD13(1)
3000	1000	0.0056	6.5	14.5	26.0	22.5	1800	DD/D13	58	F450DD562J3K0(1)	PHE450XD4560JD13(1)
3000	1000	0.0068	7.0	16.5	26.0	22.5	1800	DF/D17	55	F450DF682J3K0(1)	PHE450XD4680JD17(1)
3000	1000	0.0082	8.0	16.0	26.0	22.5	1800	DH/D14	54	F450DH822J3K0(1)	PHE450XD4820JD14(1)
3000	1000	0.010	9.0	18.5	26.0	22.5	1800	DM/D15	50	F450DM103J3K0(1)	PHE450XD5100JD15(1)
3000	1000	0.012	10.5	19.0	26.0	22.5	1800	DR/D18	49	F450DR123J3K0(1)	PHE450XD5120JD18(1)
3000	1000	0.015	11.0	21.5	26.0	22.5	1800	DT/D16	44	F450DT153J3K0(1)	PHE450XD5150JD16(1)
3000	1000	0.018	11.0	21.5	26.0	22.5	1800	DT/D16	44	F450DT183J3K0(1)	PHE450XD5180JD16(1)
3000	1000	0.022	13.5	23.0	26.0	22.5	1800	DW/D20	38	F450DW223J3K0(1)	PHE450XD5220JD20(1)
3000	1000	0.027	15.5	24.5	26.0	22.5	1800	DY/D19	35	F450DY273J3K0(1)	PHE450XD5270JD19(1)
3000	1000	0.033	15.5	24.5	26.0	22.5	1800	DY/D19	35	F450DY333J3K0(1)	PHE450XD5330JD19(1)
VDC	VAC	Cap Value (µF)	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/ µs)	Size Code (New/Legacy)	R_{thha} ºC/W 85ºC 0.2m/s	New KEMET Part Number	Legacy Part Number

(1) Insert lead and packaging code. See Ordering Options Table for available options.

Roll Over for Order Info.

Soldering Process

The implementation of the RoHS Directive has required the selection SnAuCu (SAC) alloys or SnCu alloys as primary solder. This has increased the liquidus temperature from that of 183ºC for SnPb eutectic alloy to 217ºC – 221ºC for the new alloys. As a result, the heat stress to components, even in wave soldering, has increased considerably due to higher pre-heat and wave temperatures. Polypropylene capacitors are especially sensitive to heat (melting point of polypropylene is 160ºC – 170ºC). Wave soldering can be destructive especially for mechanically small polypropylene capacitors and great care must be taken during soldering. The solder profiles from KEMET are highly recommended. You may also refer to the wave soldering curve from IEC Publication 61760–1 Edition 2. Please consult KEMET with any questions.



Marking

- KEMET's logo
- Series
- Capacitance
- Capacitance tolerance
- Rated DC voltage
- Manufacturing date code

Packaging Quantities

KEMET Size Code	Legacy Size	Lead Spacing	Thickness (mm)	Height (mm)	Length (mm)	Bulk Short Leads	Bulk Long Leads	Standard Reel ø 360 mm	Large Reel ø 500 mm	Ammo	Pizza	Std Reel Formed	Ammo Formed
KE	K00	7.5	2.5	6	10	2000	2000	2500	5000	3000			
KG	K01		4	8	10	1000	1000	1700	3400	1900			
KK	K03		5	11	10	1000	1000	1300	2600	1500			
KM	K04		6	12	10	1000	1000	1000	2000	1200			
AG	A01	10	4	9	13	1000	1000	900	1800				780
AH	A02		4.5	10.5	13	1000	1000	800	1600				
AK	A03		5	11	13	800	800	700	1400				
AP	A04		6	12	13	600	600	500	1000				520
AL	A05		9.5	7.5	13	600	600	350	700				
AE	A06		4	8	13	1000	1000	900	1800				

Packaging Quantities cont'd

KEMET Size Code	Legacy Size	Lead Spacing	Thickness (mm)	Height (mm)	Length (mm)	Bulk Short Leads	Bulk Long Leads	Standard Reel ø 360 mm	Large Reel ø 500 mm	Ammo	Pizza	Std Reel Formed	Ammo Formed
BD	B04	15	5.5	10.5	18	1000	800	600	1200			550	570
BE	B05		5.5	12.5	18	1000	800	600	1200			550	570
BL	B06		7.5	14.5	18	800	400	400	800			350	378
BJ	B10		6.5	12.5	18	1000	600	500	1000			450	480
BQ	B11		8.5	16	18	600	400	400	800			350	324
BM	B12		8	15	18	600	400	400	800			350	351
BV	B14		9.5	17.5	18	500	300	350	700			250	297
BG	B15		6	12	18	1000	800	500	1000			450	520
BY	B16		11	19	18	450	250	300	600			250	252
BU	B17		13	12.5	18	400	300	250	500			200	216
DD	D13	22.5	6.5	14.5	26.5	234		300	600		440		
DH	D14		8	16	26.5	186		250	500		352		
DM	D15		9	18.5	26.5	308		250	500		308		
DT	D16		11	21.5	26.5	253		200	400		253		
DF	D17		7	16.5	26.5	216		300	600		396		
DR	D18		10.5	19	26.5	264		200	400		264		
DY	D19		15.5	24.5	26.5	176		110	250		176		
DW	D20		13.5	23	26.5	209		160	300		209		
FK	F03	27.5	13.5	23	31.5	171			250		171		
FE	F11		10.5	20.5	31.5	216			350		216		
FG	F12		11.5	22.5	31.5	198			300		198		
FM	F13		14.5	24.5	31.5	153			250		153		
FR	F14		17.5	28	31.5	126					126		
FS	F15		19	29	31.5	117					117		
FV	F16		21	30	31.5	108					108		
FH	F17		21	12.5	31.5	108					108		
FT	F18		31	18.5	31.5	72					72		
FQ	F19		27.5	16	31.5	81					81		
RK	R02	37.5	16.5	32	41	105					105		
RM	R03		19	36	41	91					91		
RH	R04		15	26	41	119					119		
RF	R05		13	24	41	140					140		
RP	R06		21	38	41	84					84		
RS	R08		28	43	41	54					54		

R76 Series Double Metallized Polypropylene Film/Foil, Radial

Overview

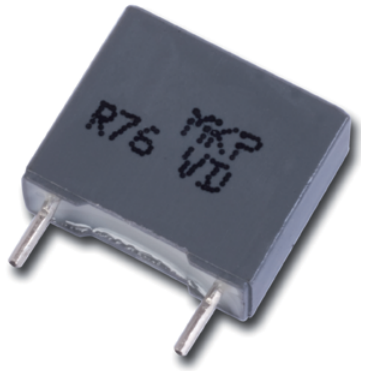
The R76 Series is a polypropylene dielectric with double-metallized polyester film as electrodes. The capacitor is encapsulated in self-extinguishing resin in a box of material meeting the requirements of UL 94 V–0.

Applications

Typical applications include deflection circuits in televisions (S-correction and flyback tuning) and monitors, switching spikes suppression in switched mode power supplies (SMPS), lamp capacitors for electronic ballasts and compact lamps, and snubber and silicon-controlled rectifier (SCR) commutation circuits as well as applications with high voltage and high current.

Benefits

- Rated voltage: 250 – 2,000 VDC
- Rated voltage: 180 – 700 VAC
- Capacitance range: 0.0001 – 15 µF
- Lead spacing: 7.5 – 37.5 mm
- Capacitance tolerance: ±2.5% (for C ≥ 0.001 µF only), ±5%, ±10%
- Climatic category: 55/105/56, IEC 60068–1
- Tape and reel packaging in accordance with IEC 60286–2
- RoHS Compliant and lead-free terminations
- Category temperature range of -55˚C to +105˚C



Part Number System

R76	I	D	1680	AA	00	H
Series	Rated Voltage (VDC)	Lead Spacing (mm)	Capacitance Code (pF)	Lead and Packaging Code	Internal Use	Capacitance Tolerance
Metallized Polypropylene	I = 250 M = 400 P = 630 Q = 1000 T = 1600 U = 2000	D = 7.5 F = 10.0 I = 15.0 N = 22.5 R = 27.5 W = 37.5	Digits 2 – 4 indicate the first three digits of the capacitance value. First digit indicates the number of zeros to be added.	See Ordering Options Table	00, 30, 40, 70 (Standard)	H = ±2.5% (for C ≥ 0.001 µF only) J = ±5% K = ±10%

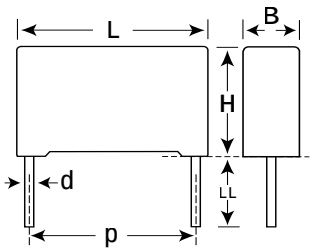
Ordering Options Table

Lead Spacing Nominal (mm)	Type of Leads and Packaging	Lead Length (mm)	Lead and Packaging Code
7.5	Standard Lead and Packaging Options		
	Bulk (Bag) – Short Leads	4 +2/-0	SE
	Ammo Pack	H_0 = 18.5 +/-0.5	DQ
	Other Lead and Packaging Options		
	Bulk (Bag) – Long Leads	17 +1/-2	Z3
	Tape & Reel (Standard Reel)	H_0 = 18.5 +/-0.5	GY

Ordering Options Table cont'd

Lead Spacing Nominal (mm)	Type of Leads and Packaging	Lead Length (mm)	Lead and Packaging Code
10	Standard Lead and Packaging Options		
	Bulk (Bag) – Short Leads	4 +2/-0	SE
	Ammo Pack	H_0= 18.5 +/-0.5	DQ
	Other Lead and Packaging Options		
	Bulk (Bag) – Long Leads	17 +1/-2	Z3
	Tape & Reel (Standard Reel)	H_0= 18.5 +/-0.5	GY
	Tape & Reel (Large Reel)	H_0= 18.5 +/-0.5	CK
15	Standard Lead and Packaging Options		
	Bulk (Bag) – Short Leads	4 +2/-0	SE
	Ammo Pack	H_0= 18.5 +/-0.5	DQ
	Other Lead and Packaging Options		
	Bulk (Bag) – Long Leads	25 +2/-1	50
	Bulk (Bag) – Max Length Leads	30 +5/-0	40
	Tape & Reel (Standard Reel)	H_0= 18.5 +/-0.5	GY
	Tape & Reel (Large Reel)	H_0= 18.5 +/-0.5	CK
	Pizza Pack	4 +2/-0	BB
22.5	Standard Lead and Packaging Options		
	Bulk (Tray) – Straight Leads	4 +2/-0	SE
	Ammo Pack	H_0= 18.5 +/-0.5	DQ
	Other Lead and Packaging Options		
	Bulk (Tray) – Long Leads	25 +2/-1	50
	Bulk (Tray) – Max Length Leads	30 +5/-0	40
	Tape & Reel (Large Reel)	H_0= 18.5 +/-0.5	CK
	Pizza Pack	4 +2/-0	BB
27.5	Standard Lead and Packaging Options		
	Bulk (Tray) – Straight Leads	4 +2/-0	SE
	Other Lead and Packaging Options		
	Bulk (Tray) – Long Leads	25 +2/-1	50
	Bulk (Tray) – Max Length Leads	30 +5/-0	40
	Tape & Reel (Large Reel)	H_0= 18.5 +/-0.5	CK
37.5	Standard Lead and Packaging Options		
	Tray– Short Leads	4 +2/-0	0
	Other Lead and Packaging Options		
	Tray– Long Leads	25 +2/-1	50
	Tray– Max Length Leads	30 +5/-0	40

Dimensions – Millimeters



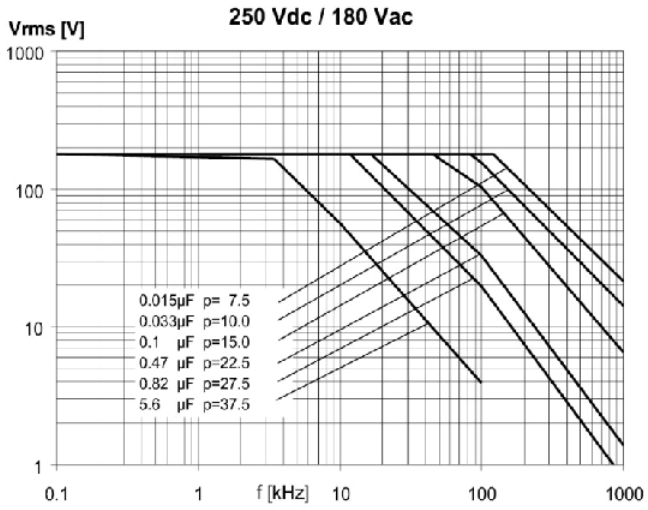
p		B		H		L		d	
Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance
7.5	+/-0.4	3	+0.1/-0	8	+0.1/-0	10	+0.2/-0	0.5	+/-0.05
7.5	+/-0.4	4	+0.1/-0	9	+0.1/-0	10	+0.2/-0	0.6	+/-0.05
7.5	+/-0.4	5	+0.1/-0	10.5	+0.1/-0	10	+0.2/-0	0.6	+/-0.05
7.5	+/-0.4	6	+0.1/-0	12	+0.1/-0	10.5	+0.2/-0	0.6	+/-0.05
10	+/-0.4	4	+0.2/-0	9	+0.1/-0	13	+0.2/-0	0.6	+/-0.05
10	+/-0.4	5	+0.2/-0	11	+0.1/-0	13	+0.2/-0	0.6	+/-0.05
10	+/-0.4	6	+0.2/-0	12	+0.1/-0	13	+0.2/-0	0.6	+/-0.05
15	+/-0.4	4	+0.2/-0	10	+0.1/-0	18	+0.3/-0	0.8	+/-0.05
15	+/-0.4	5	+0.2/-0	11	+0.1/-0	18	+0.3/-0	0.8	+/-0.05
15	+/-0.4	6	+0.2/-0	12	+0.1/-0	18	+0.3/-0	0.8	+/-0.05
15	+/-0.4	7.5	+0.2/-0	13.5	+0.1/-0	18	+0.5/-0	0.8	+/-0.05
15	+/-0.4	8.5	+0.2/-0	14.5	+0.1/-0	18	+0.5/-0	0.8	+/-0.05
15	+/-0.4	9	+0.2/-0	12.5	+0.1/-0	18	+0.5/-0	0.8	+/-0.05
15	+/-0.4	10	+0.2/-0	16	+0.1/-0	18	+0.5/-0	0.8	+/-0.05
15	+/-0.4	11	+0.2/-0	19	+0.1/-0	18	+0.5/-0	0.8	+/-0.05
15	+/-0.4	13	+0.2/-0	12	+0.1/-0	18	+0.5/-0	0.8	+/-0.05
22.5	+/-0.4	6	+0.2/-0	15	+0.1/-0	26.5	+0.3/-0	0.8	+/-0.05
22.5	+/-0.4	7	+0.2/-0	16	+0.1/-0	26.5	+0.3/-0	0.8	+/-0.05
22.5	+/-0.4	8.5	+0.2/-0	17	+0.1/-0	26.5	+0.3/-0	0.8	+/-0.05
22.5	+/-0.4	10	+0.2/-0	18.5	+0.1/-0	26.5	+0.3/-0	0.8	+/-0.05
22.5	+/-0.4	11	+0.2/-0	20	+0.1/-0	26.5	+0.3/-0	0.8	+/-0.05
22.5	+/-0.4	13	+0.2/-0	22	+0.1/-0	26.5	+0.3/-0	0.8	+/-0.05
27.5	+/-0.4	9	+0.2/-0	17	+0.1/-0	32	+0.3/-0	0.8	+/-0.05
27.5	+/-0.4	11	+0.2/-0	20	+0.1/-0	32	+0.3/-0	0.8	+/-0.05
27.5	+/-0.4	13	+0.2/-0	22	+0.1/-0	32	+0.3/-0	0.8	+/-0.05
27.5	+/-0.4	13	+0.2/-0	25	+0.1/-0	32	+0.3/-0	0.8	+/-0.05
27.5	+/-0.4	14	+0.2/-0	28	+0.1/-0	32	+0.3/-0	0.8	+/-0.05
27.5	+/-0.4	18	+0.2/-0	33	+0.1/-0	32	+0.3/-0	0.8	+/-0.05
27.5	+/-0.4	22	+0.2/-0	37	+0.1/-0	32	+0.3/-0	0.8	+/-0.05
37.5	+/-0.4	11	+0.3/-0	22	+0.1/-0	41.5	+0.3/-0	1	+/-0.05
37.5	+/-0.4	13	+0.3/-0	24	+0.1/-0	41.5	+0.3/-0	1	+/-0.05
37.5	+/-0.4	16	+0.3/-0	28.5	+0.1/-0	41.5	+0.3/-0	1	+/-0.05
37.5	+/-0.4	19	+0.3/-0	32	+0.1/-0	41.5	+0.3/-0	1	+/-0.05
37.5	+/-0.4	20	+0.3/-0	40	+0.1/-0	41.5	+0.3/-0	1	+/-0.05
37.5	+/-0.4	24	+0.3/-0	44	+0.1/-0	41.5	+0.3/-0	1	+/-0.05
37.5	+/-0.4	30	+0.3/-0	45	+0.1/-0	41.5	+0.3/-0	1	+/-0.05

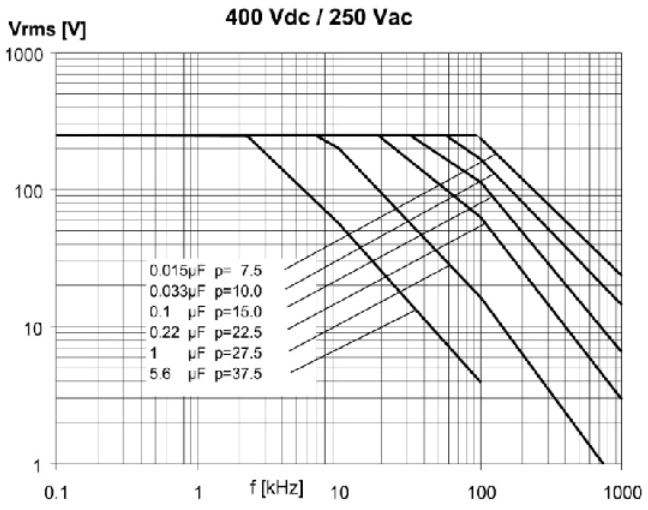
Note: See Ordering Options Table for lead length (LL) options.

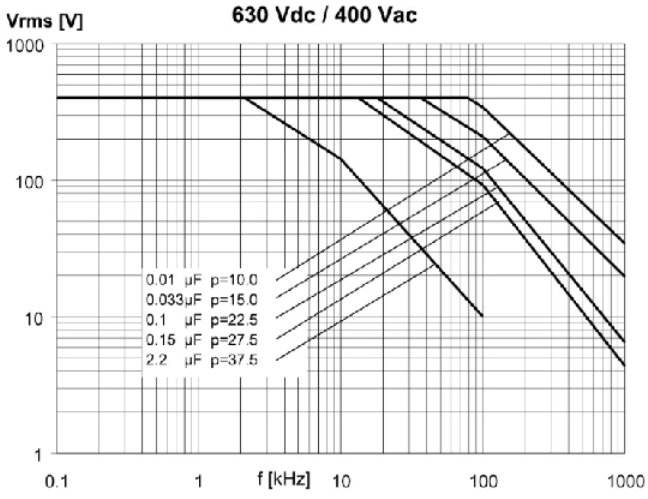
Performance Characteristics

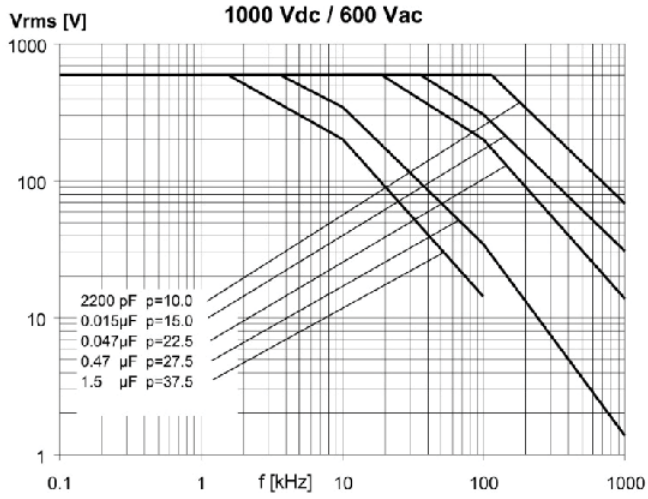
Sections	1	1	1	2	2	2	2	2
Voltage Range (VDC)	250	400	630	630	1000	1000	1600	2000
Voltage Range (VAC)	180	250	250	400	400	600	650	700
Capacitance Range (µF)	0.0068 – 15	0.0027 – 8.2	0.00068 – 0.012	0.00039 – 5.6	0.00022 – 0.0033	0.00047 – 2.2	0.0033 – 1.2	0.0001 – 0.68
Capacitance Values	In accordance with IEC E12 series							
Capacitance Tolerance	±2.5% (for C ≥ 1,000 pF only), ±5%, ±10%							
Category Temperature Range	-55°C to +105°C							
Voltage Derating	The following decreasing factor has to be applied on the rated voltage: +85°C to +105°C: 1.25% per °C for V_R (DC) +75°C to +105°C: 1.35% per °C for V_R (AC)							
Climatic Category	IEC 60068–1, 55/105/56							
Self-Inductance L (Lead Length ~ 2 mm)	Lead Spacing (mm)		7.5	10	15	22.5	27.5	37.5
	L (nH) ≈		8	9	10	18	18	20
Dissipation Factor tanδ	Measured at 25°C ± 5°C							
			C ≤ 0.1 µF		0.1 µF < C ≤ 1.0 µF		C > 1.0 µF	
	1 kHz		0.0003		0.0003		0.0004	
	10 kHz		0.0004		0.0006			
	100 kHz		0.0015				–	
Insulation Resistance	Measured at +25°C, 100 VDC 60 seconds							
	Minimum Values Between Terminals							
	C ≤ 0.33 µF				≥ 100,000 MΩ			
	C > 0.33 µF				≥ 30,000 MΩ • µF			
Test Voltage Between Terminals	1.6 x V_R applied for 2 seconds at 25°C ±5°C							

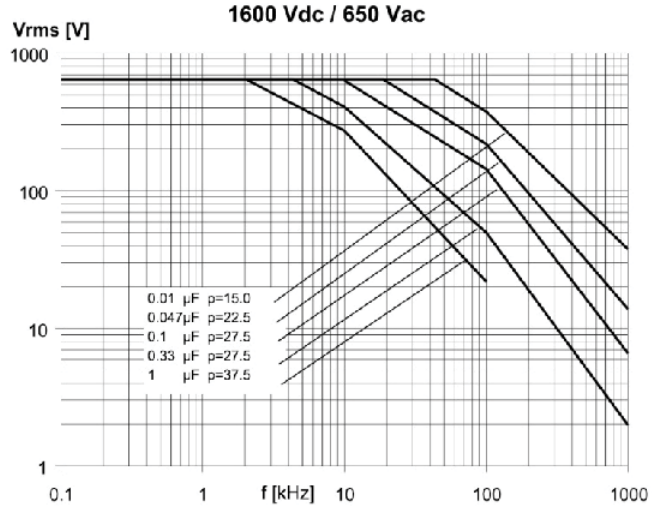
Maximum Voltage (V_{rms}) vs. Frequency (Sinusoidal Waveform/T ≤ 40ºC)

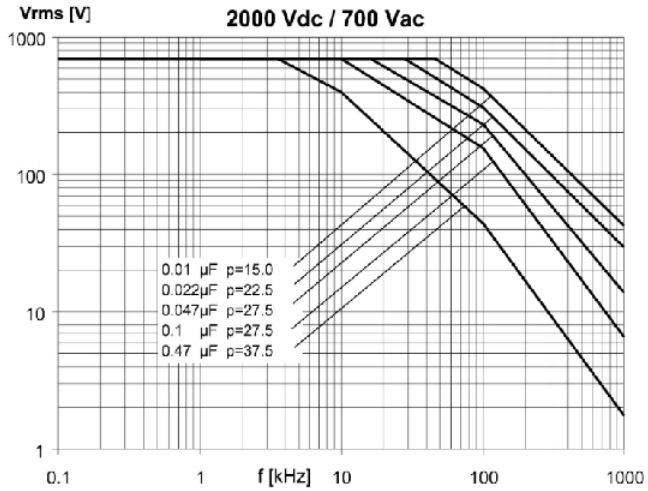




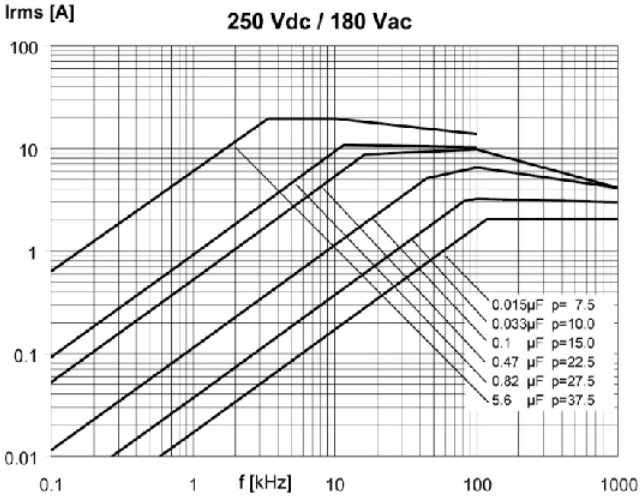


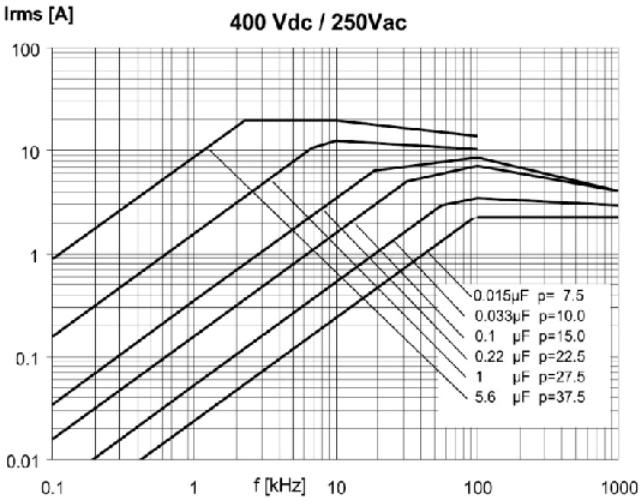


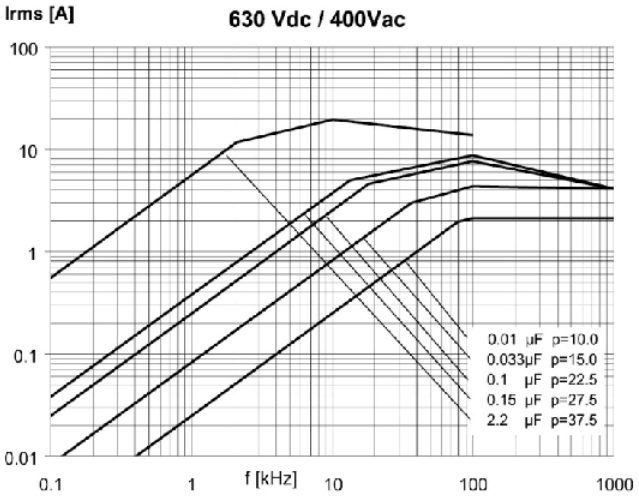


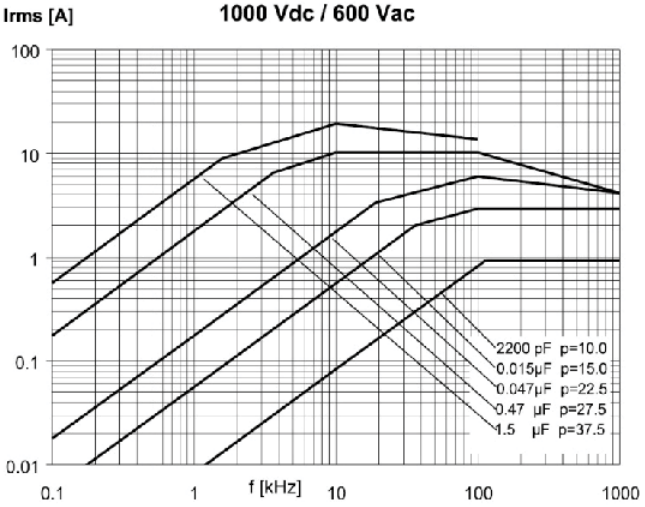


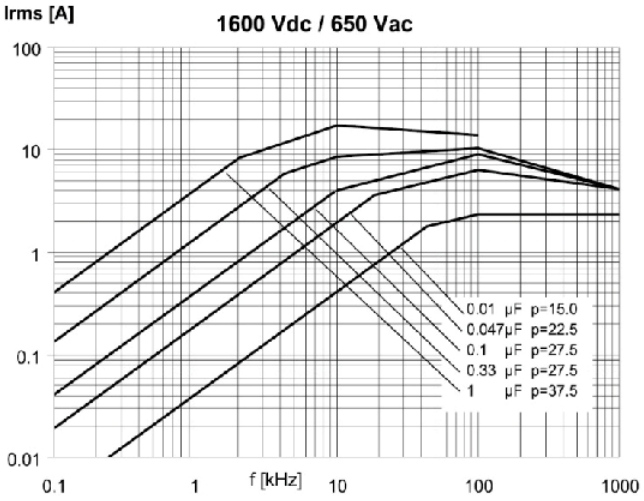
Maximum Current (I_{rms}) vs. Frequency (Sinusoidal Waveform/T ≤ 40ºC)

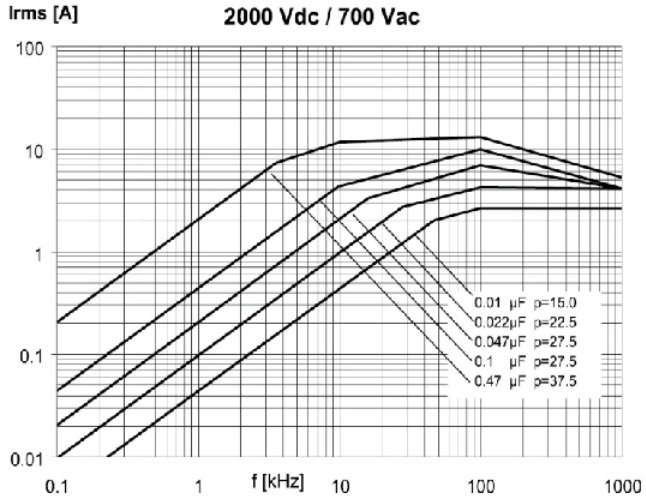












Environmental Test Data

Test	IEC Publication	Procedure	Requirements
Voltage Proof	60384–1 Clause 4.6	1.6 x V_R after 60 seconds	The capacitors must withstand the voltage without breakdowns or flashovers and without decreased insulation resistance below the value in each detail specification. No visible damage
	Clause 4.6 2.3	2 x V_R (minimum 400 VDC to case) after 60 seconds	As above
Vibration	60068–2–6 Test Fc	6 hours with 10 – 500 Hz and 0.75 mm amplitude or 98 m/s^2 depending on frequency	No visible damage tanδ ≤ 1.2 x stated value at 100 kHz Δ C/C ≤ ±0.5 %
Bump	60068–2–29 Test Eb	4,000 bumps with 390 m/s^2 mounted on PCB	Δ C/C ≤ ±0.5% tanδ ≤ 1.2 x stated value at 100 kHz Insulation resistance: ≥ 100,000 MΩ for C_R ≤ 0.33 µF ≥ 30,000 MΩ • µF for C_R > 0.33 µF
Resistance to Soldering Heat	60068–2–20 Method 1A	Solder bath at + 260°C ±5°C with screening	Immersion of the terminations into the solder bath shall be completed in a time not exceeding 1 second and the terminations shall remain immersed to the specified depth for 10 + 1 second and then be withdrawn. Δ C/C ≤ ±1.0% tanδ increase < 0.001 No visible damage
Climatic Sequence	60384–1 Paragraph 4:21	60068–2.2 dry heat 16 hours 60068–2–34 damp heat, one cycle 60068–2–1 Test Aa 2 hours	Insulation resistance: ≥ 100,000 MΩ for C_R ≤ 0.33 µF ≥ 30,000 MΩ • µF for C_R > 0.33 µF Δ C/C ≤ ±0.5% tanδ ≤ 1.2 x stated value at 100 kHz
Damp Heat Steady State	60068–2–3 Test Ca	+40°C and 90 – 95% RH	56 days no visible damage Insulation resistance: ≥ 50,000 MΩ for C_R ≤ 0.33 µF ≥ 15,000 MΩ • µF for C_R > 0.33 µF Δ C/C ≤ ±1% tanδ ≤ 1.2 x stated value at 100 kHz
Endurance, AC		1,000 hours at +85°C and 1.25 x V_R AC	No visible damage Δ C/C ≤ ±3% tanδ ≤ 1.5 x stated value at 100 kHz Insulation resistance: ≥ 100,000 MΩ for C_R ≤ 0.33 µF ≥ 30,000 MΩ • µF for C_R > 0.33 µF
Charge and Discharge	60384–17 Paragraph 4.13	10,000 pulses and with (2 x) dV/dt according to detail specification	tanδ (100 kHz) ≤ 2 x stated value (100 kHz) Δ C/C ≤ ± 0.5% Insulation resistance: ≥ 50,000 MΩ for C_R ≤ 0.33 µF ≥ 15,000 MΩ • µF for C_R > 0.33 µF

Environmental Compliance

All KEMET pulse capacitors are RoHS Compliant.

RoHS Compliant

Table 1 – Ratings & Part Number Reference

VDC	VAC	Cap Value (µF)	Dimensions in mm			Lead Spacing (p)	dV/dt (V/µs)	Max K_0 (V^2/µs)	New KEMET Part Number	Legacy Part Number
			B	H	L					
250	180	0.0068	3.0	8.0	10.0	7.5	1100	55 E4	76ID1680(1)30(2)	R76ID1680(1)30(2)
250	180	0.0082	3.0	8.0	10.0	7.5	1100	55 E4	76ID1820(1)30(2)	R76ID1820(1)30(2)
250	180	0.010	3.0	8.0	10.0	7.5	1100	55 E4	76ID2100(1)30(2)	R76ID2100(1)30(2)
250	180	0.012	4.0	9.0	10.0	7.5	1100	55 E4	76ID2120(1)40(2)	R76ID2120(1)40(2)
250	180	0.015	4.0	9.0	10.0	7.5	1100	55 E4	76ID2150(1)40(2)	R76ID2150(1)40(2)
250	180	0.018	4.0	9.0	10.0	7.5	1100	55 E4	76ID2180(1)40(2)	R76ID2180(1)40(2)
250	180	0.022	4.0	9.0	10.0	7.5	1100	55 E4	76ID2220(1)40(2)	R76ID2220(1)40(2)
250	180	0.027	5.0	10.5	10.0	7.5	1100	55 E4	76ID2270(1)40(2)	R76ID2270(1)40(2)
250	180	0.033	5.0	10.5	10.0	7.5	1100	55 E4	76ID2330(1)40(2)	R76ID2330(1)40(2)
250	180	0.039	6.0	12.0	10.5	7.5	1100	55 E4	76ID2390(1)30(2)	R76ID2390(1)30(2)
250	180	0.047	6.0	12.0	10.5	7.5	1100	55 E4	76ID2470(1)30(2)	R76ID2470(1)30(2)
250	180	0.027	4.0	9.0	13.0	10.0	1000	50 E4	76IF2270(1)30(2)	R76IF2270(1)30(2)
250	180	0.033	4.0	9.0	13.0	10.0	1000	50 E4	76IF2330(1)30(2)	R76IF2330(1)30(2)
250	180	0.039	4.0	9.0	13.0	10.0	1000	50 E4	76IF2390(1)30(2)	R76IF2390(1)30(2)
250	180	0.047	5.0	11.0	13.0	10.0	1000	50 E4	76IF2470(1)30(2)	R76IF2470(1)30(2)
250	180	0.056	5.0	11.0	13.0	10.0	1000	50 E4	76IF2560(1)30(2)	R76IF2560(1)30(2)
250	180	0.068	6.0	12.0	13.0	10.0	1000	50 E4	76IF2680(1)30(2)	R76IF2680(1)30(2)
250	180	0.082	6.0	12.0	13.0	10.0	1000	50 E4	76IF2820(1)30(2)	R76IF2820(1)30(2)
250	180	0.068	5.0	11.0	18.0	15.0	550	28 E4	76II2680(1)30(2)	R76II2680(1)30(2)
250	180	0.082	5.0	11.0	18.0	15.0	550	28 E4	76II2820(1)30(2)	R76II2820(1)30(2)
250	180	0.10	5.0	11.0	18.0	15.0	550	28 E4	76II3100(1)30(2)	R76II3100(1)30(2)
250	180	0.12	6.0	12.0	18.0	15.0	550	28 E4	76II3120(1)30(2)	R76II3120(1)30(2)
250	180	0.15	6.0	12.0	18.0	15.0	550	28 E4	76II3150(1)30(2)	R76II3150(1)30(2)
250	180	0.18	7.5	13.5	18.0	15.0	550	28 E4	76II3180(1)30(2)	R76II3180(1)30(2)
250	180	0.18	9.0	12.5	18.0	15.0	550	28 E4	76II3180(1)70(2)	R76II3180(1)70(2)
250	180	0.22	7.5	13.5	18.0	15.0	550	28 E4	76II3220(1)30(2)	R76II3220(1)30(2)
250	180	0.22	9.0	12.5	18.0	15.0	550	28 E4	76II3220(1)70(2)	R76II3220(1)70(2)
250	180	0.27	8.5	14.5	18.0	15.0	550	28 E4	76II3270(1)30(2)	R76II3270(1)30(2)
250	180	0.27	9.0	12.5	18.0	15.0	550	28 E4	76II3270(1)70(2)	R76II3270(1)70(2)
250	180	0.33	10.0	16.0	18.0	15.0	550	28 E4	76II3330(1)30(2)	R76II3330(1)30(2)
250	180	0.33	13.0	12.0	18.0	15.0	550	28 E4	76II3330(1)70(2)	R76II3330(1)70(2)
250	180	0.39	10.0	16.0	18.0	15.0	550	28 E4	76II3390(1)30(2)	R76II3390(1)30(2)
250	180	0.47	11.0	19.0	18.0	15.0	550	28 E4	76II3470(1)30(2)	R76II3470(1)30(2)
250	180	0.22	6.0	15.0	26.5	22.5	250	13 E4	76IN3220(1)00(2)	R76IN3220(1)00(2)
250	180	0.27	6.0	15.0	26.5	22.5	250	13 E4	76IN3270(1)30(2)	R76IN3270(1)30(2)
250	180	0.33	6.0	15.0	26.5	22.5	250	13 E4	76IN3330(1)30(2)	R76IN3330(1)30(2)
250	180	0.39	7.0	16.0	26.5	22.5	250	13 E4	76IN3390(1)30(2)	R76IN3390(1)30(2)
250	180	0.47	7.0	16.0	26.5	22.5	250	13 E4	76IN3470(1)30(2)	R76IN3470(1)30(2)
250	180	0.56	8.5	17.0	26.5	22.5	250	13 E4	76IN3560(1)30(2)	R76IN3560(1)30(2)
250	180	0.68	10.0	18.5	26.5	22.5	250	13 E4	76IN3680(1)30(2)	R76IN3680(1)30(2)
250	180	0.82	10.0	18.5	26.5	22.5	250	13 E4	76IN3820(1)30(2)	R76IN3820(1)30(2)
250	180	1.0	11.0	20.0	26.5	22.5	250	13 E4	76IN4100(1)30(2)	R76IN4100(1)30(2)
250	180	1.2	13.0	22.0	26.5	22.5	250	13 E4	76IN4120(1)30(2)	R76IN4120(1)30(2)
250	180	0.82	9.0	17.0	32.0	27.5	200	10 E4	76IR3820(1)30(2)	R76IR3820(1)30(2)
250	180	1.0	11.0	20.0	32.0	27.5	200	10 E4	76IR4100(1)30(2)	R76IR4100(1)30(2)
250	180	1.2	11.0	20.0	32.0	27.5	200	10 E4	76IR4120(1)40(2)	R76IR4120(1)40(2)
250	180	1.5	13.0	22.0	32.0	27.5	200	10 E4	76IR4150(1)30(2)	R76IR4150(1)30(2)
250	180	1.8	13.0	22.0	32.0	27.5	200	10 E4	76IR4180(1)40(2)	R76IR4180(1)40(2)
250	180	2.2	14.0	28.0	32.0	27.5	200	10 E4	76IR4220(1)40(2)	R76IR4220(1)40(2)
250	180	2.7	18.0	33.0	32.0	27.5	200	10 E4	76IR4270(1)30(2)	R76IR4270(1)30(2)
250	180	3.3	18.0	33.0	32.0	27.5	200	10 E4	76IR4330(1)30(2)	R76IR4330(1)30(2)
250	180	3.9	18.0	33.0	32.0	27.5	200	10 E4	76IR4390(1)30(2)	R76IR4390(1)30(2)
250	180	4.7	22.0	37.0	32.0	27.5	200	10 E4	76IR4470(1)30(2)	R76IR4470(1)30(2)
250	180	5.6	22.0	37.0	32.0	27.5	200	10 E4	76IR4560(1)40(2)	R76IR4560(1)40(2)
250	180	1.2	11.0	22.0	41.5	37.5	100	5 E4	76IW4120(1)30(2)	R76IW4120(1)30(2)
250	180	1.5	11.0	22.0	41.5	37.5	100	5 E4	76IW4150(1)30(2)	R76IW4150(1)30(2)
250	180	1.8	11.0	22.0	41.5	37.5	100	5 E4	76IW4180(1)30(2)	R76IW4180(1)30(2)
250	180	2.2	13.0	24.0	41.5	37.5	100	5 E4	76IW4220(1)30(2)	R76IW4220(1)30(2)
250	180	2.7	13.0	24.0	41.5	37.5	100	5 E4	76IW4270(1)30(2)	R76IW4270(1)30(2)
250	180	3.3	16.0	28.5	41.5	37.5	100	5 E4	76IW4330(1)30(2)	R76IW4330(1)30(2)
VDC	VAC	Cap Value (µF)	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/µs)	Max K_0 (V^2/µs)	New KEMET Part Number	Legacy Part Number

(1) Insert lead and packaging code. See Ordering Options Table for available options.
(2) H = ±2.5% (for C ≥ 0.001 µF only), J = ±5%, K = ±10%.

Roll Over for Order Info.

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Cap Value (µF)	Dimensions in mm			Lead Spacing (p)	dV/dt (V/µs)	Max K_0 (V^2/µs)	New KEMET Part Number	Legacy Part Number
			B	H	L					
250	180	3.9	16.0	28.5	41.5	37.5	100	5 E4	76IW4390(1)30(2)	R76IW4390(1)30(2)
250	180	4.7	19.0	32.0	41.5	37.5	100	5 E4	76IW4470(1)30(2)	R76IW4470(1)30(2)
250	180	5.6	19.0	32.0	41.5	37.5	100	5 E4	76IW4560(1)30(2)	R76IW4560(1)30(2)
250	180	6.8	20.0	40.0	41.5	37.5	100	5 E4	76IW4680(1)30(2)	R76IW4680(1)30(2)
250	180	8.2	20.0	40.0	41.5	37.5	100	5 E4	76IW4820(1)30(2)	R76IW4820(1)30(2)
250	180	10.0	24.0	44.0	41.5	37.5	100	5 E4	76IW5100(1)30(2)	R76IW5100(1)30(2)
250	180	12.0	30.0	45.0	41.5	37.5	100	5 E4	76IW5120(1)30(2)	R76IW5120(1)30(2)
250	180	15.0	30.0	45.0	41.5	37.5	100	5 E4	76IW5150(1)30(2)	R76IW5150(1)30(2)
400	250	0.0027	3.0	8.0	10.0	7.5	1700	136 E4	76MD1270(1)30(2)	R76MD1270(1)30(2)
400	250	0.0033	3.0	8.0	10.0	7.5	1700	136 E4	76MD1330(1)30(2)	R76MD1330(1)30(2)
400	250	0.0039	3.0	8.0	10.0	7.5	1700	136 E4	76MD1390(1)30(2)	R76MD1390(1)30(2)
400	250	0.0047	3.0	8.0	10.0	7.5	1700	136 E4	76MD1470(1)30(2)	R76MD1470(1)30(2)
400	250	0.0056	3.0	8.0	10.0	7.5	1700	136 E4	76MD1560(1)30(2)	R76MD1560(1)30(2)
400	250	0.0068	4.0	9.0	10.0	7.5	1700	136 E4	76MD1680(1)40(2)	R76MD1680(1)40(2)
400	250	0.0082	4.0	9.0	10.0	7.5	1700	136 E4	76MD1820(1)40(2)	R76MD1820(1)40(2)
400	250	0.010	4.0	9.0	10.0	7.5	1700	136 E4	76MD2100(1)40(2)	R76MD2100(1)40(2)
400	250	0.012	4.0	9.0	10.0	7.5	1700	136 E4	76MD2120(1)40(2)	R76MD2120(1)40(2)
400	250	0.015	5.0	10.5	10.0	7.5	1700	136 E4	76MD2150(1)40(2)	R76MD2150(1)40(2)
400	250	0.018	5.0	10.5	10.0	7.5	1700	136 E4	76MD2180(1)40(2)	R76MD2180(1)40(2)
400	250	0.022	6.0	12.0	10.5	7.5	1700	136 E4	76MD2220(1)30(2)	R76MD2220(1)30(2)
400	250	0.027	6.0	12.0	10.5	7.5	1700	136 E4	76MD2270(1)30(2)	R76MD2270(1)30(2)
400	250	0.010	4.0	9.0	13.0	10.0	1500	120 E4	76MF2100(1)00(2)	R76MF2100(1)00(2)
400	250	0.012	4.0	9.0	13.0	10.0	1500	120 E4	76MF2120(1)00(2)	R76MF2120(1)00(2)
400	250	0.015	4.0	9.0	13.0	10.0	1500	120 E4	76MF2150(1)30(2)	R76MF2150(1)30(2)
400	250	0.018	4.0	9.0	13.0	10.0	1500	120 E4	76MF2180(1)30(2)	R76MF2180(1)30(2)
400	250	0.022	4.0	9.0	13.0	10.0	1500	120 E4	76MF2220(1)30(2)	R76MF2220(1)30(2)
400	250	0.027	5.0	11.0	13.0	10.0	1500	120 E4	76MF2270(1)30(2)	R76MF2270(1)30(2)
400	250	0.033	5.0	11.0	13.0	10.0	1500	120 E4	76MF2330(1)30(2)	R76MF2330(1)30(2)
400	250	0.039	6.0	12.0	13.0	10.0	1500	120 E4	76MF2390(1)30(2)	R76MF2390(1)30(2)
400	250	0.047	6.0	12.0	13.0	10.0	1500	120 E4	76MF2470(1)30(2)	R76MF2470(1)30(2)
400	250	0.033	5.0	11.0	18.0	15.0	900	72 E4	76MI2330(1)00(2)	R76MI2330(1)00(2)
400	250	0.039	5.0	11.0	18.0	15.0	900	72 E4	76MI2390(1)30(2)	R76MI2390(1)30(2)
400	250	0.047	5.0	11.0	18.0	15.0	900	72 E4	76MI2470(1)30(2)	R76MI2470(1)30(2)
400	250	0.056	5.0	11.0	18.0	15.0	900	72 E4	76MI2560(1)30(2)	R76MI2560(1)30(2)
400	250	0.068	6.0	12.0	18.0	15.0	900	72 E4	76MI2680(1)30(2)	R76MI2680(1)30(2)
400	250	0.082	6.0	12.0	18.0	15.0	900	72 E4	76MI2820(1)30(2)	R76MI2820(1)30(2)
400	250	0.10	7.5	13.5	18.0	15.0	900	72 E4	76MI3100(1)30(2)	R76MI3100(1)30(2)
400	250	0.10	9.0	12.5	18.0	15.0	900	72 E4	76MI3100(1)70(2)	R76MI3100(1)70(2)
400	250	0.12	7.5	13.5	18.0	15.0	900	72 E4	76MI3120(1)30(2)	R76MI3120(1)30(2)
400	250	0.12	9.0	12.5	18.0	15.0	900	72 E4	76MI3120(1)70(2)	R76MI3120(1)70(2)
400	250	0.15	8.5	14.5	18.0	15.0	900	72 E4	76MI3150(1)30(2)	R76MI3150(1)30(2)
400	250	0.15	13.0	12.0	18.0	15.0	900	72 E4	76MI3150(1)70(2)	R76MI3150(1)70(2)
400	250	0.18	10.0	16.0	18.0	15.0	900	72 E4	76MI3180(1)30(2)	R76MI3180(1)30(2)
400	250	0.18	13.0	12.0	18.0	15.0	900	72 E4	76MI3180(1)70(2)	R76MI3180(1)70(2)
400	250	0.22	10.0	16.0	18.0	15.0	900	72 E4	76MI3220(1)30(2)	R76MI3220(1)30(2)
400	250	0.27	11.0	19.0	18.0	15.0	900	72 E4	76MI3270(1)30(2)	R76MI3270(1)30(2)
400	250	0.12	6.0	15.0	26.5	22.5	500	40 E4	76MN3120(1)30(2)	R76MN3120(1)30(2)
400	250	0.15	6.0	15.0	26.5	22.5	500	40 E4	76MN3150(1)30(2)	R76MN3150(1)30(2)
400	250	0.18	6.0	15.0	26.5	22.5	500	40 E4	76MN3180(1)30(2)	R76MN3180(1)30(2)
400	250	0.22	7.0	16.0	26.5	22.5	500	40 E4	76MN3220(1)30(2)	R76MN3220(1)30(2)
400	250	0.27	8.5	17.0	26.5	22.5	500	40 E4	76MN3270(1)30(2)	R76MN3270(1)30(2)
400	250	0.33	8.5	17.0	26.5	22.5	500	40 E4	76MN3330(1)30(2)	R76MN3330(1)30(2)
400	250	0.39	10.0	18.5	26.5	22.5	500	40 E4	76MN3390(1)30(2)	R76MN3390(1)30(2)
400	250	0.47	10.0	18.5	26.5	22.5	500	40 E4	76MN3470(1)30(2)	R76MN3470(1)30(2)
400	250	0.56	11.0	20.0	26.5	22.5	500	40 E4	76MN3560(1)30(2)	R76MN3560(1)30(2)
400	250	0.68	13.0	22.0	26.5	22.5	500	40 E4	76MN3680(1)30(2)	R76MN3680(1)30(2)
400	250	0.39	9.0	17.0	32.0	27.5	300	24 E4	76MR3390(1)30(2)	R76MR3390(1)30(2)
400	250	0.47	9.0	17.0	32.0	27.5	300	24 E4	76MR3470(1)30(2)	R76MR3470(1)30(2)
400	250	0.56	11.0	20.0	32.0	27.5	300	24 E4	76MR3560(1)30(2)	R76MR3560(1)30(2)
400	250	0.68	11.0	20.0	32.0	27.5	300	24 E4	76MR3680(1)30(2)	R76MR3680(1)30(2)
VDC	VAC	Cap Value (µF)	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/µs)	Max K_0 (V^2/µs)	New KEMET Part Number	Legacy Part Number

(1) Insert lead and packaging code. See Ordering Options Table for available options.
(2) H = ±2.5% (for C ≥ 0.001 µF only), J = ±5%, K = ±10%.

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Cap Value (µF)	Dimensions in mm			Lead Spacing (p)	dV/dt (V/µs)	Max K_0 (V^2/µs)	New KEMET Part Number	Legacy Part Number
			B	H	L					
400	250	0.82	13.0	22.0	32.0	27.5	300	24 E4	76MR3820(1)30(2)	R76MR3820(1)30(2)
400	250	1.0	13.0	22.0	32.0	27.5	300	24 E4	76MR4100(1)40(2)	R76MR4100(1)40(2)
400	250	1.2	14.0	28.0	32.0	27.5	300	24 E4	76MR4120(1)40(2)	R76MR4120(1)40(2)
400	250	1.5	18.0	33.0	32.0	27.5	300	24 E4	76MR4150(1)30(2)	R76MR4150(1)30(2)
400	250	1.8	18.0	33.0	32.0	27.5	300	24 E4	76MR4180(1)30(2)	R76MR4180(1)30(2)
400	250	2.2	22.0	37.0	32.0	27.5	300	24 E4	76MR4220(1)30(2)	R76MR4220(1)30(2)
400	250	2.7	22.0	37.0	32.0	27.5	300	24 E4	76MR4270(1)30(2)	R76MR4270(1)30(2)
400	250	1.0	11.0	22.0	41.5	37.5	180	14 E4	76MW4100(1)30(2)	R76MW4100(1)30(2)
400	250	1.2	13.0	24.0	41.5	37.5	180	14 E4	76MW4120(1)30(2)	R76MW4120(1)30(2)
400	250	1.5	13.0	24.0	41.5	37.5	180	14 E4	76MW4150(1)30(2)	R76MW4150(1)30(2)
400	250	1.8	16.0	28.5	41.5	37.5	180	14 E4	76MW4180(1)30(2)	R76MW4180(1)30(2)
400	250	2.2	19.0	32.0	41.5	37.5	180	14 E4	76MW4220(1)30(2)	R76MW4220(1)30(2)
400	250	2.7	19.0	32.0	41.5	37.5	180	14 E4	76MW4270(1)30(2)	R76MW4270(1)30(2)
400	250	3.3	19.0	32.0	41.5	37.5	180	14 E4	76MW4330(1)30(2)	R76MW4330(1)30(2)
400	250	3.9	20.0	40.0	41.5	37.5	180	14 E4	76MW4390(1)30(2)	R76MW4390(1)30(2)
400	250	4.7	20.0	40.0	41.5	37.5	180	14 E4	76MW4470(1)30(2)	R76MW4470(1)30(2)
400	250	5.6	24.0	44.0	41.5	37.5	180	14 E4	76MW4560(1)30(2)	R76MW4560(1)30(2)
400	250	6.8	30.0	45.0	41.5	37.5	180	14 E4	76MW4680(1)30(2)	R76MW4680(1)30(2)
400	250	8.2	30.0	45.0	41.5	37.5	180	14 E4	76MW4820(1)30(2)	R76MW4820(1)30(2)
630	250	0.00068	3.0	8.0	10.0	7.5	2800	353 E4	76PD0680(1)00(2)	R76PD0680(1)00(2)
630	250	0.00082	3.0	8.0	10.0	7.5	2800	353 E4	76PD0820(1)00(2)	R76PD0820(1)00(2)
630	250	0.001	3.0	8.0	10.0	7.5	2800	353 E4	76PD1100(1)00(2)	R76PD1100(1)00(2)
630	250	0.0012	3.0	8.0	10.0	7.5	2800	353 E4	76PD1120(1)00(2)	R76PD1120(1)00(2)
630	250	0.0015	3.0	8.0	10.0	7.5	2800	353 E4	76PD1150(1)00(2)	R76PD1150(1)00(2)
630	250	0.0018	3.0	8.0	10.0	7.5	2800	353 E4	76PD1180(1)00(2)	R76PD1180(1)00(2)
630	250	0.0022	3.0	8.0	10.0	7.5	2800	353 E4	76PD1220(1)00(2)	R76PD1220(1)00(2)
630	250	0.0027	4.0	9.0	10.0	7.5	2800	353 E4	76PD1270(1)40(2)	R76PD1270(1)40(2)
630	250	0.0033	4.0	9.0	10.0	7.5	2800	355 E4	76PD1330(1)40(2)	R76PD1330(1)40(2)
630	250	0.0039	4.0	9.0	10.0	7.5	2800	353 E4	76PD1390(1)40(2)	R76PD1390(1)40(2)
630	250	0.0047	4.0	9.0	10.0	7.5	2800	353 E4	76PD1470(1)40(2)	R76PD1470(1)40(2)
630	250	0.0056	4.0	9.0	10.0	7.5	2800	353 E4	76PD1560(1)40(2)	R76PD1560(1)40(2)
630	250	0.0068	5.0	10.5	10.0	7.5	2800	353 E4	76PD1680(1)40(2)	R76PD1680(1)40(2)
630	250	0.0082	5.0	10.5	10.0	7.5	2800	353 E4	76PD1820(1)40(2)	R76PD1820(1)40(2)
630	250	0.010	6.0	12.0	10.5	7.5	2800	353 E4	76PD2100(1)30(2)	R76PD2100(1)30(2)
630	250	0.012	6.0	12.0	10.5	7.5	2800	353 E4	76PD2120(1)30(2)	R76PD2120(1)30(2)
630	400	0.0039	4.0	9.0	13.0	10.0	3000	378 E4	76PF1390(1)00(2)	R76PF1390(1)00(2)
630	400	0.0047	4.0	9.0	13.0	10.0	3000	378 E4	76PF1470(1)00(2)	R76PF1470(1)00(2)
630	400	0.0056	4.0	9.0	13.0	10.0	3000	378 E4	76PF1560(1)00(2)	R76PF1560(1)00(2)
630	400	0.0068	4.0	9.0	13.0	10.0	3000	378 E4	76PF1680(1)00(2)	R76PF1680(1)00(2)
630	400	0.0082	4.0	9.0	13.0	10.0	3000	378 E4	76PF1820(1)00(2)	R76PF1820(1)00(2)
630	400	0.010	5.0	11.0	13.0	10.0	3000	378 E4	76PF2100(1)30(2)	R76PF2100(1)30(2)
630	400	0.012	5.0	11.0	13.0	10.0	3000	378 E4	76PF2120(1)30(2)	R76PF2120(1)30(2)
630	400	0.015	6.0	12.0	13.0	10.0	3000	378 E4	76PF2150(1)30(2)	R76PF2150(1)30(2)
630	400	0.018	6.0	12.0	13.0	10.0	3000	378 E4	76PF2180(1)30(2)	R76PF2180(1)30(2)
630	400	0.012	5.0	11.0	18.0	15.0	2500	315 E4	76PI2120(1)00(2)	R76PI2120(1)00(2)
630	400	0.015	5.0	11.0	18.0	15.0	2500	315 E4	76PI2150(1)00(2)	R76PI2150(1)00(2)
630	400	0.018	5.0	11.0	18.0	15.0	2500	315 E4	76PI2180(1)00(2)	R76PI2180(1)00(2)
630	400	0.022	5.0	11.0	18.0	15.0	2500	315 E4	76PI2220(1)30(2)	R76PI2220(1)30(2)
630	400	0.027	5.0	11.0	18.0	15.0	2500	315 E4	76PI2270(1)30(2)	R76PI2270(1)30(2)
630	400	0.033	6.0	12.0	18.0	15.0	2500	315 E4	76PI2330(1)30(2)	R76PI2330(1)30(2)
630	400	0.039	6.0	12.0	18.0	15.0	2500	315 E4	76PI2390(1)30(2)	R76PI2390(1)30(2)
630	400	0.047	7.5	13.5	18.0	15.0	2500	315 E4	76PI2470(1)30(2)	R76PI2470(1)30(2)
630	400	0.047	9.0	12.5	18.0	15.0	2500	315 E4	76PI2470(1)70(2)	R76PI2470(1)70(2)
630	400	0.056	7.5	13.5	18.0	15.0	2500	315 E4	76PI2560(1)30(2)	R76PI2560(1)30(2)
630	400	0.056	9.0	12.5	18.0	15.0	2500	315 E4	76PI2560(1)70(2)	R76PI2560(1)70(2)
630	400	0.068	8.5	14.5	18.0	15.0	2500	315 E4	76PI2680(1)30(2)	R76PI2680(1)30(2)
630	400	0.068	9.0	12.5	18.0	15.0	2500	315 E4	76PI2680(1)70(2)	R76PI2680(1)70(2)
630	400	0.082	8.5	14.5	18.0	15.0	2500	315 E4	76PI2820(1)30(2)	R76PI2820(1)30(2)
630	400	0.082	13.0	12.0	18.0	15.0	2500	315 E4	76PI2820(1)70(2)	R76PI2820(1)70(2)
630	400	0.10	10.0	16.0	18.0	15.0	2500	315 E4	76PI3100(1)30(2)	R76PI3100(1)30(2)
VDC	VAC	Cap Value (µF)	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/µs)	Max K_0 (V^2/µs)	New KEMET Part Number	Legacy Part Number

(1) Insert lead and packaging code. See Ordering Options Table for available options.
(2) H = ±2.5% (for C ≥ 0.001 µF only), J = ±5%, K = ±10%.

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Cap Value (µF)	Dimensions in mm			Lead Spacing (p)	dV/dt (V/µs)	Max K_0 (V^2/µs)	New KEMET Part Number	Legacy Part Number
			B	H	L					
630	400	0.12	11.0	19.0	18.0	15.0	2500	315 E4	76PI3120(1)30(2)	R76PI3120(1)30(2)
630	400	0.047	6.0	15.0	26.5	22.5	1500	189 E4	76PN2470(1)00(2)	R76PN2470(1)00(2)
630	400	0.056	6.0	15.0	26.5	22.5	1500	189 E4	76PN2560(1)00(2)	R76PN2560(1)00(2)
630	400	0.068	6.0	15.0	26.5	22.5	1500	189 E4	76PN2680(1)00(2)	R76PN2680(1)00(2)
630	400	0.082	6.0	15.0	26.5	22.5	1500	189 E4	76PN2820(1)30(2)	R76PN2820(1)30(2)
630	400	0.10	6.0	15.0	26.5	22.5	1500	189 E4	76PN3100(1)30(2)	R76PN3100(1)30(2)
630	400	0.12	7.0	16.0	26.5	22.5	1500	189 E4	76PN3120(1)30(2)	R76PN3120(1)30(2)
630	400	0.15	8.5	17.0	26.5	22.5	1500	189 E4	76PN3150(1)30(2)	R76PN3150(1)30(2)
630	400	0.18	8.5	17.0	26.5	22.5	1500	189 E4	76PN3180(1)30(2)	R76PN3180(1)30(2)
630	400	0.22	10.0	18.5	26.5	22.5	1500	189 E4	76PN3220(1)30(2)	R76PN3220(1)30(2)
630	400	0.27	11.0	20.0	26.5	22.5	1500	189 E4	76PN3270(1)30(2)	R76PN3270(1)30(2)
630	400	0.33	11.0	20.0	26.5	22.5	1500	189 E4	76PN3330(1)30(2)	R76PN3330(1)30(2)
630	400	0.39	13.0	22.0	26.5	22.5	1500	189 E4	76PN3390(1)30(2)	R76PN3390(1)30(2)
630	400	0.15	9.0	17.0	32.0	27.5	900	113 E4	76PR3150(1)30(2)	R76PR3150(1)30(2)
630	400	0.18	9.0	17.0	32.0	27.5	900	113 E4	76PR3180(1)30(2)	R76PR3180(1)30(2)
630	400	0.22	9.0	17.0	32.0	27.5	900	113 E4	76PR3220(1)30(2)	R76PR3220(1)30(2)
630	400	0.27	9.0	17.0	32.0	27.5	900	113 E4	76PR3270(1)30(2)	R76PR3270(1)30(2)
630	400	0.33	11.0	20.0	32.0	27.5	900	113 E4	76PR3330(1)40(2)	R76PR3330(1)40(2)
630	400	0.39	11.0	20.0	32.0	27.5	900	113 E4	76PR3390(1)30(2)	R76PR3390(1)30(2)
630	400	0.47	13.0	22.0	32.0	27.5	900	113 E4	76PR3470(1)30(2)	R76PR3470(1)30(2)
630	400	0.56	13.0	22.0	32.0	27.5	900	113 E4	76PR3560(1)30(2)	R76PR3560(1)30(2)
630	400	0.68	13.0	25.0	32.0	27.5	900	113 E4	76PR3680(1)40(2)	R76PR3680(1)40(2)
630	400	0.82	14.0	28.0	32.0	27.5	900	113 E4	76PR3820(1)30(2)	R76PR3820(1)30(2)
630	400	1.0	18.0	33.0	32.0	27.5	900	113 E4	76PR4100(1)30(2)	R76PR4100(1)30(2)
630	400	1.2	18.0	33.0	32.0	27.5	900	113 E4	76PR4120(1)30(2)	R76PR4120(1)30(2)
630	400	1.5	22.0	37.0	32.0	27.5	900	113 E4	76PR4150(1)30(2)	R76PR4150(1)30(2)
630	400	1.8	22.0	37.0	32.0	27.5	900	113 E4	76PR4180(1)30(2)	R76PR4180(1)30(2)
630	400	0.33	11.0	22.0	41.5	37.5	450	56 E4	76PW3330(1)30(2)	R76PW3330(1)30(2)
630	400	0.39	11.0	22.0	41.5	37.5	450	56 E4	76PW3390(1)30(2)	R76PW3390(1)30(2)
630	400	0.47	11.0	22.0	41.5	37.5	450	56 E4	76PW3470(1)30(2)	R76PW3470(1)30(2)
630	400	0.56	11.0	22.0	41.5	37.5	450	56 E4	76PW3560(1)30(2)	R76PW3560(1)30(2)
630	400	0.68	11.0	22.0	41.5	37.5	450	56 E4	76PW3680(1)30(2)	R76PW3680(1)30(2)
630	400	0.82	13.0	24.0	41.5	37.5	450	56 E4	76PW3820(1)30(2)	R76PW3820(1)30(2)
630	400	1.0	16.0	28.5	41.5	37.5	450	56 E4	76PW4100(1)30(2)	R76PW4100(1)30(2)
630	400	1.2	16.0	28.5	41.5	37.5	450	56 E4	76PW4120(1)30(2)	R76PW4120(1)30(2)
630	400	1.5	16.0	28.5	41.5	37.5	450	56 E4	76PW4150(1)30(2)	R76PW4150(1)30(2)
630	400	1.8	19.0	32.0	41.5	37.5	450	56 E4	76PW4180(1)30(2)	R76PW4180(1)30(2)
630	400	2.2	20.0	40.0	41.5	37.5	450	56 E4	76PW4220(1)30(2)	R76PW4220(1)30(2)
630	400	2.7	20.0	40.0	41.5	37.5	450	56 E4	76PW4270(1)30(2)	R76PW4270(1)30(2)
630	400	3.3	24.0	44.0	41.5	37.5	450	56 E4	76PW4330(1)30(2)	R76PW4330(1)30(2)
630	400	3.9	30.0	45.0	41.5	37.5	450	56 E4	76PW4390(1)30(2)	R76PW4390(1)30(2)
630	400	4.7	30.0	45.0	41.5	37.5	450	56 E4	76PW4470(1)30(2)	R76PW4470(1)30(2)
630	400	5.6	30.0	45.0	41.5	37.5	450	56 E4	76PW4560(1)30(2)	R76PW4560(1)30(2)
1000	400	0.00022	3.0	8.0	10.0	7.5	6000	1200 E4	76QD0220(1)00(2)	R76QD0220(1)00(2)
1000	400	0.00027	3.0	8.0	10.0	7.5	6000	1200 E4	76QD0270(1)00(2)	R76QD0270(1)00(2)
1000	400	0.00033	3.0	8.0	10.0	7.5	6000	1200 E4	76QD0330(1)00(2)	R76QD0330(1)00(2)
1000	400	0.00039	3.0	8.0	10.0	7.5	6000	1200 E4	76QD0390(1)00(2)	R76QD0390(1)00(2)
1000	400	0.00047	3.0	8.0	10.0	7.5	6000	1200 E4	76QD0470(1)00(2)	R76QD0470(1)00(2)
1000	400	0.00056	3.0	8.0	10.0	7.5	6000	1200 E4	76QD0560(1)00(2)	R76QD0560(1)00(2)
1000	400	0.00068	4.0	9.0	10.0	7.5	6000	1200 E4	76QD0680(1)40(2)	R76QD0680(1)40(2)
1000	400	0.00082	4.0	9.0	10.0	7.5	6000	1200 E4	76QD0820(1)40(2)	R76QD0820(1)40(2)
1000	400	0.001	4.0	9.0	10.0	7.5	6000	1200 E4	76QD1100(1)40(2)	R76QD1100(1)40(2)
1000	400	0.0012	4.0	9.0	10.0	7.5	6000	1200 E4	76QD1120(1)40(2)	R76QD1120(1)40(2)
1000	400	0.0015	5.0	10.5	10.0	7.5	6000	1200 E4	76QD1150(1)40(2)	R76QD1150(1)40(2)
1000	400	0.0018	5.0	10.5	10.0	7.5	6000	1200 E4	76QD1180(1)40(2)	R76QD1180(1)40(2)
1000	400	0.0022	5.0	10.5	10.0	7.5	6000	1200 E4	76QD1220(1)40(2)	R76QD1220(1)40(2)
1000	400	0.0027	6.0	12.0	10.5	7.5	6000	1200 E4	76QD1270(1)00(2)	R76QD1270(1)00(2)
1000	400	0.0033	6.0	12.0	10.5	7.5	6000	1200 E4	76QD1330(1)00(2)	R76QD1330(1)00(2)
1000	600	0.00047	4.0	9.0	13.0	10.0	4800	960 E4	76QF0470(1)00(2)	R76QF0470(1)00(2)
1000	600	0.00056	4.0	9.0	13.0	10.0	4800	960 E4	76QF0560(1)00(2)	R76QF0560(1)00(2)
VDC	VAC	Cap Value (µF)	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/µs)	Max K_0 (V^2/µs)	New KEMET Part Number	Legacy Part Number

(1) Insert lead and packaging code. See Ordering Options Table for available options.
(2) H = ±2.5% (for C ≥ 0.001 µF only), J = ±5%, K = ±10%.

Roll Over for Order Info.

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Cap Value (µF)	Dimensions in mm			Lead Spacing (p)	dV/dt (V/µs)	Max K_0 (V^2/µs)	New KEMET Part Number	Legacy Part Number
			B	H	L					
1000	600	0.00068	4.0	9.0	13.0	10.0	4800	960 E4	76QF0680(1)00(2)	R76QF0680(1)00(2)
1000	600	0.00082	4.0	9.0	13.0	10.0	4800	960 E4	76QF0820(1)00(2)	R76QF0820(1)00(2)
1000	600	0.001	4.0	9.0	13.0	10.0	4800	960 E4	76QF1100(1)00(2)	R76QF1100(1)00(2)
1000	600	0.0012	4.0	9.0	13.0	10.0	4800	960 E4	76QF1120(1)00(2)	R76QF1120(1)00(2)
1000	600	0.0015	4.0	9.0	13.0	10.0	4800	960 E4	76QF1150(1)00(2)	R76QF1150(1)00(2)
1000	600	0.0018	4.0	9.0	13.0	10.0	4800	960 E4	76QF1180(1)00(2)	R76QF1180(1)00(2)
1000	600	0.0022	4.0	9.0	13.0	10.0	4800	960 E4	76QF1220(1)00(2)	R76QF1220(1)00(2)
1000	600	0.0027	4.0	9.0	13.0	10.0	4800	960 E4	76QF1270(1)00(2)	R76QF1270(1)00(2)
1000	600	0.0033	4.0	9.0	13.0	10.0	4800	960 E4	76QF1330(1)30(2)	R76QF1330(1)30(2)
1000	600	0.0039	5.0	11.0	13.0	10.0	4800	960 E4	76QF1390(1)30(2)	R76QF1390(1)30(2)
1000	600	0.0047	5.0	11.0	13.0	10.0	4800	960 E4	76QF1470(1)30(2)	R76QF1470(1)30(2)
1000	600	0.0056	6.0	12.0	13.0	10.0	4800	960 E4	76QF1560(1)30(2)	R76QF1560(1)30(2)
1000	600	0.0068	6.0	12.0	13.0	10.0	4800	960 E4	76QF1680(1)30(2)	R76QF1680(1)30(2)
1000	600	0.0082	4.0	10.0	18.0	15.0	3300	660 E4	76QI1820(1)40(2)	R76QI1820(1)40(2)
1000	600	0.0082	5.0	11.0	18.0	15.0	3300	660 E4	76QI1820(1)00(2)	R76QI1820(1)00(2)
1000	600	0.010	4.0	10.0	18.0	15.0	3300	660 E4	76QI2100(1)40(2)	R76QI2100(1)40(2)
1000	600	0.010	5.0	11.0	18.0	15.0	3300	660 E4	76QI2100(1)30(2)	R76QI2100(1)30(2)
1000	600	0.012	5.0	11.0	18.0	15.0	3300	660 E4	76QI2120(1)30(2)	R76QI2120(1)30(2)
1000	600	0.015	5.0	11.0	18.0	15.0	3300	660 E4	76QI2150(1)40(2)	R76QI2150(1)40(2)
1000	600	0.018	5.0	11.0	18.0	15.0	3300	660 E4	76QI2180(1)40(2)	R76QI2180(1)40(2)
1000	600	0.022	6.0	12.0	18.0	15.0	3300	660 E4	76QI2220(1)40(2)	R76QI2220(1)40(2)
1000	600	0.022	9.0	12.5	18.0	15.0	3300	660 E4	76QI2220(1)70(2)	R76QI2220(1)70(2)
1000	600	0.027	7.5	13.5	18.0	15.0	3300	660 E4	76QI2270(1)40(2)	R76QI2270(1)40(2)
1000	600	0.027	9.0	12.5	18.0	15.0	3300	660 E4	76QI2270(1)70(2)	R76QI2270(1)70(2)
1000	600	0.033	7.5	13.5	18.0	15.0	3300	660 E4	76QI2330(1)40(2)	R76QI2330(1)40(2)
1000	600	0.033	13.0	12.0	18.0	15.0	3300	660 E4	76QI2330(1)70(2)	R76QI2330(1)70(2)
1000	600	0.039	8.5	14.5	18.0	15.0	3300	660 E4	76QI2390(1)40(2)	R76QI2390(1)40(2)
1000	600	0.047	8.5	14.5	18.0	15.0	3300	660 E4	76QI2470(1)40(2)	R76QI2470(1)40(2)
1000	600	0.027	6.0	15.0	26.5	22.5	2100	420 E4	76QN2270(1)00(2)	R76QN2270(1)00(2)
1000	600	0.033	6.0	15.0	26.5	22.5	2100	420 E4	76QN2330(1)30(2)	R76QN2330(1)30(2)
1000	600	0.039	6.0	15.0	26.5	22.5	2100	420 E4	76QN2390(1)30(2)	R76QN2390(1)30(2)
1000	600	0.047	7.0	16.0	26.5	22.5	2100	420 E4	76QN2470(1)30(2)	R76QN2470(1)30(2)
1000	600	0.056	7.0	16.0	26.5	22.5	2100	420 E4	76QN2560(1)30(2)	R76QN2560(1)30(2)
1000	600	0.068	8.5	17.0	26.5	22.5	2100	420 E4	76QN2680(1)30(2)	R76QN2680(1)30(2)
1000	600	0.082	10.0	18.5	26.5	22.5	2100	420 E4	76QN2820(1)30(2)	R76QN2820(1)30(2)
1000	600	0.10	10.0	18.5	26.5	22.5	2100	420 E4	76QN3100(1)30(2)	R76QN3100(1)30(2)
1000	600	0.12	11.0	20.0	26.5	22.5	2100	420 E4	76QN3120(1)30(2)	R76QN3120(1)30(2)
1000	600	0.15	13.0	22.0	26.5	22.5	2100	420 E4	76QN3150(1)30(2)	R76QN3150(1)30(2)
1000	600	0.10	9.0	17.0	32.0	27.5	1000	200 E4	76QR3100(1)40(2)	R76QR3100(1)40(2)
1000	600	0.12	9.0	17.0	32.0	27.5	1000	200 E4	76QR3120(1)40(2)	R76QR3120(1)40(2)
1000	600	0.15	11.0	20.0	32.0	27.5	1000	200 E4	76QR3150(1)30(2)	R76QR3150(1)30(2)
1000	600	0.18	13.0	22.0	32.0	27.5	1000	200 E4	76QR3180(1)30(2)	R76QR3180(1)30(2)
1000	600	0.22	13.0	22.0	32.0	27.5	1000	200 E4	76QR3220(1)30(2)	R76QR3220(1)30(2)
1000	600	0.27	13.0	25.0	32.0	27.5	1000	200 E4	76QR3270(1)40(2)	R76QR3270(1)40(2)
1000	600	0.33	14.0	28.0	32.0	27.5	1000	200 E4	76QR3330(1)30(2)	R76QR3330(1)30(2)
1000	600	0.39	18.0	33.0	32.0	27.5	1000	200 E4	76QR3390(1)30(2)	R76QR3390(1)30(2)
1000	600	0.47	18.0	33.0	32.0	27.5	1000	200 E4	76QR3470(1)30(2)	R76QR3470(1)30(2)
1000	600	0.56	22.0	37.0	32.0	27.5	1000	200 E4	76QR3560(1)30(2)	R76QR3560(1)30(2)
1000	600	0.68	22.0	37.0	32.0	27.5	1000	200 E4	76QR3680(1)30(2)	R76QR3680(1)30(2)
1000	600	0.18	11.0	22.0	41.5	37.5	500	100 E4	76QW3180(1)30(2)	R76QW3180(1)30(2)
1000	600	0.22	11.0	22.0	41.5	37.5	500	100 E4	76QW3220(1)30(2)	R76QW3220(1)30(2)
1000	600	0.27	13.0	24.0	41.5	37.5	500	100 E4	76QW3270(1)30(2)	R76QW3270(1)30(2)
1000	600	0.33	13.0	24.0	41.5	37.5	500	100 E4	76QW3330(1)30(2)	R76QW3330(1)30(2)
1000	600	0.39	16.0	28.5	41.5	37.5	500	100 E4	76QW3390(1)30(2)	R76QW3390(1)30(2)
1000	600	0.47	16.0	28.5	41.5	37.5	500	100 E4	76QW3470(1)30(2)	R76QW3470(1)30(2)
1000	600	0.56	16.0	28.5	41.5	37.5	500	100 E4	76QW3560(1)30(2)	R76QW3560(1)30(2)
1000	600	0.68	19.0	32.0	41.5	37.5	500	100 E4	76QW3680(1)30(2)	R76QW3680(1)30(2)
1000	600	0.82	20.0	40.0	41.5	37.5	500	100 E4	76QW3820(1)30(2)	R76QW3820(1)30(2)
1000	600	1.0	20.0	40.0	41.5	37.5	500	100 E4	76QW4100(1)30(2)	R76QW4100(1)30(2)
1000	600	1.2	24.0	44.0	41.5	37.5	500	100 E4	76QW4120(1)30(2)	R76QW4120(1)30(2)
VDC	VAC	Cap Value (µF)	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/µs)	Max K_0 (V^2/µs)	New KEMET Part Number	Legacy Part Number

(1) Insert lead and packaging code. See Ordering Options Table for available options.
(2) H = ±2.5% (for C ≥ 0.001 µF only), J = ±5%, K = ±10%.

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Cap Value (µF)	Dimensions in mm			Lead Spacing (p)	dV/dt (V/µs)	Max K_0 (V^2/µs)	New KEMET Part Number	Legacy Part Number
			B	H	L					
1000	600	1.5	24.0	44.0	41.5	37.5	500	100 E4	76QW4150(1)30(2)	R76QW4150(1)30(2)
1000	600	1.8	30.0	45.0	41.5	37.5	500	100 E4	76QW4180(1)30(2)	R76QW4180(1)30(2)
1000	600	2.2	30.0	45.0	41.5	37.5	500	100 E4	76QW4220(1)30(2)	R76QW4220(1)30(2)
1600	650	0.0033	4.0	10.0	18.0	15.0	6000	1900 E4	76TI1330(1)40(2)	R76TI1330(1)40(2)
1600	650	0.0033	5.0	11.0	18.0	15.0	6000	1900 E4	76TI1330(1)30(2)	R76TI1330(1)30(2)
1600	650	0.0039	4.0	10.0	18.0	15.0	6000	1900 E4	76TI1390(1)40(2)	R76TI1390(1)40(2)
1600	650	0.0039	5.0	11.0	18.0	15.0	6000	1900 E4	76TI1390(1)30(2)	R76TI1390(1)30(2)
1600	650	0.0047	4.0	10.0	18.0	15.0	6000	1900 E4	76TI1470(1)40(2)	R76TI1470(1)40(2)
1600	650	0.0047	5.0	11.0	18.0	15.0	6000	1900 E4	76TI1470(1)30(2)	R76TI1470(1)30(2)
1600	650	0.0056	4.0	10.0	18.0	15.0	6000	1900 E4	76TI1560(1)40(2)	R76TI1560(1)40(2)
1600	650	0.0056	5.0	11.0	18.0	15.0	6000	1900 E4	76TI1560(1)30(2)	R76TI1560(1)30(2)
1600	650	0.0068	5.0	11.0	18.0	15.0	6000	1900 E4	76TI1680(1)30(2)	R76TI1680(1)30(2)
1600	650	0.0082	5.0	11.0	18.0	15.0	6000	1900 E4	76TI1820(1)40(2)	R76TI1820(1)40(2)
1600	650	0.010	5.0	11.0	18.0	15.0	6000	1900 E4	76TI2100(1)40(2)	R76TI2100(1)40(2)
1600	650	0.012	6.0	12.0	18.0	15.0	6000	1900 E4	76TI2120(1)40(2)	R76TI2120(1)40(2)
1600	650	0.015	6.0	12.0	18.0	15.0	6000	1900 E4	76TI2150(1)40(2)	R76TI2150(1)40(2)
1600	650	0.018	7.5	13.5	18.0	15.0	6000	1900 E4	76TI2180(1)40(2)	R76TI2180(1)40(2)
1600	650	0.018	9.0	12.5	18.0	15.0	6000	1900 E4	76TI2180(1)70(2)	R76TI2180(1)70(2)
1600	650	0.022	7.5	13.5	18.0	15.0	6000	1900 E4	76TI2220(1)40(2)	R76TI2220(1)40(2)
1600	650	0.022	13.0	12.0	18.0	15.0	6000	1900 E4	76TI2220(1)70(2)	R76TI2220(1)70(2)
1600	650	0.027	8.5	14.5	18.0	15.0	6000	1900 E4	76TI2270(1)40(2)	R76TI2270(1)40(2)
1600	650	0.033	8.5	14.5	18.0	15.0	6000	1900 E4	76TI2330(1)40(2)	R76TI2330(1)40(2)
1600	650	0.015	6.0	15.0	26.5	22.5	3000	960 E4	76TN2150(1)30(2)	R76TN2150(1)30(2)
1600	650	0.018	6.0	15.0	26.5	22.5	3000	960 E4	76TN2180(1)30(2)	R76TN2180(1)30(2)
1600	650	0.022	6.0	15.0	26.5	22.5	3000	960 E4	76TN2220(1)30(2)	R76TN2220(1)30(2)
1600	650	0.027	6.0	15.0	26.5	22.5	3000	960 E4	76TN2270(1)30(2)	R76TN2270(1)30(2)
1600	650	0.033	6.0	15.0	26.5	22.5	3000	960 E4	76TN2330(1)40(2)	R76TN2330(1)40(2)
1600	650	0.039	7.0	16.0	26.5	22.5	3000	960 E4	76TN2390(1)40(2)	R76TN2390(1)40(2)
1600	650	0.047	7.0	16.0	26.5	22.5	3000	960 E4	76TN2470(1)40(2)	R76TN2470(1)40(2)
1600	650	0.056	8.5	17.0	26.5	22.5	3000	960 E4	76TN2560(1)40(2)	R76TN2560(1)40(2)
1600	650	0.068	10.0	18.5	26.5	22.5	3000	960 E4	76TN2680(1)40(2)	R76TN2680(1)40(2)
1600	650	0.082	10.0	18.5	26.5	22.5	3000	960 E4	76TN2820(1)40(2)	R76TN2820(1)40(2)
1600	650	0.10	11.0	20.0	26.5	22.5	3000	960 E4	76TN3100(1)40(2)	R76TN3100(1)40(2)
1600	650	0.039	9.0	17.0	32.0	27.5	2000	640 E4	76TR2390(1)30(2)	R76TR2390(1)30(2)
1600	650	0.047	9.0	17.0	32.0	27.5	2000	640 E4	76TR2470(1)30(2)	R76TR2470(1)30(2)
1600	650	0.056	9.0	17.0	32.0	27.5	2000	640 E4	76TR2560(1)30(2)	R76TR2560(1)30(2)
1600	650	0.068	9.0	17.0	32.0	27.5	2000	640 E4	76TR2680(1)30(2)	R76TR2680(1)30(2)
1600	650	0.082	11.0	20.0	32.0	27.5	2000	640 E4	76TR2820(1)30(2)	R76TR2820(1)30(2)
1600	650	0.10	11.0	20.0	32.0	27.5	2000	640 E4	76TR3100(1)30(2)	R76TR3100(1)30(2)
1600	650	0.12	13.0	22.0	32.0	27.5	2000	640 E4	76TR3120(1)30(2)	R76TR3120(1)30(2)
1600	650	0.15	13.0	25.0	32.0	27.5	2000	640 E4	76TR3150(1)40(2)	R76TR3150(1)40(2)
1600	650	0.18	14.0	28.0	32.0	27.5	2000	640 E4	76TR3180(1)40(2)	R76TR3180(1)40(2)
1600	650	0.22	18.0	33.0	32.0	27.5	2000	640 E4	76TR3220(1)30(2)	R76TR3220(1)30(2)
1600	650	0.27	18.0	33.0	32.0	27.5	2000	640 E4	76TR3270(1)30(2)	R76TR3270(1)30(2)
1600	650	0.33	18.0	33.0	32.0	27.5	2000	640 E4	76TR3330(1)30(2)	R76TR3330(1)30(2)
1600	650	0.39	22.0	37.0	32.0	27.5	2000	640 E4	76TR3390(1)30(2)	R76TR3390(1)30(2)
1600	650	0.47	22.0	37.0	32.0	27.5	2000	640 E4	76TR3470(1)30(2)	R76TR3470(1)30(2)
1600	650	0.082	11.0	22.0	41.5	37.5	1200	384 E4	76TW2820(1)30(2)	R76TW2820(1)30(2)
1600	650	0.10	11.0	22.0	41.5	37.5	1200	384 E4	76TW3100(1)30(2)	R76TW3100(1)30(2)
1600	650	0.12	11.0	22.0	41.5	37.5	1200	384 E4	76TW3120(1)30(2)	R76TW3120(1)30(2)
1600	650	0.15	11.0	22.0	41.5	37.5	1200	384 E4	76TW3150(1)30(2)	R76TW3150(1)30(2)
1600	650	0.18	13.0	24.0	41.5	37.5	1200	384 E4	76TW3180(1)30(2)	R76TW3180(1)30(2)
1600	650	0.22	13.0	24.0	41.5	37.5	1200	384 E4	76TW3220(1)30(2)	R76TW3220(1)30(2)
1600	650	0.27	13.0	24.0	41.5	37.5	1200	384 E4	76TW3270(1)30(2)	R76TW3270(1)30(2)
1600	650	0.33	16.0	28.5	41.5	37.5	1200	384 E4	76TW3330(1)30(2)	R76TW3330(1)30(2)
1600	650	0.39	16.0	28.5	41.5	37.5	1200	384 E4	76TW3390(1)30(2)	R76TW3390(1)30(2)
1600	650	0.47	19.0	32.0	41.5	37.5	1200	384 E4	76TW3470(1)30(2)	R76TW3470(1)30(2)
1600	650	0.56	20.0	40.0	41.5	37.5	1200	384 E4	76TW3560(1)30(2)	R76TW3560(1)30(2)
1600	650	0.68	20.0	40.0	41.5	37.5	1200	384 E4	76TW3680(1)30(2)	R76TW3680(1)30(2)
1600	650	0.82	24.0	44.0	41.5	37.5	1200	384 E4	76TW3820(1)30(2)	R76TW3820(1)30(2)
VDC	VAC	Cap Value (µF)	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/µs)	Max K_0 (V^2/µs)	New KEMET Part Number	Legacy Part Number

(1) Insert lead and packaging code. See Ordering Options Table for available options.
(2) H = ±2.5% (for C ≥ 0.001 µF only), J = ±5%, K = ±10%.

Roll Over for Order Info.

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Cap Value (µF)	Dimensions in mm			Lead Spacing (p)	dV/dt (V/µs)	Max K_0 (V^2/µs)	New KEMET Part Number	Legacy Part Number
			B	H	L					
1600	650	1.0	24.0	44.0	41.5	37.5	1200	384 E4	76TW4100(1)30(2)	R76TW4100(1)30(2)
1600	650	1.2	30.0	45.0	41.5	37.5	1200	384 E4	76TW4120(1)30(2)	R76TW4120(1)30(2)
2000	700	0.0001	4.0	10.0	18.0	15.0	9500	3800 E4	76UI0100(1)40(2)	R76UI0100(1)40(2)
2000	700	0.00012	4.0	10.0	18.0	15.0	9500	3800 E4	76UI0120(1)40(2)	R76UI0120(1)40(2)
2000	700	0.00015	4.0	10.0	18.0	15.0	9500	3800 E4	76UI0150(1)40(2)	R76UI0150(1)40(2)
2000	700	0.00018	4.0	10.0	18.0	15.0	9500	3800 E4	76UI0180(1)40(2)	R76UI0180(1)40(2)
2000	700	0.00022	4.0	10.0	18.0	15.0	9500	3800 E4	76UI0220(1)40(2)	R76UI0220(1)40(2)
2000	700	0.00022	5.0	11.0	18.0	15.0	9500	3800 E4	76UI0220(1)00(2)	R76UI0220(1)00(2)
2000	700	0.00027	4.0	10.0	18.0	15.0	9500	3800 E4	76UI0270(1)40(2)	R76UI0270(1)40(2)
2000	700	0.00027	5.0	11.0	18.0	15.0	9500	3800 E4	76UI0270(1)00(2)	R76UI0270(1)00(2)
2000	700	0.00033	4.0	10.0	18.0	15.0	9500	3800 E4	76UI0330(1)40(2)	R76UI0330(1)40(2)
2000	700	0.00033	5.0	11.0	18.0	15.0	9500	3800 E4	76UI0330(1)00(2)	R76UI0330(1)00(2)
2000	700	0.00039	4.0	10.0	18.0	15.0	9500	3800 E4	76UI0390(1)40(2)	R76UI0390(1)40(2)
2000	700	0.00039	5.0	11.0	18.0	15.0	9500	3800 E4	76UI0390(1)00(2)	R76UI0390(1)00(2)
2000	700	0.00047	4.0	10.0	18.0	15.0	9500	3800 E4	76UI0470(1)40(2)	R76UI0470(1)40(2)
2000	700	0.00047	5.0	11.0	18.0	15.0	9500	3800 E4	76UI0470(1)00(2)	R76UI0470(1)00(2)
2000	700	0.00056	4.0	10.0	18.0	15.0	9500	3800 E4	76UI0560(1)40(2)	R76UI0560(1)40(2)
2000	700	0.00056	5.0	11.0	18.0	15.0	9500	3800 E4	76UI0560(1)00(2)	R76UI0560(1)00(2)
2000	700	0.00068	4.0	10.0	18.0	15.0	9500	3800 E4	76UI0680(1)40(2)	R76UI0680(1)40(2)
2000	700	0.00068	5.0	11.0	18.0	15.0	9500	3800 E4	76UI0680(1)00(2)	R76UI0680(1)00(2)
2000	700	0.00082	4.0	10.0	18.0	15.0	9500	3800 E4	76UI0820(1)40(2)	R76UI0820(1)40(2)
2000	700	0.00082	5.0	11.0	18.0	15.0	9500	3800 E4	76UI0820(1)00(2)	R76UI0820(1)00(2)
2000	700	0.001	4.0	10.0	18.0	15.0	9500	3800 E4	76UI1100(1)40(2)	R76UI1100(1)40(2)
2000	700	0.001	5.0	11.0	18.0	15.0	9500	3800 E4	76UI1100(1)30(2)	R76UI1100(1)30(2)
2000	700	0.0012	4.0	10.0	18.0	15.0	9500	3800 E4	76UI1120(1)40(2)	R76UI1120(1)40(2)
2000	700	0.0012	5.0	11.0	18.0	15.0	9500	3800 E4	76UI1120(1)30(2)	R76UI1120(1)30(2)
2000	700	0.0015	4.0	10.0	18.0	15.0	9500	3800 E4	76UI1150(1)40(2)	R76UI1150(1)40(2)
2000	700	0.0015	5.0	11.0	18.0	15.0	9500	3800 E4	76UI1150(1)30(2)	R76UI1150(1)30(2)
2000	700	0.0018	4.0	10.0	18.0	15.0	9500	3800 E4	76UI1180(1)40(2)	R76UI1180(1)40(2)
2000	700	0.0018	5.0	11.0	18.0	15.0	9500	3800 E4	76UI1180(1)30(2)	R76UI1180(1)30(2)
2000	700	0.0022	4.0	10.0	18.0	15.0	9500	3800 E4	76UI1220(1)40(2)	R76UI1220(1)40(2)
2000	700	0.0022	5.0	11.0	18.0	15.0	9500	3800 E4	76UI1220(1)30(2)	R76UI1220(1)30(2)
2000	700	0.0027	4.0	10.0	18.0	15.0	9500	3800 E4	76UI1270(1)40(2)	R76UI1270(1)40(2)
2000	700	0.0027	5.0	11.0	18.0	15.0	9500	3800 E4	76UI1270(1)30(2)	R76UI1270(1)30(2)
2000	700	0.0033	5.0	11.0	18.0	15.0	9500	3800 E4	76UI1330(1)40(2)	R76UI1330(1)40(2)
2000	700	0.0039	5.0	11.0	18.0	15.0	9500	3800 E4	76UI1390(1)40(2)	R76UI1390(1)40(2)
2000	700	0.0047	5.0	11.0	18.0	15.0	9500	3800 E4	76UI1470(1)40(2)	R76UI1470(1)40(2)
2000	700	0.0056	6.0	12.0	18.0	15.0	9500	3800 E4	76UI1560(1)40(2)	R76UI1560(1)40(2)
2000	700	0.0068	6.0	12.0	18.0	15.0	9500	3800 E4	76UI1680(1)40(2)	R76UI1680(1)40(2)
2000	700	0.0082	6.0	12.0	18.0	15.0	9500	3800 E4	76UI1820(1)40(2)	R76UI1820(1)40(2)
2000	700	0.010	7.5	13.5	18.0	15.0	9500	3800 E4	76UI2100(1)40(2)	R76UI2100(1)40(2)
2000	700	0.010	13.0	12.0	18.0	15.0	9500	3800 E4	76UI2100(1)70(2)	R76UI2100(1)70(2)
2000	700	0.012	8.5	14.5	18.0	15.0	9500	3800 E4	76UI2120(1)40(2)	R76UI2120(1)40(2)
2000	700	0.015	8.5	14.5	18.0	15.0	9500	3800 E4	76UI2150(1)40(2)	R76UI2150(1)40(2)
2000	700	0.001	6.0	15.0	26.5	22.5	3500	1400 E4	76UN1100(1)00(2)	R76UN1100(1)00(2)
2000	700	0.0012	6.0	15.0	26.5	22.5	3500	1400 E4	76UN1120(1)00(2)	R76UN1120(1)00(2)
2000	700	0.0015	6.0	15.0	26.5	22.5	3500	1400 E4	76UN1150(1)00(2)	R76UN1150(1)00(2)
2000	700	0.0018	6.0	15.0	26.5	22.5	3500	1400 E4	76UN1180(1)00(2)	R76UN1180(1)00(2)
2000	700	0.0022	6.0	15.0	26.5	22.5	3500	1400 E4	76UN1220(1)00(2)	R76UN1220(1)00(2)
2000	700	0.0027	6.0	15.0	26.5	22.5	3500	1400 E4	76UN1270(1)00(2)	R76UN1270(1)00(2)
2000	700	0.0033	6.0	15.0	26.5	22.5	3500	1400 E4	76UN1330(1)00(2)	R76UN1330(1)00(2)
2000	700	0.0039	6.0	15.0	26.5	22.5	3500	1400 E4	76UN1390(1)00(2)	R76UN1390(1)00(2)
2000	700	0.0047	6.0	15.0	26.5	22.5	3500	1400 E4	76UN1470(1)00(2)	R76UN1470(1)00(2)
2000	700	0.0056	6.0	15.0	26.5	22.5	3500	1400 E4	76UN1560(1)00(2)	R76UN1560(1)00(2)
2000	700	0.0068	6.0	15.0	26.5	22.5	3500	1400 E4	76UN1680(1)00(2)	R76UN1680(1)00(2)
2000	700	0.0082	6.0	15.0	26.5	22.5	3500	1400 E4	76UN1820(1)30(2)	R76UN1820(1)30(2)
2000	700	0.010	6.0	15.0	26.5	22.5	3500	1400 E4	76UN2100(1)30(2)	R76UN2100(1)30(2)
2000	700	0.012	6.0	15.0	26.5	22.5	3500	1400 E4	76UN2120(1)30(2)	R76UN2120(1)30(2)
2000	700	0.015	6.0	15.0	26.5	22.5	3500	1400 E4	76UN2150(1)40(2)	R76UN2150(1)40(2)
2000	700	0.018	6.0	15.0	26.5	22.5	3500	1400 E4	76UN2180(1)40(2)	R76UN2180(1)40(2)
VDC	VAC	Cap Value (µF)	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/µs)	Max K_0 (V^2/µs)	New KEMET Part Number	Legacy Part Number

(1) Insert lead and packaging code. See Ordering Options Table for available options.
(2) H = ±2.5% (for C ≥ 0.001 µF only), J = ±5%, K = ±10%.

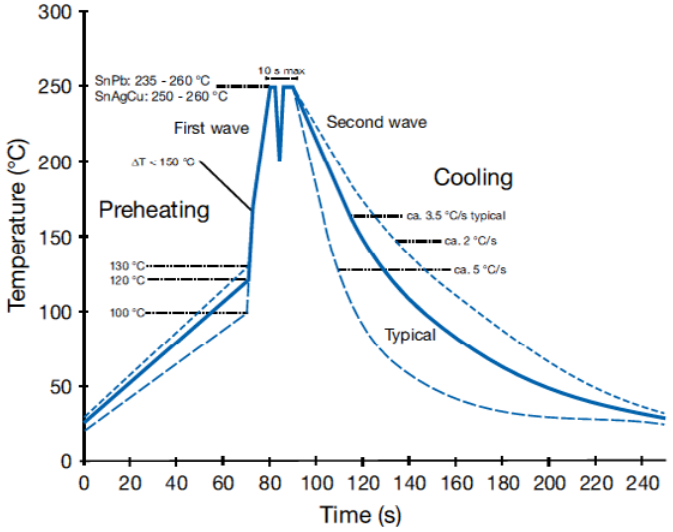
Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Cap Value (µF)	Dimensions in mm			Lead Spacing (p)	dV/dt (V/µs)	Max K_0 (V^2/µs)	New KEMET Part Number	Legacy Part Number
			B	H	L					
2000	700	0.022	7.0	16.0	26.5	22.5	3500	1400 E4	76UN2220(1)40(2)	R76UN2220(1)40(2)
2000	700	0.027	7.0	16.0	26.5	22.5	3500	1400 E4	76UN2270(1)40(2)	R76UN2270(1)40(2)
2000	700	0.033	8.5	17.0	26.5	22.5	3500	1400 E4	76UN2330(1)40(2)	R76UN2330(1)40(2)
2000	700	0.039	10.0	18.5	26.5	22.5	3500	1400 E4	76UN2390(1)40(2)	R76UN2390(1)40(2)
2000	700	0.047	10.0	18.5	26.5	22.5	3500	1400 E4	76UN2470(1)40(2)	R76UN2470(1)40(2)
2000	700	0.056	11.0	20.0	26.5	22.5	3500	1400 E4	76UN2560(1)40(2)	R76UN2560(1)40(2)
2000	700	0.022	9.0	17.0	32.0	27.5	2300	920 E4	76UR2220(1)30(2)	R76UR2220(1)30(2)
2000	700	0.027	9.0	17.0	32.0	27.5	2300	920 E4	76UR2270(1)30(2)	R76UR2270(1)30(2)
2000	700	0.033	9.0	17.0	32.0	27.5	2300	920 E4	76UR2330(1)30(2)	R76UR2330(1)30(2)
2000	700	0.039	9.0	17.0	32.0	27.5	2300	920 E4	76UR2390(1)40(2)	R76UR2390(1)40(2)
2000	700	0.047	11.0	20.0	32.0	27.5	2300	920 E4	76UR2470(1)30(2)	R76UR2470(1)30(2)
2000	700	0.056	13.0	22.0	32.0	27.5	2300	920 E4	76UR2560(1)30(2)	R76UR2560(1)30(2)
2000	700	0.068	13.0	22.0	32.0	27.5	2300	920 E4	76UR2680(1)30(2)	R76UR2680(1)30(2)
2000	700	0.082	13.0	25.0	32.0	27.5	2300	920 E4	76UR2820(1)40(2)	R76UR2820(1)40(2)
2000	700	0.10	14.0	28.0	32.0	27.5	2300	920 E4	76UR3100(1)30(2)	R76UR3100(1)30(2)
2000	700	0.12	18.0	33.0	32.0	27.5	2300	920 E4	76UR3120(1)30(2)	R76UR3120(1)30(2)
2000	700	0.15	18.0	33.0	32.0	27.5	2300	920 E4	76UR3150(1)30(2)	R76UR3150(1)30(2)
2000	700	0.18	22.0	37.0	32.0	27.5	2300	920 E4	76UR3180(1)30(2)	R76UR3180(1)30(2)
2000	700	0.22	22.0	37.0	32.0	27.5	2300	920 E4	76UR3220(1)30(2)	R76UR3220(1)30(2)
2000	700	0.033	11.0	22.0	41.5	37.5	1500	600 E4	76UW2330(1)30(2)	R76UW2330(1)30(2)
2000	700	0.039	11.0	22.0	41.5	37.5	1500	600 E4	76UW2390(1)30(2)	R76UW2390(1)30(2)
2000	700	0.047	11.0	22.0	41.5	37.5	1500	600 E4	76UW2470(1)30(2)	R76UW2470(1)30(2)
2000	700	0.056	11.0	22.0	41.5	37.5	1500	600 E4	76UW2560(1)30(2)	R76UW2560(1)30(2)
2000	700	0.068	11.0	22.0	41.5	37.5	1500	600 E4	76UW2680(1)30(2)	R76UW2680(1)30(2)
2000	700	0.082	11.0	22.0	41.5	37.5	1500	600 E4	76UW2820(1)30(2)	R76UW2820(1)30(2)
2000	700	0.10	13.0	24.0	41.5	37.5	1500	600 E4	76UW3100(1)30(2)	R76UW3100(1)30(2)
2000	700	0.12	13.0	24.0	41.5	37.5	1500	600 E4	76UW3120(1)30(2)	R76UW3120(1)30(2)
2000	700	0.15	16.0	28.5	41.5	37.5	1500	600 E4	76UW3150(1)30(2)	R76UW3150(1)30(2)
2000	700	0.18	16.0	28.5	41.5	37.5	1500	600 E4	76UW3180(1)30(2)	R76UW3180(1)30(2)
2000	700	0.22	19.0	32.0	41.5	37.5	1500	600 E4	76UW3220(1)30(2)	R76UW3220(1)30(2)
2000	700	0.27	20.0	40.0	41.5	37.5	1500	600 E4	76UW3270(1)30(2)	R76UW3270(1)30(2)
2000	700	0.33	20.0	40.0	41.5	37.5	1500	600 E4	76UW3330(1)30(2)	R76UW3330(1)30(2)
2000	700	0.39	24.0	44.0	41.5	37.5	1500	600 E4	76UW3390(1)30(2)	R76UW3390(1)30(2)
2000	700	0.47	24.0	44.0	41.5	37.5	1500	600 E4	76UW3470(1)30(2)	R76UW3470(1)30(2)
2000	700	0.56	30.0	45.0	41.5	37.5	1500	600 E4	76UW3560(1)30(2)	R76UW3560(1)30(2)
2000	700	0.68	30.0	45.0	41.5	37.5	1500	600 E4	76UW3680(1)30(2)	R76UW3680(1)30(2)
VDC	VAC	Cap Value (µF)	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/µs)	Max K_0 (V^2/µs)	New KEMET Part Number	Legacy Part Number

(1) Insert lead and packaging code. See Ordering Options Table for available options.
(2) H = ±2.5% (for C ≥ 0.001 µF only), J = ±5%, K = ±10%.

Soldering Process

The implementation of the RoHS Directive has required the selection SnAuCu (SAC) alloys or SnCu alloys as primary solder. This has increased the liquidus temperature from that of 183ºC for SnPb eutectic alloy to 217ºC – 221ºC for the new alloys. As a result, the heat stress to components, even in wave soldering, has increased considerably due to higher pre-heat and wave temperatures. Polypropylene capacitors are especially sensitive to heat (melting point of polypropylene is 160ºC – 170ºC). Wave soldering can be destructive especially for mechanically small polypropylene capacitors and great care must be taken during soldering. The solder profiles from KEMET are highly recommended. You may also refer to the wave soldering curve from IEC Publication 61760–1 Edition 2. Please consult KEMET with any questions.



Marking

- KEMET's logo
- Series
- Dielectric code (MKP)
- Capacitance
- Capacitance tolerance
- Rated DC voltage
- Manufacturing date code

Packaging Quantities

Lead Spacing	Thickness (mm)	Height (mm)	Length (mm)	Bulk Short Leads	Bulk Long Leads	Standard Reel ø 355 mm	Large Reel ø 500 mm	Ammo	Pizza
7.5	3	8	10	1500	1750	2100		2800	
	4	9	10	2000	1500	1500		2100	
	5	10.5	10	1500	1000	1200		1600	
	6	12	10	1000	800	1000		1350	
10	4	9	13	2000	2200	750	1500	1000	
	5	11	13	1300	2000	600	1250	800	
	6	12	13	1000	1800	500	1000	680	

Packaging Quantities cont'd

Lead Spacing	Thickness (mm)	Height (mm)	Length (mm)	Bulk Short Leads	Bulk Long Leads	Standard Reel ø 355 mm	Large Reel ø 500 mm	Ammo	Pizza
15	4	10	18	2500	1500	750	1500	1000	1411
	5	11	18	1000	1250	600	1250	800	1139
	6	12	18	1750	1000	500	1000	680	935
	7.5	13.5	18	1000	800	350	800	500	748
	6	17.5	18	1000	800	500	1000	680	935
	7.5	14.5	18	1000	750	350	800	500	748
	8.5	14.5	18	1000	650	300	700	440	663
	9	12.5	18	1000	700	270	650	410	629
	7.5	18.5	18	900	600	350	800	500	748
	10	16	18	750	550	300	600	380	561
	13	12	18	750	520	200	480	280	425
	11	19	18	450	400	250	500	340	510
22.5	6	15	26.5	1404	702	300	700	464	660
	7	16	26.5	1188	594	250	550	380	564
	8.5	17	26.5	972	486	250	450	280	468
	10	18.5	26.5	810	405	160	350	235	396
	11	20	26.5	630	378	190	350	217	360
	13	22	26.5	540	324	150	300	200	300
27.5	9	17	32	816	408		450		
	10	20	32	600	360		350		
	11	20	32	560	336		350		
	13	22	32	480	288		300		
	13	25	32	480	288				
	14	28	32	352	176				
	15	24.5	32	400	240				
	18	33	32	256	128				
	22	37	32	168	112				

General Purpose, Pulse and DC Transient Suppression

R77 Series Double Metallized Polypropylene Film, Optimized for AC Applications

Overview

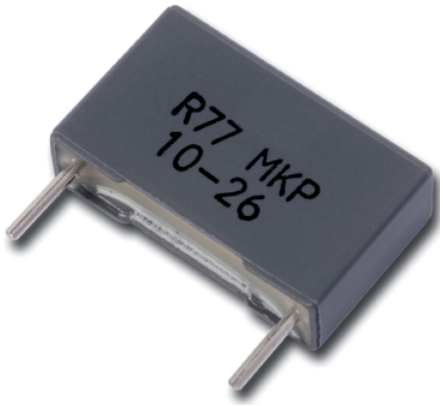
The R77 Series is a polypropylene dielectric with double-metallized polyester film as electrodes, encapsulated in self-extinguishing resin in a box of material meeting the requirements of UL 94 V–0.

Applications

Typical applications include electronic lighting such as automotive headlamps and ballasts, as well as pulse applications with high AC voltage and high current.

Benefits

- Rated voltage: 250 – 900 VAC
- Capacitance range: 0.001 – 0.1 µF
- Lead spacing: 15 – 27.5 mm
- Capacitance tolerance: ±2.5%, ±5%, ±10%
- Climatic category: 55/105/56, IEC 60068–1
- Tape and reel packaging in accordance with IEC 60286–2
- RoHS Compliant and lead-free terminations
- Category temperature range of -55˚C to +105˚C



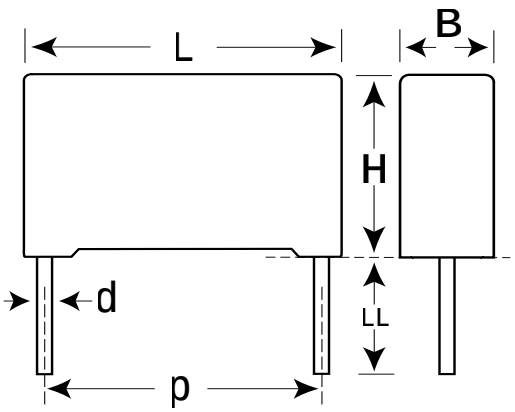
Part Number System

R77	L	I	2270	AA	00	H
Series	Rated Voltage (VAC)	Lead Spacing (mm)	Capacitance Code (pF)	Lead and Packaging Code	Internal Use	Capacitance Tolerance
Metallized Polypropylene	L = 250 3 = 300 N = 400 5 = 500 7 = 700 9 = 900	I = 15.0 N = 22.5 R = 27.5	Digits 2 – 4 indicate the first three digits of the capacitance value. First digit indicates the number of zeros to be added.	See Ordering Options Table	00 (Standard)	H = ±2.5% J = ±5% K = ±10%

Ordering Options Table

Lead Spacing Nominal (mm)	Type of Leads and Packaging	Lead Length (mm)	Lead and Packaging Code
15	Standard Lead and Packaging Options		
	Bulk (Bag) – Short Leads	4 +2/-0	AA
	Ammo Pack	H_0= 18.5 +/-0.5	DQ
	Other Lead and Packaging Options		
	Bulk (Bag) – Long Leads	25 +2/-1	50
	Bulk (Bag) – Max Length Leads	30 +5/-0	40
	Tape & Reel (Standard Reel)	H_0= 18.5 +/-0.5	GY
	Tape & Reel (Large Reel)	H_0= 18.5 +/-0.5	CK
	Pizza Pack	4 +2/-0	BB
22.5	Standard Lead and Packaging Options		
	Bulk (Tray) – Straight Leads	4 +2/-0	AA
	Ammo Pack	H_0= 18.5 +/-0.5	DQ
	Other Lead and Packaging Options		
	Bulk (Tray) – Long Leads	25 +2/-1	50
	Bulk (Tray) – Max Length Leads	30 +5/-0	40
	Tape & Reel (Large Reel)	H_0= 18.5 +/-0.5	CK
	Pizza Pack	4 +2/-0	BB
27.5	Standard Lead and Packaging Options		
	Bulk (Tray) – Straight Leads	4 +2/-0	AA
	Other Lead and Packaging Options		
	Bulk (Tray) – Long Leads	25 +2/-1	50
	Bulk (Tray) – Max Length Leads	30 +5/-0	40
	Tape & Reel (Large Reel)	H_0= 18.5 +/-0.5	CK

Dimensions – Millimeters



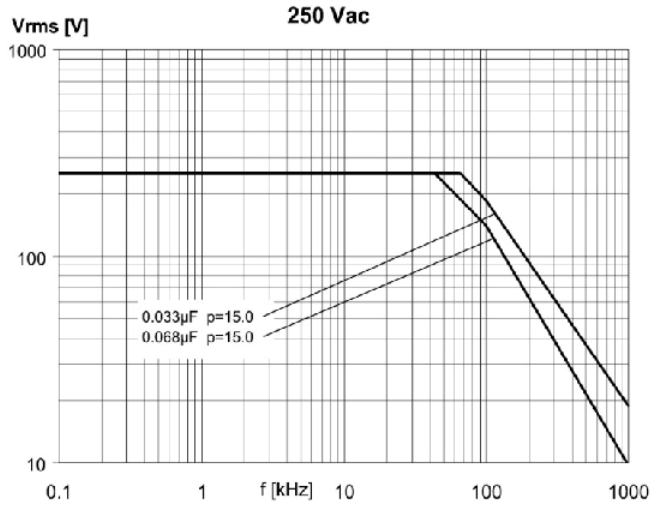
p		B		H		L		d	
Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance
15	+/-0.4	5	+0.2/-0	11	+0.1/-0	18	+0.3/-0	0.8	+/-0.05
15	+/-0.4	6	+0.2/-0	12	+0.1/-0	18	+0.3/-0	0.8	+/-0.05
15	+/-0.4	7.5	+0.2/-0	13.5	+0.1/-0	18	+0.5/-0	0.8	+/-0.05
15	+/-0.4	8.5	+0.2/-0	14.5	+0.1/-0	18	+0.5/-0	0.8	+/-0.05
15	+/-0.4	10	+0.2/-0	16	+0.1/-0	18	+0.5/-0	0.8	+/-0.05
22.5	+/-0.4	6	+0.2/-0	15	+0.1/-0	26.5	+0.3/-0	0.8	+/-0.05
22.5	+/-0.4	7	+0.2/-0	16	+0.1/-0	26.5	+0.3/-0	0.8	+/-0.05
22.5	+/-0.4	8.5	+0.2/-0	17	+0.1/-0	26.5	+0.3/-0	0.8	+/-0.05
22.5	+/-0.4	10	+0.2/-0	18.5	+0.1/-0	26.5	+0.3/-0	0.8	+/-0.05
22.5	+/-0.4	11	+0.2/-0	20	+0.1/-0	26.5	+0.3/-0	0.8	+/-0.05
27.5	+/-0.4	11	+0.2/-0	20	+0.1/-0	32	+0.3/-0	0.8	+/-0.05
27.5	+/-0.4	13	+0.2/-0	22	+0.1/-0	32	+0.3/-0	0.8	+/-0.05

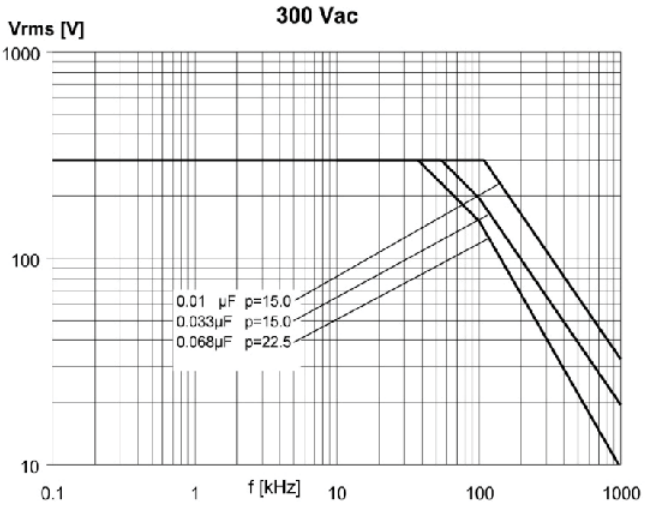
Note: See Ordering Options Table for lead length (LL) options.

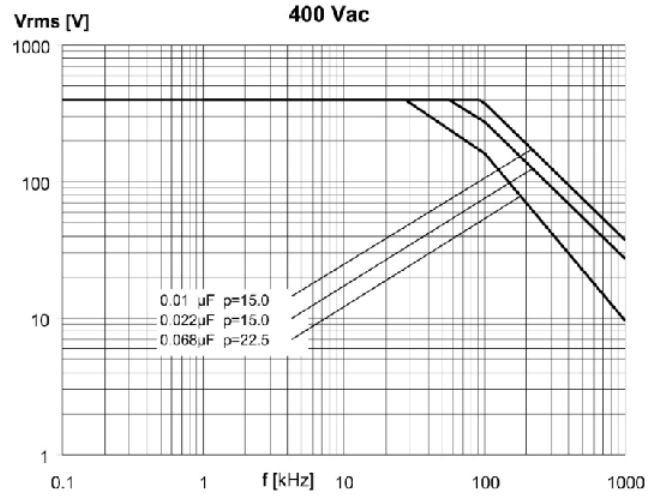
Performance Characteristics

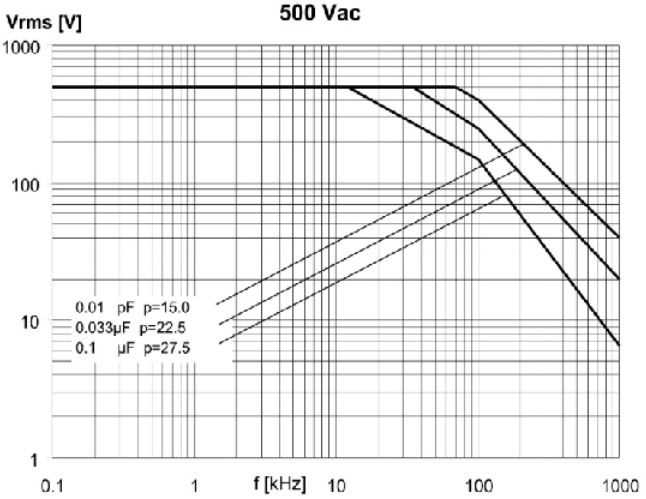
Sections	1	2	2	2	3	4
Voltage Range (VAC)	250	300	400	500	700	900
Voltage Range (VDC)	630	800	1000	1300	1600	2000
Capacitance Range (µF)	0.027 – 0.1	0.01 – 0.1	0.0056 – 0.01	0.001 – 0.1	0.001 – 0.027	0.001 – 0.018
Capacitance Values	In accordance with IEC E12 series					
Capacitance Tolerance	±2.5%, ±5%, ±10%					
Category Temperature Range	-55°C to +105°C					
Voltage Derating	The rated voltage is decreased with 1.25%/°C between +85°C and +105°C					
Climatic Category	IEC 60068–1, 55/105/56					
Self-Inductance L (Lead Length ~ 2 mm)	Lead Spacing (mm)		15		22.5	27.5
	L (nH) ≈		10		18	18
Dissipation Factor tanδ	Measured at 25°C ±5°C					
	1 kHz		0.001			
	10 kHz		0.0006			
	100 kHz		0.001			
Insulation Resistance	Measured at +25°C, 100 VDC 60 seconds					
	Minimum Values Between Terminals					
	C ≤ 0.33 µF		≥ 100,000 MΩ			
	C > 0.33 µF		≥ 30,000 MΩ • µF			
Test Voltage Between Terminals	1.6 x V_R applied for 2 seconds at 25°C ±5°C					

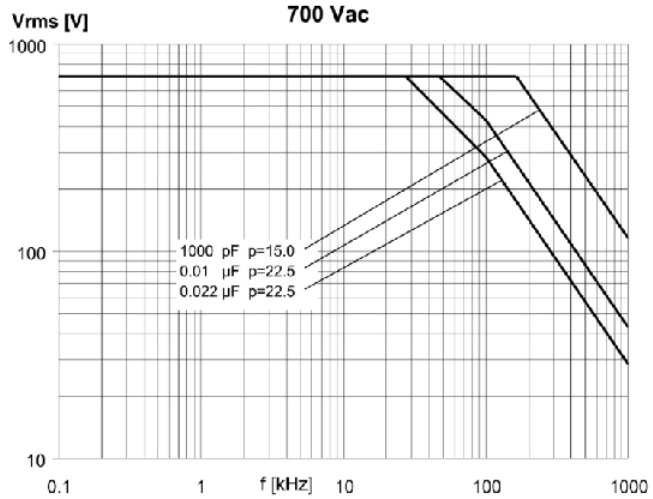
Maximum Voltage (V_{rms}) vs. Frequency (Sinusoidal Waveform/T ≤ 40ºC)

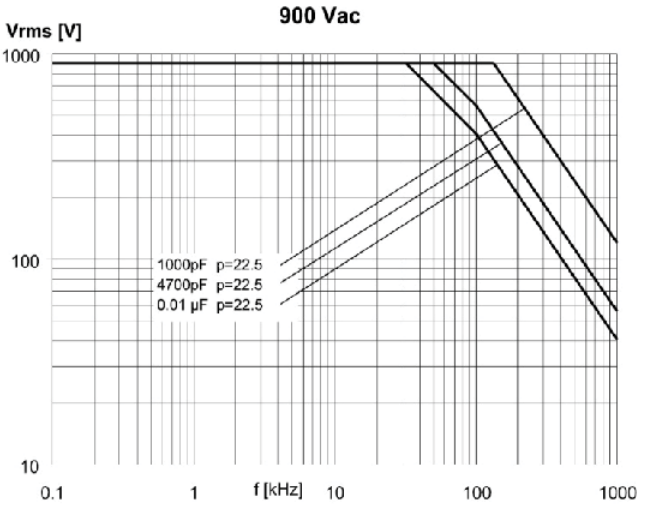






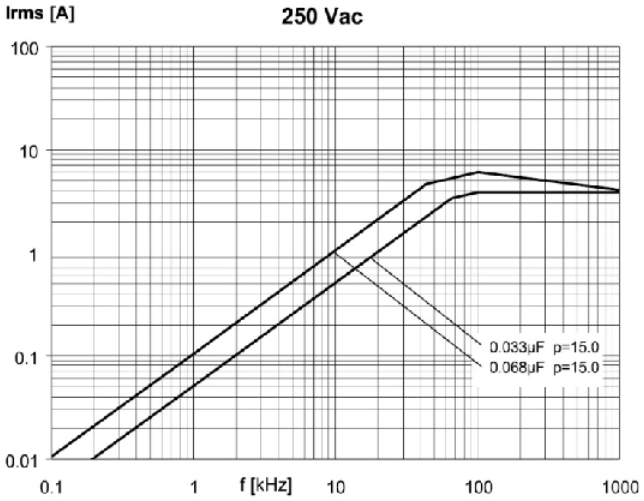


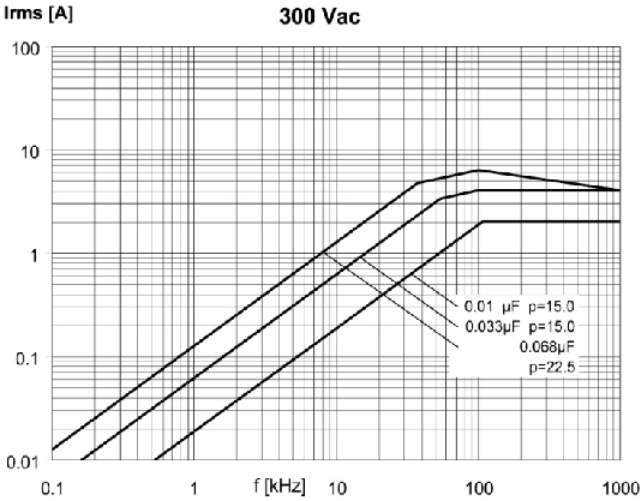


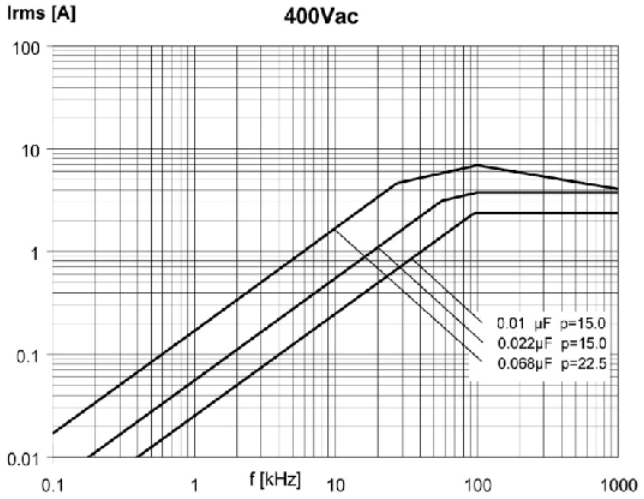


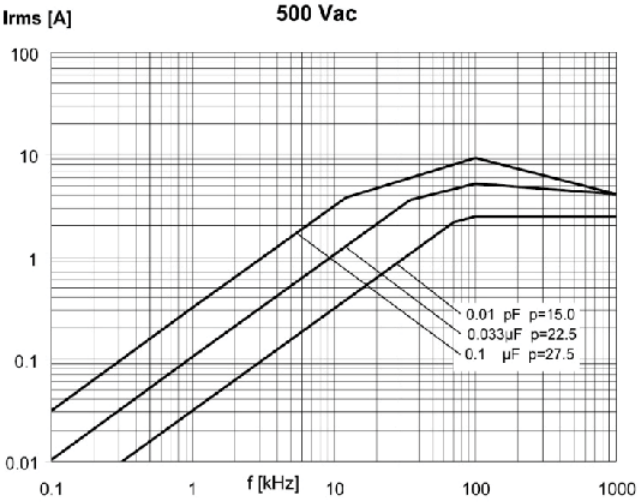
Note: p (pitch) in mm.

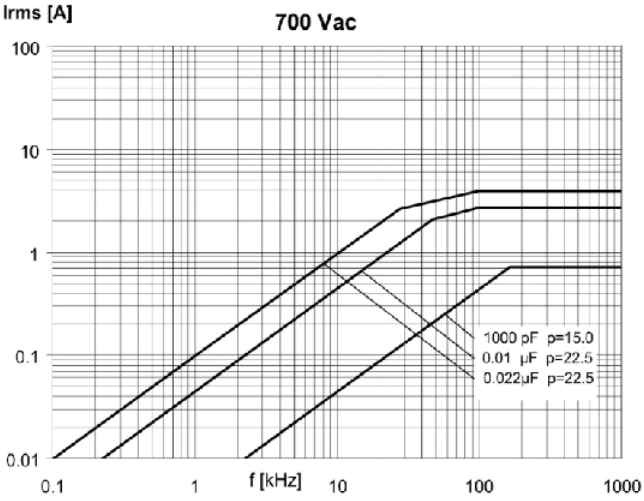
Maximum Current (I_{rms}) vs. Frequency (Sinusoidal Waveform/T ≤ 40ºC)

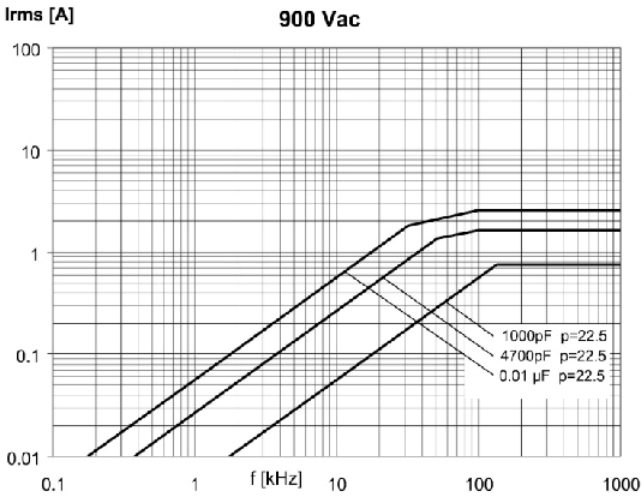












Note: p (pitch) in mm.

Environmental Test Data

Test	IEC Publication	Procedure	Requirements
Voltage Proof	60384–1 Clause 4.6	1.6 x V_R after 60 seconds	The capacitors must withstand the voltage without breakdowns or flashovers and without decreased insulation resistance below the value in each detail specification. No visible damage
	Clause 4.6 2.3	2 x V_R (minimum 400 VDC to case) after 60 seconds	As above
Vibration	60068–2–6 Test Fc	6 hours with 10 – 500 Hz and 0.75 mm amplitude or 98 m/s^2 depending on frequency	No visible damage tanδ ≤ 1.2 x stated value at 100 kHz Δ C/C ≤ ±0.5 %
Bump	60068–2–29 Test Eb	4,000 bumps with 390 m/s^2 mounted on PCB	Δ C/C ≤ ±0.5% tanδ ≤ 1.2 x stated value at 100 kHz Insulation resistance: ≥ 100,000 MΩ for C_R ≤ 0.33 µF ≥ 30,000 MΩ • µF for C_R > 0.33 µF
Resistance to Soldering Heat	60068–2–20 Method 1A	Solder bath at + 260°C ±5°C with screening	Immersion of the terminations into the solder bath shall be completed in a time not exceeding 1 second and the terminations shall remain immersed to the specified depth for 10 + 1 second and then be withdrawn. Δ C/C ≤ ±1.0% tanδ increase < 0.001 No visible damage
Climatic Sequence	60384–1 Paragraph 4:21	60068–2.2 dry heat 16 hours 60068–2–34 damp heat, one cycle 60068–2–1 Test Aa 2 hours	Insulation resistance: ≥ 100,000 MΩ for C_R ≤ 0.33 µF ≥ 30,000 MΩ • µF for C_R > 0.33 µF Δ C/C ≤ ±0.5% tanδ ≤ 1.2 x stated value at 100 kHz
Damp Heat Steady State	60068–2–3 Test Ca	+40°C and 90 – 95% RH	56 days no visible damage Insulation resistance: ≥ 50,000 MΩ for C_R ≤ 0.33 µF ≥ 15,000 MΩ • µF for C_R > 0.33 µF Δ C/C ≤ ±1% tanδ ≤ 1.2 x stated value at 100 kHz
Endurance, AC		1,000 hours at +85°C and 1.25 x V_R AC	No visible damage Δ C/C ≤ ±3% tanδ ≤ 1.5 x stated value at 100 kHz Insulation resistance: ≥ 100,000 MΩ for C_R ≤ 0.33 µF ≥ 30,000 MΩ • µF for C_R > 0.33 µF
Charge and Discharge	60384–17 Paragraph 4.13	10,000 pulses and with (2 x) dV/dt according to detail specification	tanδ (100 kHz) ≤ 2 x stated value (100 kHz) Δ C/C ≤ ±0.5% Insulation resistance: ≥ 50,000 MΩ for C_R ≤ 0.33 µF ≥ 15,000 MΩ • µF for C_R > 0.33 µF

Environmental Compliance

All KEMET pulse capacitors are RoHS Compliant.

RoHS Compliant

Table 1 – Ratings & Part Number Reference

VAC	VDC	Cap Value (µF)	Dimensions in mm			Lead Spacing (p)	dV/dt (V/µs)	Max K_0 (V^2/µs)	New KEMET Part Number	Legacy Part Number
			B	H	L					
250	630	0.027	6.0	12.0	18.0	15.0	900	110 E4	77LI2270(1)00(2)	R77LI2270(1)00(2)
250	630	0.033	6.0	12.0	18.0	15.0	900	110 E4	77LI2330(1)00(2)	R77LI2330(1)00(2)
250	630	0.039	6.0	12.0	18.0	15.0	900	110 E4	77LI2390(1)00(2)	R77LI2390(1)00(2)
250	630	0.047	7.5	13.5	18.0	15.0	900	110 E4	77LI2470(1)00(2)	R77LI2470(1)00(2)
250	630	0.056	7.5	13.5	18.0	15.0	900	110 E4	77LI2560(1)00(2)	R77LI2560(1)00(2)
250	630	0.068	8.5	14.5	18.0	15.0	900	110 E4	77LI2680(1)00(2)	R77LI2680(1)00(2)
250	630	0.082	10.0	16.0	18.0	15.0	900	110 E4	77LI2820(1)00(2)	R77LI2820(1)00(2)
250	630	0.10	10.0	16.0	18.0	15.0	900	110 E4	77LI3100(1)00(2)	R77LI3100(1)00(2)
300	800	0.010	5.0	11.0	18.0	15.0	2500	400 E4	773I2100(1)00(2)	R773I2100(1)00(2)
300	800	0.012	5.0	11.0	18.0	15.0	2500	400 E4	773I2120(1)00(2)	R773I2120(1)00(2)
300	800	0.015	5.0	11.0	18.0	15.0	2500	400 E4	773I2150(1)00(2)	R773I2150(1)00(2)
300	800	0.018	5.0	11.0	18.0	15.0	2500	400 E4	773I2180(1)00(2)	R773I2180(1)00(2)
300	800	0.022	6.0	12.0	18.0	15.0	2500	400 E4	773I2220(1)00(2)	R773I2220(1)00(2)
300	800	0.027	6.0	12.0	18.0	15.0	2500	400 E4	773I2270(1)00(2)	R773I2270(1)00(2)
300	800	0.033	7.5	13.5	18.0	15.0	2500	400 E4	773I2330(1)00(2)	R773I2330(1)00(2)
300	800	0.039	7.5	13.5	18.0	15.0	2500	400 E4	773I2390(1)00(2)	R773I2390(1)00(2)
300	800	0.047	8.5	14.5	18.0	15.0	2500	400 E4	773I2470(1)00(2)	R773I2470(1)00(2)
300	800	0.056	10.0	16.0	18.0	15.0	2500	400 E4	773I2560(1)00(2)	R773I2560(1)00(2)
300	800	0.068	10.0	16.0	18.0	15.0	2500	400 E4	773I2680(1)00(2)	R773I2680(1)00(2)
300	800	0.056	6.0	15.0	26.5	22.5	1500	240 E4	773N2560(1)00(2)	R773N2560(1)00(2)
300	800	0.068	7.0	16.0	26.5	22.5	1500	240 E4	773N2680(1)00(2)	R773N2680(1)00(2)
300	800	0.082	7.0	16.0	26.5	22.5	1500	240 E4	773N2820(1)00(2)	R773N2820(1)00(2)
300	800	0.10	8.5	17.0	26.5	22.5	1500	240 E4	773N3100(1)00(2)	R773N3100(1)00(2)
400	1000	0.0056	5.0	11.0	18.0	15.0	3300	660 E4	77NI1560(1)00(2)	R77NI1560(1)00(2)
400	1000	0.0068	5.0	11.0	18.0	15.0	3300	660 E4	77NI1680(1)00(2)	R77NI1680(1)00(2)
400	1000	0.0082	5.0	11.0	18.0	15.0	3300	660 E4	77NI1820(1)00(2)	R77NI1820(1)00(2)
400	1000	0.010	6.0	12.0	18.0	15.0	3300	660 E4	77NI2100(1)00(2)	R77NI2100(1)00(2)
400	1000	0.012	6.0	12.0	18.0	15.0	3300	660 E4	77NI2120(1)00(2)	R77NI2120(1)00(2)
400	1000	0.015	7.5	13.5	18.0	15.0	3300	660 E4	77NI2150(1)00(2)	R77NI2150(1)00(2)
400	1000	0.018	7.5	13.5	18.0	15.0	3300	660 E4	77NI2180(1)00(2)	R77NI2180(1)00(2)
400	1000	0.022	8.5	14.5	18.0	15.0	3300	660 E4	77NI2220(1)00(2)	R77NI2220(1)00(2)
400	1000	0.027	10.0	16.0	18.0	15.0	3300	660 E4	77NI2270(1)00(2)	R77NI2270(1)00(2)
400	1000	0.033	10.0	16.0	18.0	15.0	3300	660 E4	77NI2330(1)00(2)	R77NI2330(1)00(2)
400	1000	0.027	6.0	15.0	26.5	22.5	2100	420 E4	77NN2270(1)00(2)	R77NN2270(1)00(2)
400	1000	0.033	7.0	16.0	26.5	22.5	2100	420 E4	77NN2330(1)00(2)	R77NN2330(1)00(2)
400	1000	0.039	7.0	16.0	26.5	22.5	2100	420 E4	77NN2390(1)00(2)	R77NN2390(1)00(2)
400	1000	0.047	8.5	17.0	26.5	22.5	2100	420 E4	77NN2470(1)00(2)	R77NN2470(1)00(2)
400	1000	0.056	8.5	17.0	26.5	22.5	2100	420 E4	77NN2560(1)00(2)	R77NN2560(1)00(2)
400	1000	0.068	10.0	18.5	26.5	22.5	2100	420 E4	77NN2680(1)00(2)	R77NN2680(1)00(2)
400	1000	0.082	10.0	18.5	26.5	22.5	2100	420 E4	77NN2820(1)00(2)	R77NN2820(1)00(2)
400	1000	0.10	11.0	20.0	26.5	22.5	2100	420 E4	77NN3100(1)00(2)	R77NN3100(1)00(2)
500	1300	0.001	5.0	11.0	18.0	15.0	4500	1200 E4	775I1100(1)00(2)	R775I1100(1)00(2)
500	1300	0.0012	5.0	11.0	18.0	15.0	4500	1200 E4	775I1120(1)00(2)	R775I1120(1)00(2)
500	1300	0.0015	5.0	11.0	18.0	15.0	4500	1200 E4	775I1150(1)00(2)	R775I1150(1)00(2)
500	1300	0.0018	5.0	11.0	18.0	15.0	4500	1200 E4	775I1180(1)00(2)	R775I1180(1)00(2)
500	1300	0.0022	5.0	11.0	18.0	15.0	4500	1200 E4	775I1220(1)00(2)	R775I1220(1)00(2)
500	1300	0.0027	5.0	11.0	18.0	15.0	4500	1200 E4	775I1270(1)00(2)	R775I1270(1)00(2)
500	1300	0.0033	5.0	11.0	18.0	15.0	4500	1200 E4	775I1330(1)00(2)	R775I1330(1)00(2)
500	1300	0.0039	5.0	11.0	18.0	15.0	4500	1200 E4	775I1390(1)00(2)	R775I1390(1)00(2)
500	1300	0.0047	5.0	11.0	18.0	15.0	4500	1200 E4	775I1470(1)00(2)	R775I1470(1)00(2)
500	1300	0.0056	5.0	11.0	18.0	15.0	4500	1200 E4	775I1560(1)00(2)	R775I1560(1)00(2)
500	1300	0.0068	6.0	12.0	18.0	15.0	4500	1200 E4	775I1680(1)00(2)	R775I1680(1)00(2)
500	1300	0.0082	6.0	12.0	18.0	15.0	4500	1200 E4	775I1820(1)00(2)	R775I1820(1)00(2)
500	1300	0.010	7.5	13.5	18.0	15.0	4500	1200 E4	775I2100(1)00(2)	R775I2100(1)00(2)
500	1300	0.012	7.5	13.5	18.0	15.0	4500	1200 E4	775I2120(1)00(2)	R775I2120(1)00(2)
500	1300	0.015	8.5	14.5	18.0	15.0	4500	1200 E4	775I2150(1)00(2)	R775I2150(1)00(2)
500	1300	0.018	10.0	16.0	18.0	15.0	4500	1200 E4	775I2180(1)00(2)	R775I2180(1)00(2)
500	1300	0.022	10.0	16.0	18.0	15.0	4500	1200 E4	775I2220(1)00(2)	R775I2220(1)00(2)
500	1300	0.018	6.0	15.0	26.5	22.5	2500	650 E4	775N2180(1)00(2)	R775N2180(1)00(2)
500	1300	0.022	7.0	16.0	26.5	22.5	2500	650 E4	775N2220(1)00(2)	R775N2220(1)00(2)
VAC	VDC	Cap Value (µF)	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/µs)	Max K_0 (V^2/µs)	New KEMET Part Number	Legacy Part Number

(1) Insert lead and packaging code. See Ordering Options Table for available options.
(2) H = 2.5%, J = 5%, K = 10%.

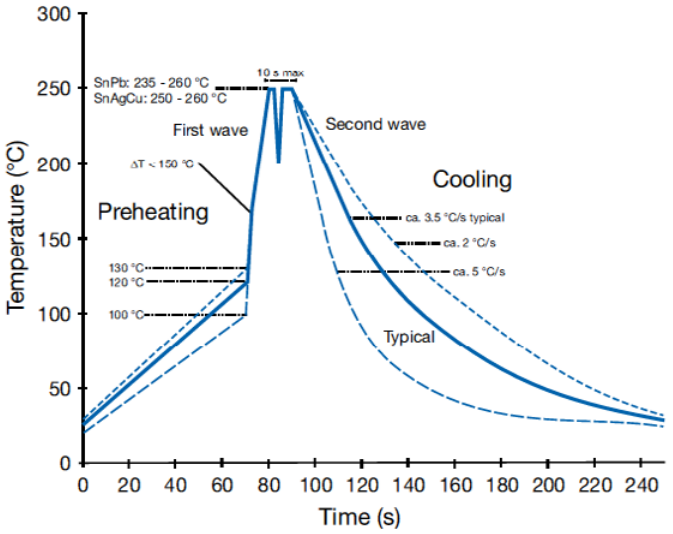
Table 1 – Ratings & Part Number Reference cont'd

VAC	VDC	Cap Value (µF)	Dimensions in mm			Lead Spacing (p)	dV/dt (V/µs)	Max K_0 (V^2/µs)	New KEMET Part Number	Legacy Part Number
			B	H	L					
500	1300	0.027	7.0	16.0	26.5	22.5	2500	650 E4	775N2270(1)00(2)	R775N2270(1)00(2)
500	1300	0.033	8.5	17.0	26.5	22.5	2500	650 E4	775N2330(1)00(2)	R775N2330(1)00(2)
500	1300	0.039	10.0	18.5	26.5	22.5	2500	650 E4	775N2390(1)00(2)	R775N2390(1)00(2)
500	1300	0.047	10.0	18.5	26.5	22.5	2500	650 E4	775N2470(1)00(2)	R775N2470(1)00(2)
500	1300	0.056	11.0	20.0	26.5	22.5	2500	650 E4	775N2560(1)00(2)	R775N2560(1)00(2)
500	1300	0.068	11.0	20.0	32.0	27.5	1100	290 E4	775R2680(1)00(2)	R775R2680(1)00(2)
500	1300	0.082	11.0	20.0	32.0	27.5	1100	290 E4	775R2820(1)00(2)	R775R2820(1)00(2)
500	1300	0.10	13.0	22.0	32.0	27.5	1100	290 E4	775R3100(1)00(2)	R775R3100(1)00(2)
700	1600	0.001	5.0	11.0	18.0	15.0	9500	3000 E4	777I1100(1)00(2)	R777I1100(1)00(2)
700	1600	0.0012	5.0	11.0	18.0	15.0	9500	3000 E4	777I1120(1)00(2)	R777I1120(1)00(2)
700	1600	0.0015	5.0	11.0	18.0	15.0	9500	3000 E4	777I1150(1)00(2)	R777I1150(1)00(2)
700	1600	0.0018	5.0	11.0	18.0	15.0	9500	3000 E4	777I1180(1)00(2)	R777I1180(1)00(2)
700	1600	0.0022	5.0	11.0	18.0	15.0	9500	3000 E4	777I1220(1)00(2)	R777I1220(1)00(2)
700	1600	0.0027	6.0	12.0	18.0	15.0	9500	3000 E4	777I1270(1)00(2)	R777I1270(1)00(2)
700	1600	0.0033	6.0	12.0	18.0	15.0	9500	3000 E4	777I1330(1)00(2)	R777I1330(1)00(2)
700	1600	0.0039	7.5	13.5	18.0	15.0	9500	3000 E4	777I1390(1)00(2)	R777I1390(1)00(2)
700	1600	0.0047	7.5	13.5	18.0	15.0	9500	3000 E4	777I1470(1)00(2)	R777I1470(1)00(2)
700	1600	0.0056	8.5	14.5	18.0	15.0	9500	3000 E4	777I1560(1)00(2)	R777I1560(1)00(2)
700	1600	0.0068	8.5	14.5	18.0	15.0	9500	3000 E4	777I1680(1)00(2)	R777I1680(1)00(2)
700	1600	0.0082	10.0	16.0	18.0	15.0	9500	3000 E4	777I1820(1)00(2)	R777I1820(1)00(2)
700	1600	0.0082	6.0	15.0	26.5	22.5	4500	1400 E4	777N1820(1)00(2)	R777N1820(1)00(2)
700	1600	0.010	6.0	15.0	26.5	22.5	4500	1400 E4	777N2100(1)00(2)	R777N2100(1)00(2)
700	1600	0.012	7.0	16.0	26.5	22.5	4500	1400 E4	777N2120(1)00(2)	R777N2120(1)00(2)
700	1600	0.015	8.5	17.0	26.5	22.5	4500	1400 E4	777N2150(1)00(2)	R777N2150(1)00(2)
700	1600	0.018	10.0	18.5	26.5	22.5	4500	1400 E4	777N2180(1)00(2)	R777N2180(1)00(2)
700	1600	0.022	10.0	18.5	26.5	22.5	4500	1400 E4	777N2220(1)00(2)	R777N2220(1)00(2)
700	1600	0.027	11.0	20.0	26.5	22.5	4500	1400 E4	777N2270(1)00(2)	R777N2270(1)00(2)
900	2000	0.001	6.0	15.0	26.5	22.5	9500	3800 E4	779N1100(1)00(2)	R779N1100(1)00(2)
900	2000	0.0012	6.0	15.0	26.5	22.5	9500	3800 E4	779N1120(1)00(2)	R779N1120(1)00(2)
900	2000	0.0015	6.0	15.0	26.5	22.5	9500	3800 E4	779N1150(1)00(2)	R779N1150(1)00(2)
900	2000	0.0018	6.0	15.0	26.5	22.5	9500	3800 E4	779N1180(1)00(2)	R779N1180(1)00(2)
900	2000	0.0022	6.0	15.0	26.5	22.5	9500	3800 E4	779N1220(1)00(2)	R779N1220(1)00(2)
900	2000	0.0027	6.0	15.0	26.5	22.5	9500	3800 E4	779N1270(1)00(2)	R779N1270(1)00(2)
900	2000	0.0033	6.0	15.0	26.5	22.5	9500	3800 E4	779N1330(1)00(2)	R779N1330(1)00(2)
900	2000	0.0039	6.0	15.0	26.5	22.5	9500	3800 E4	779N1390(1)00(2)	R779N1390(1)00(2)
900	2000	0.0047	6.0	15.0	26.5	22.5	9500	3800 E4	779N1470(1)00(2)	R779N1470(1)00(2)
900	2000	0.0056	6.0	15.0	26.5	22.5	9500	3800 E4	779N1560(1)00(2)	R779N1560(1)00(2)
900	2000	0.0068	7.0	16.0	26.5	22.5	9500	3800 E4	779N1680(1)00(2)	R779N1680(1)00(2)
900	2000	0.0082	7.0	16.0	26.5	22.5	9500	3800 E4	779N1820(1)00(2)	R779N1820(1)00(2)
900	2000	0.010	8.5	17.0	26.5	22.5	9500	3800 E4	779N2100(1)00(2)	R779N2100(1)00(2)
900	2000	0.012	10.0	18.5	26.5	22.5	9500	3800 E4	779N2120(1)00(2)	R779N2120(1)00(2)
900	2000	0.015	10.0	18.5	26.5	22.5	9500	3800 E4	779N2150(1)00(2)	R779N2150(1)00(2)
900	2000	0.018	11.0	20.0	26.5	22.5	9500	3800 E4	779N2180(1)00(2)	R779N2180(1)00(2)
VAC	VDC	Cap Value (µF)	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/µs)	Max K_0 (V^2/µs)	New KEMET Part Number	Legacy Part Number

(1) Insert lead and packaging code. See Ordering Options Table for available options.
(2) H = 2.5%, J = 5%, K = 10%.

Soldering Process

The implementation of the RoHS Directive has required the selection SnAuCu (SAC) alloys or SnCu alloys as primary solder. This has increased the liquidus temperature from that of 183ºC for SnPb eutectic alloy to 217ºC – 221ºC for the new alloys. As a result, the heat stress to components, even in wave soldering, has increased considerably due to higher pre-heat and wave temperatures. Polypropylene capacitors are especially sensitive to heat (melting point of polypropylene is 160ºC – 170ºC). Wave soldering can be destructive especially for mechanically small polypropylene capacitors and great care must be taken during soldering. The solder profiles from KEMET are highly recommended. You may also refer to the wave soldering curve from IEC Publication 61760–1 Edition 2. Please consult KEMET with any questions.



Marking

- KEMET's logo
- Series
- Dielectric code (MKP)
- Capacitance
- Capacitance tolerance
- Rated AC voltage
- Manufacturing date code

Packaging Quantities

Lead Spacing	Thickness (mm)	Height (mm)	Length (mm)	Bulk Short Leads	Bulk Long Leads	Standard Reel ø 355 mm	Large Reel ø 500 mm	Ammo	Pizza
15	4	10	18	2500	1500	750	1500	1000	1411
	5	11	18	1000	1250	600	1250	800	1139
	6	12	18	1750	1000	500	1000	680	935
	7.5	13.5	18	1000	800	350	800	500	748
	6	17.5	18	1000	800	500	1000	680	935
	7.5	14.5	18	1000	750	350	800	500	748
	8.5	14.5	18	1000	650	300	700	440	663
	9	12.5	18	1000	700	270	650	410	629
	7.5	18.5	18	900	600	350	800	500	748
	10	16	18	750	550	300	600	380	561
	13	12	18	750	520	200	480	280	425
	11	19	18	450	400	250	500	340	510
22.5	6	15	26.5	1404	702	300	700	464	660
	7	16	26.5	1188	594	250	550	380	564
	8.5	17	26.5	972	486	250	450	280	468
	10	18.5	26.5	810	405	160	350	235	396
	11	20	26.5	630	378	190	350	217	360
	13	22	26.5	540	324	150	300	200	300
27.5	9	17	32	816	408		450		
	10	20	32	600	360		350		
	11	20	32	560	336		350		
	13	22	32	480	288		300		
	13	25	32	480	288				
	14	28	32	352	176				
	15	24.5	32	400	240				
	18	33	32	256	128				
	22	37	32	168	112				

PFR Series Polypropylene Film/Foil, Radial

Overview

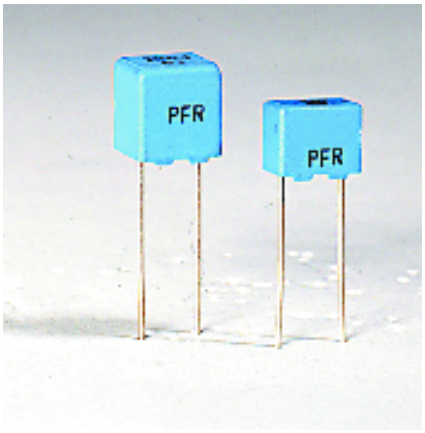
The PFR Series is a capacitor with polypropylene film and metal foil electrodes, encapsulated in self-extinguishing resin in a box of material meeting the requirements of UL 94 V–0.

Applications

Typical applications include high speed applications requiring low losses at high frequencies and high dV/dt, such as electrical ballasts, televisions, video and telecommunications.

Benefits

- Rated voltage: 63 – 1,000 VDC
- Rated voltage: 40 – 250 VAC
- Capacitance range: 0.0001 – 0.022 µF
- Lead spacing: 5 mm
- Capacitance tolerance: ±1%, ±2%, ±2.5%, ±5%, ±10%
- Climatic category: 55/100/56, IEC 60068–1
- Tape and reel packaging in accordance with IEC 60286–2
- RoHS Compliant and lead-free terminations
- Category temperature range of -55˚C to +100˚C



Legacy Part Number System

PFR	5	101	J	63	J11	L4	BULK
Series	Lead Spacing (mm)	Capacitance Code (pF)	Capacitance Tolerance	Rated Voltage (VDC)	Size Code	Lead Length	Lead and Packaging Code
Polypropylene Film/Foil	5 (Standard)	First two digits indicate the two most significant digits of the capacitance value in picofarads. The third digit is the number of following zeros.	F = ±1% G = ±2% H = ±2.5% J = ±5% K = ±10%	63 = 63 100 = 100 250 = 250 400 = 400 630 = 630 1000 = 1000	See Dimension Table	Letter "L" followed by lead length in mm	See Ordering Options Table

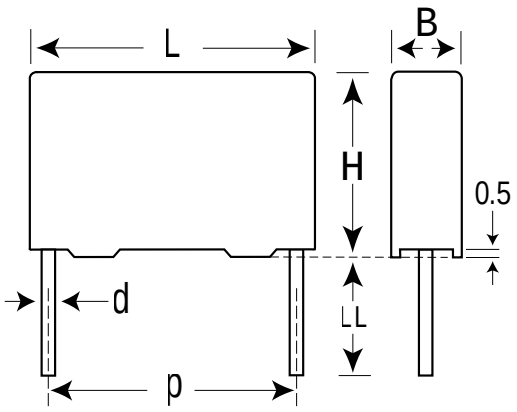
New KEMET Part Number System

F	411	J	H	101	J	063	C
Capacitor Class	Series	Lead Spacing (mm)	Size Code	Capacitance Code (pF)	Capacitance Tolerance	Rated Voltage (VDC)	Lead and Packaging Code
F = Film	Polypropylene Film/Foil	J = 5.0	See Dimension Table	First two digits indicate the two most significant digits of the capacitance value in picofarads. The third digit is the number of following zeros.	F = ±1% G = ±2% H = ±2.5% J = ±5% K = ±10%	063 = 63 100 = 100 250 = 250 400 = 400 630 = 630 1K0 = 1000	See Ordering Options Table

Ordering Options Table

Lead Spacing Nominal (mm)	Type of Leads and Packaging	Lead Length (mm)	KEMET Lead and Packaging Code	Legacy Lead and Packaging Code
5	Standard Lead and Packaging Options			
	Bulk (Bag) – Short Leads	4 +1/-0	C	Bulk
	Tape & Reel (Standard Reel)	H_0= 18.5 +/-0.5	L	TR18
	Other Lead and Packaging Options			
	Ammo Pack	H_0= 16.5 +/-0.5	Q	TA16
	Ammo Pack	H_0= 18.5 +/-0.5	R	TA18
	Tape & Reel (Large Reel)	H_0= 18.5 +/-0.5	P	LR18

Dimensions – Millimeters

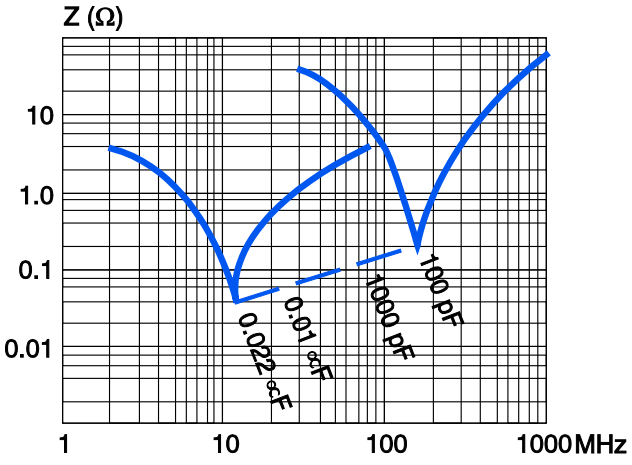


KEMET Size Code	Legacy Size Code	p		B		H		L		d	
		Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance
JH	J11	5	-0.4	4.5	Maximum	6	Maximum	7.2	Maximum	0.5	+/-0.05
JK	J12	5	-0.4	5.5	Maximum	7	Maximum	7.2	Maximum	0.5	+/-0.05
JR	J13	5	-0.4	6.5	Maximum	8	Maximum	7.2	Maximum	0.5	+/-0.05
Note: See Ordering Options Table for lead length (LL) options.											

Performance Characteristics

Voltage Range (VDC)	63	100	250	400	630	1000
Voltage Range (VAC)	40	63	160	220	250	250
Capacitance Range (µF)	0.0001 – 0.022	0.0001 – 0.01	0.0001 – 0.0068	0.0001 – 0.0068	0.0001 – 0.0047	0.0001 – 0.001
Capacitance Values	In accordance with IEC E12 series					
Capacitance Tolerance	±1%, ±2%, ±2.5%, ±5%, ±10%					
Category Temperature Range	-55°C to +100°C. An operating temperature up to +105°C is allowed under certain conditions. Please consult KEMET for details					
Climatic Category	IEC 60068–1, 55/100/56					
Capacitance Drift	Maximum 0.3% after a 2 year storage period at a temperature of +10°C to +40°C and a relative humidity of 40% to 60%					
Temperature Coefficient	-200 (+50, -100) ppm/°C at 1 kHz					
Self-Inductance	Approximately 6 nH/cm for the total length of capacitor winding and the leads					
Dissipation Factor tanδ	Maximum Values at +23°C					
		C ≤ 0.001 µF	0.001 µF < C ≤ 0.0047 µF	C > 0.0047 µF		
	1 kHz	0.0004	0.0004	0.0004		
	10 kHz	0.0004	0.0005	0.0007		
	100 kHz	0.0005	0.0007	–		
Insulation Resistance	Measured at +20°C, according to IEC 60384–13					
	Minimum value between terminals 100,000 MΩ					

Resonance Frequencies



Environmental Test Data

Test	IEC Publication	Procedure	Requirements
Voltage Proof	60384–1 Clause 4.6	1.6 x V_R after 60 seconds	The capacitors must withstand the voltage without breakdowns or flashovers and without decreased insulation resistance below the value in each detail specification. No visible damage
	Clause 4.6 2.3	2 x V_R (minimum 400 VDC to case) after 60 seconds	As above
Vibration	60068–2–6 Test Fc	6 hours with 10 – 500 Hz and 0.75 mm amplitude or 98 m/s^2 depending on frequency	No visible damage tanδ ≤ 1.2 x stated value at 100 kHz Δ C/C ≤ ±0.5 %
Bump	60068–2–29 Test Eb	4,000 bumps with 390 m/s^2 mounted on PCB	Δ C/C ≤ ±0.5% tanδ ≤ 1.2 x stated value at 100 kHz Insulation resistance: ≥ 100,000 MΩ for C_R ≤ 0.33 µF ≥ 30,000 MΩ • µF for C_R > 0.33 µF
Resistance to Soldering Heat	60068–2–20 Method 1A	Solder bath at + 260°C ±5°C with screening	Immersion of the terminations into the solder bath shall be completed in a time not exceeding 1 second and the terminations shall remain immersed to the specified depth for 10 + 1 second and then be withdrawn. Δ C/C ≤ ±0.5% tanδ increase < 0.001 No visible damage
Climatic Sequence	60384–1 Paragraph 4:21	60068–2.2 dry heat 16 hours 60068–2–34 damp heat, one cycle 60068–2–1 Test Aa 2 hours	Insulation resistance: ≥ 100,000 MΩ for C_R ≤ 0.33 µF ≥ 30,000 MΩ • µF for C_R > 0.33 µF Δ C/C ≤ ±0.5% tanδ ≤ 1.2 x stated value at 100 kHz
Damp Heat Steady State	60068–2–3 Test Ca	+40°C and 90 – 95% RH	56 days no visible damage Insulation resistance: ≥ 50,000 MΩ for C_R ≤ 0.33 µF ≥ 15,000 MΩ • µF for C_R > 0.33 µF Δ C/C ≤ ±1% tanδ ≤ 1.2 x stated value at 100 kHz
Endurance, AC		1,000 hours at +85°C and 1.25 x V_R AC	No visible damage Δ C/C ≤ ±3% tanδ ≤ 1.5 x stated value at 100 kHz Insulation resistance: ≥ 100,000 MΩ for C_R ≤ 0.33 µF ≥ 30,000 MΩ • µF for C_R > 0.33 µF
Charge and Discharge	60384–17 Paragraph 4.13	10,000 pulses and with (2 x) dV/dt according to detail specification	tanδ (100 kHz) ≤ 2 x stated value (100 kHz) Δ C/C ≤ ±0.5% Insulation resistance: ≥ 50,000 MΩ for C_R ≤ 0.33 µF ≥ 15,000 MΩ • µF for C_R > 0.33 µF

Environmental Compliance

All KEMET pulse capacitors are RoHS Compliant.

RoHS Compliant

Table 1 – Ratings & Part Number Reference

VDC	VAC	Cap Value (µF)	Max Dimensions in mm			Lead Spacing (p)	dV/dt (V/µs)	Size Code (New/Legacy)	New KEMET Part Number	Legacy Part Number
			B	H	L					
63	40	0.00010	4.5	6.0	7.2	5	1000	JH/J11	F411JH101(1)063(2)	PFR5101(1)63J11L4(2)
63	40	0.00015	4.5	6.0	7.2	5	1000	JH/J11	F411JH151(1)063(2)	PFR5151(1)63J11L4(2)
63	40	0.00022	4.5	6.0	7.2	5	1000	JH/J11	F411JH221(1)063(2)	PFR5221(1)63J11L4(2)
63	40	0.00033	4.5	6.0	7.2	5	1000	JH/J11	F411JH331(1)063(2)	PFR5331(1)63J11L4(2)
63	40	0.00047	4.5	6.0	7.2	5	1000	JH/J11	F411JH471(1)063(2)	PFR5471(1)63J11L4(2)
63	40	0.00068	4.5	6.0	7.2	5	1000	JH/J11	F411JH681(1)063(2)	PFR5681(1)63J11L4(2)
63	40	0.0010	4.5	6.0	7.2	5	1000	JH/J11	F411JH102(1)063(2)	PFR5102(1)63J11L4(2)
63	40	0.0015	4.5	6.0	7.2	5	1000	JH/J11	F411JH152(1)063(2)	PFR5152(1)63J11L4(2)
63	40	0.0022	4.5	6.0	7.2	5	1000	JH/J11	F411JH222(1)063(2)	PFR5222(1)63J11L4(2)
63	40	0.0033	4.5	6.0	7.2	5	1000	JH/J11	F411JH332(1)063(2)	PFR5332(1)63J11L4(2)
63	40	0.0047	4.5	6.0	7.2	5	1000	JH/J11	F411JH472(1)063(2)	PFR5472(1)63J11L4(2)
63	40	0.0068	4.5	6.0	7.2	5	1000	JH/J11	F411JH682(1)063(2)	PFR5682(1)63J11L4(2)
63	40	0.010	5.5	7.0	7.2	5	1000	JK/J12	F411JK103(1)063(2)	PFR5103(1)63J12L4(2)
63	40	0.015	6.5	8.0	7.2	5	1000	JR/J13	F411JR153(1)063(2)	PFR5153(1)63J13L4(2)
63	40	0.020	6.5	8.0	7.2	5	1000	JR/J13	F411JR203(1)063(2)	PFR5203(1)63J13L4(2)
63	40	0.022	6.5	8.0	7.2	5	1000	JR/J13	F411JR223(1)063(2)	PFR5223(1)63J13L4(2)
100	63	0.00010	4.5	6.0	7.2	5	1000	JH/J11	F411JH101(1)100(2)	PFR5101(1)100J11L4(2)
100	63	0.00015	4.5	6.0	7.2	5	1000	JH/J11	F411JH151(1)100(2)	PFR5151(1)100J11L4(2)
100	63	0.00022	4.5	6.0	7.2	5	1000	JH/J11	F411JH221(1)100(2)	PFR5221(1)100J11L4(2)
100	63	0.00033	4.5	6.0	7.2	5	1000	JH/J11	F411JH331(1)100(2)	PFR5331(1)100J11L4(2)
100	63	0.00047	4.5	6.0	7.2	5	1000	JH/J11	F411JH471(1)100(2)	PFR5471(1)100J11L4(2)
100	63	0.00068	4.5	6.0	7.2	5	1000	JH/J11	F411JH681(1)100(2)	PFR5681(1)100J11L4(2)
100	63	0.0010	4.5	6.0	7.2	5	1000	JH/J11	F411JH102(1)100(2)	PFR5102(1)100J11L4(2)
100	63	0.0015	4.5	6.0	7.2	5	1000	JH/J11	F411JH152(1)100(2)	PFR5152(1)100J11L4(2)
100	63	0.0022	4.5	6.0	7.2	5	1000	JH/J11	F411JH222(1)100(2)	PFR5222(1)100J11L4(2)
100	63	0.0033	5.5	7.0	7.2	5	1000	JK/J12	F411JK332(1)100(2)	PFR5332(1)100J12L4(2)
100	63	0.0047	5.5	7.0	7.2	5	1000	JK/J12	F411JK472(1)100(2)	PFR5472(1)100J12L4(2)
100	63	0.0068	6.5	8.0	7.2	5	1000	JR/J13	F411JR682(1)100(2)	PFR5682(1)100J13L4(2)
100	63	0.010	6.5	8.0	7.2	5	1000	JR/J13	F411JR103(1)100(2)	PFR5103(1)100J13L4(2)
250	160	0.00010	4.5	6.0	7.2	5	1000	JH/J11	F411JH101(1)250(2)	PFR5101(1)250J11L4(2)
250	160	0.00015	4.5	6.0	7.2	5	1000	JH/J11	F411JH151(1)250(2)	PFR5151(1)250J11L4(2)
250	160	0.00022	4.5	6.0	7.2	5	1000	JH/J11	F411JH221(1)250(2)	PFR5221(1)250J11L4(2)
250	160	0.00033	4.5	6.0	7.2	5	1000	JH/J11	F411JH331(1)250(2)	PFR5331(1)250J11L4(2)
250	160	0.00047	4.5	6.0	7.2	5	1000	JH/J11	F411JH471(1)250(2)	PFR5471(1)250J11L4(2)
250	160	0.00068	4.5	6.0	7.2	5	1000	JH/J11	F411JH681(1)250(2)	PFR5681(1)250J11L4(2)
250	160	0.0010	4.5	6.0	7.2	5	1000	JH/J11	F411JH102(1)250(2)	PFR5102(1)250J11L4(2)
250	160	0.0015	4.5	6.0	7.2	5	1000	JH/J11	F411JH152(1)250(2)	PFR5152(1)250J11L4(2)
250	160	0.0022	4.5	6.0	7.2	5	1000	JH/J11	F411JH222(1)250(2)	PFR5222(1)250J11L4(2)
250	160	0.0033	5.5	7.0	7.2	5	1000	JK/J12	F411JK332(1)250(2)	PFR5332(1)250J12L4(2)
250	160	0.0047	6.5	8.0	7.2	5	1000	JR/J13	F411JR472(1)250(2)	PFR5472(1)250J13L4(2)
250	160	0.0068	6.5	8.0	7.2	5	1000	JR/J13	F411JR682(1)250(2)	PFR5682(1)250J13L4(2)
400	220	0.00010	4.5	6.0	7.2	5	1000	JH/J11	F411JH101(1)400(2)	PFR5101(1)400J11L4(2)
400	220	0.00015	4.5	6.0	7.2	5	1000	JH/J11	F411JH151(1)400(2)	PFR5151(1)400J11L4(2)
400	220	0.00022	4.5	6.0	7.2	5	1000	JH/J11	F411JH221(1)400(2)	PFR5221(1)400J11L4(2)
400	220	0.00033	4.5	6.0	7.2	5	1000	JH/J11	F411JH331(1)400(2)	PFR5331(1)400J11L4(2)
400	220	0.00047	4.5	6.0	7.2	5	1000	JH/J11	F411JH471(1)400(2)	PFR5471(1)400J11L4(2)
400	220	0.00068	4.5	6.0	7.2	5	1000	JH/J11	F411JH681(1)400(2)	PFR5681(1)400J11L4(2)
400	220	0.0010	4.5	6.0	7.2	5	1000	JH/J11	F411JH102(1)400(2)	PFR5102(1)400J11L4(2)
400	220	0.0015	4.5	6.0	7.2	5	1000	JH/J11	F411JH152(1)400(2)	PFR5152(1)400J11L4(2)
400	220	0.0022	4.5	6.0	7.2	5	1000	JH/J11	F411JH222(1)400(2)	PFR5222(1)400J11L4(2)
400	220	0.0033	5.5	7.0	7.2	5	1000	JK/J12	F411JK332(1)400(2)	PFR5332(1)400J12L4(2)
400	220	0.0047	6.5	8.0	7.2	5	1000	JR/J13	F411JR472(1)400(2)	PFR5472(1)400J13L4(2)
400	220	0.0068	6.5	8.0	7.2	5	1000	JR/J13	F411JR682(1)400(2)	PFR5682(1)400J13L4(2)
630	250	0.00010	4.5	6.0	7.2	5	1000	JH/J11	F411JH101(1)630(2)	PFR5101(1)630J11L4(2)
630	250	0.00015	4.5	6.0	7.2	5	1000	JH/J11	F411JH151(1)630(2)	PFR5151(1)630J11L4(2)
630	250	0.00022	4.5	6.0	7.2	5	1000	JH/J11	F411JH221(1)630(2)	PFR5221(1)630J11L4(2)
630	250	0.00033	4.5	6.0	7.2	5	1000	JH/J11	F411JH331(1)630(2)	PFR5331(1)630J11L4(2)
630	250	0.00047	4.5	6.0	7.2	5	1000	JH/J11	F411JH471(1)630(2)	PFR5471(1)630J11L4(2)
VDC	VAC	Cap Value (µF)	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/µs)	Size Code (New/Legacy)	New KEMET Part Number	Legacy Part Number

(1) F = ±1%, G = ±2%, H = ±2.5%, J = ±5%, K = ±10%.

(2) Insert lead and packaging code. See Ordering Options Table for available options.

Roll Over for Order Info.

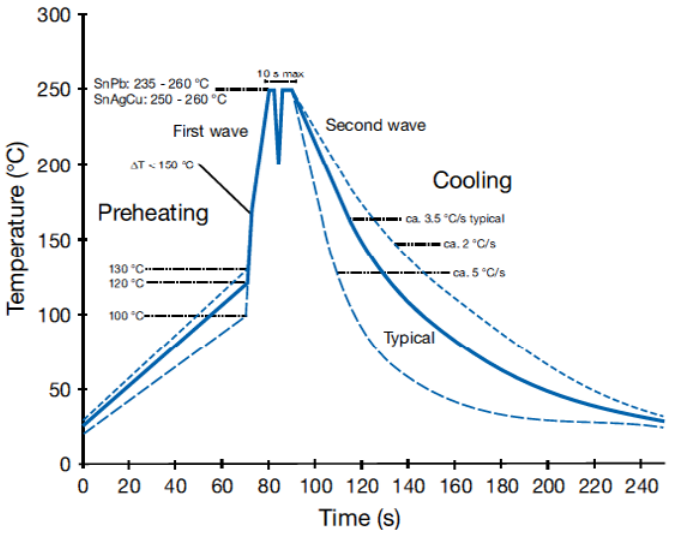
Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Cap Value (µF)	Max Dimensions in mm			Lead Spacing (p)	dV/dt (V/µs)	Size Code (New/Legacy)	New KEMET Part Number	Legacy Part Number
			B	H	L					
630	250	0.00068	4.5	6.0	7.2	5	1000	JH/J11	F411JH681(1)630(2)	PFR5681(1)630J11L4(2)
630	250	0.0010	4.5	6.0	7.2	5	1000	JH/J11	F411JH102(1)630(2)	PFR5102(1)630J11L4(2)
630	250	0.0015	4.5	6.0	7.2	5	1000	JH/J11	F411JH152(1)630(2)	PFR5152(1)630J11L4(2)
630	250	0.0022	5.5	7.0	7.2	5	1000	JK/J12	F411JK222(1)630(2)	PFR5222(1)630J12L4(2)
630	250	0.0033	6.5	8.0	7.2	5	1000	JR/J13	F411JR332(1)630(2)	PFR5332(1)630J13L4(2)
630	250	0.0047	6.5	8.0	7.2	5	1000	JR/J13	F411JR472(1)630(2)	PFR5472(1)630J13L4(2)
1000	250	0.00010	4.5	6.0	7.2	5	1000	JH/J11	F411JH101(1)1K0(2)	PFR5101(1)1000J11L4(2)
1000	250	0.00015	4.5	6.0	7.2	5	1000	JH/J11	F411JH151(1)1K0(2)	PFR5151(1)1000J11L4(2)
1000	250	0.00022	4.5	6.0	7.2	5	1000	JH/J11	F411JH221(1)1K0(2)	PFR5221(1)1000J11L4(2)
1000	250	0.00033	5.5	7.0	7.2	5	1000	JK/J12	F411JK331(1)1K0(2)	PFR5331(1)1000J12L4(2)
1000	250	0.00047	5.5	7.0	7.2	5	1000	JK/J12	F411JK471(1)1K0(2)	PFR5471(1)1000J12L4(2)
1000	250	0.00068	5.5	7.0	7.2	5	1000	JK/J12	F411JK681(1)1K0(2)	PFR5681(1)1000J12L4(2)
1000	250	0.0010	6.5	8.0	7.2	5	1000	JR/J13	F411JR102(1)1K0(2)	PFR5102(1)1000J13L4(2)
VDC	VAC	Cap Value (µF)	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/µs)	Size Code (New/Legacy)	New KEMET Part Number	Legacy Part Number

(1) F = ±1%, G = ±2%, H = ±2.5%, J = ±5%, K = ±10%.
(2) Insert lead and packaging code. See Ordering Options Table for available options.

Soldering Process

The implementation of the RoHS Directive has required the selection SnAuCu (SAC) alloys or SnCu alloys as primary solder. This has increased the liquidus temperature from that of 183ºC for SnPb eutectic alloy to 217ºC – 221ºC for the new alloys. As a result, the heat stress to components, even in wave soldering, has increased considerably due to higher pre-heat and wave temperatures. Polypropylene capacitors are especially sensitive to heat (melting point of polypropylene is 160ºC – 170ºC). Wave soldering can be destructive especially for mechanically small polypropylene capacitors and great care must be taken during soldering. The solder profiles from KEMET are highly recommended. You may also refer to the wave soldering curve from IEC Publication 61760–1 Edition 2. Please consult KEMET with any questions.



Marking

- Series
- Capacitance
- Capacitance tolerance
- Rated DC voltage
- Manufacturing date code

Packaging Quantities

KEMET Size Code	Legacy Size Code	Lead Spacing	Thickness (mm)	Height (mm)	Length (mm)	Bulk Short Leads	Bulk Long Leads	Standard Reel ø 360 mm	Large Reel ø 500 mm	Ammo
JF	J01	5	2.5	6.5	7.2	2000	2000	2500	5000	3000
JJ	J02		3.5	8	7.2	2000	2000	2000	4000	2000
JL	J03		4.5	9	7.2	1000	1000	1500	3000	1700
JQ	J04		5	10	7.2	1000	1000	1300	2600	1500
JT	J05		6	11	7.2	1000	1000	1000	2000	1200
JU	J06		7.2	13	7.2	1000	1000	800	1600	
JH	J11		4.5	6	7.2	1000	1000	1500	3000	1700
JK	J12		5.5	7	7.2	1000	1000	1200	2400	1300
JR	J13		6.5	8	7.2	1000	1000	900	1800	1100

R73 Series Polypropylene Film/Foil, Radial

Overview

The R73 Series is a capacitor with polypropylene film and metal foil or metallized film and metal foil electrodes. The capacitor is encapsulated in self-extinguishing resin in a box of material meeting the requirements of UL 94 V–0.

Applications

Typical applications include deflection circuits in televisions (flyback tuning), switching spikes suppression in switched mode power supply (SMPS), snubber and silicon-controlled rectifier (SCR) commutation circuits, and switching circuits in electronic ballasts, as well as applications with high voltage and very high current.

Benefits

- Rated voltage: 100 – 2,000 VDC
- Rated voltage: 40 – 250 VAC
- Capacitance range: 0.0001 – 2.2 µF
- Lead spacing: 5 – 37.5 mm
- Capacitance tolerance: ±2.5% (for 2-section construction only), ±5%, ±10%
- Climatic category: 55/105/56, IEC 60068–1
- Tape and reel packaging in accordance with IEC 60286–2
- RoHS Compliant and lead-free terminations
- Category temperature range of -55˚C to +105˚C

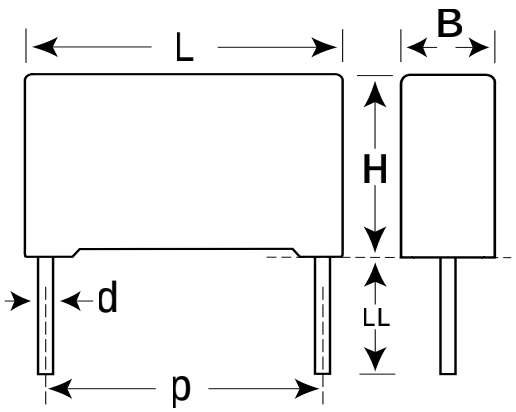
Part Number System

R73	E	I	2470	AA	00	H
Series	Rated Voltage (VDC)	Lead Spacing (mm)	Capacitance Code (pF)	Lead and Packaging Code	Internal Use	Capacitance Tolerance
Polypropylene Film/Foil	E = 100 G = 160 I = 250 M = 400 P = 630 Q = 1000 R = 1250 T = 1600 U = 2000	I = 15.0 N = 22.5 R = 27.5 W = 37.5	Digits 2 – 4 indicate the first three digits of the capacitance value. First digit indicates the number of zeros to be added.	See Ordering Options Table	00, 10, 30, 40 (Standard)	H = ±2.5% (for 2-section construction only) J = ±5% K = ±10%

Ordering Options Table

Lead Spacing Nominal (mm)	Type of Leads and Packaging	Lead Length (mm)	Lead and Packaging Code
15	Standard Lead and Packaging Options		
	Bulk (Bag) – Short Leads	4 +2/-0	SE
	Ammo Pack	H_0= 18.5 +/-0.5	DQ
	Other Lead and Packaging Options		
	Bulk (Bag) – Long Leads	25 +2/-1	50
	Bulk (Bag) – Max Length Leads	30 +5/-0	40
	Tape & Reel (Standard Reel)	H_0= 18.5 +/-0.5	GY
	Tape & Reel (Large Reel)	H_0= 18.5 +/-0.5	CK
	Pizza Pack	4 +2/-0	BB
22.5	Standard Lead and Packaging Options		
	Bulk (Tray) – Straight Leads	4 +2/-0	SE
	Ammo Pack	H_0= 18.5 +/-0.5	DQ
	Other Lead and Packaging Options		
	Bulk (Tray) – Long Leads	25 +2/-1	50
	Bulk (Tray) – Max Length Leads	30 +5/-0	40
	Tape & Reel (Large Reel)	H_0= 18.5 +/-0.5	CK
	Pizza Pack	4 +2/-0	BB
27.5	Standard Lead and Packaging Options		
	Bulk (Tray) – Straight Leads	4 +2/-0	SE
	Other Lead and Packaging Options		
	Bulk (Tray) – Long Leads	25 +2/-1	50
	Bulk (Tray) – Max Length Leads	30 +5/-0	40
	Tape & Reel (Large Reel)	H_0= 18.5 +/-0.5	CK
37.5	Standard Lead and Packaging Options		
	Tray– Short Leads	4 +2/-0	0
	Other Lead and Packaging Options		
	Tray– Long Leads	25 +2/-1	50
	Tray– Max Length Leads	30 +5/-0	40

Dimensions – Millimeters



p		B		H		L		d	
Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance
15	+/-0.4	5	+0.2/-0	11	+0.1/-0	18	+0.3/-0	0.8	+/-0.05
15	+/-0.4	6	+0.2/-0	12	+0.1/-0	18	+0.3/-0	0.8	+/-0.05
15	+/-0.4	7.5	+0.2/-0	13.5	+0.1/-0	18	+0.5/-0	0.8	+/-0.05
15	+/-0.4	8.5	+0.2/-0	14.5	+0.1/-0	18	+0.5/-0	0.8	+/-0.05
15	+/-0.4	10	+0.2/-0	16	+0.1/-0	18	+0.5/-0	0.8	+/-0.05
22.5	+/-0.4	6	+0.2/-0	15	+0.1/-0	26.5	+0.3/-0	0.8	+/-0.05
22.5	+/-0.4	7	+0.2/-0	16	+0.1/-0	26.5	+0.3/-0	0.8	+/-0.05
22.5	+/-0.4	8.5	+0.2/-0	17	+0.1/-0	26.5	+0.3/-0	0.8	+/-0.05
22.5	+/-0.4	10	+0.2/-0	18.5	+0.1/-0	26.5	+0.3/-0	0.8	+/-0.05
22.5	+/-0.4	11	+0.2/-0	20	+0.1/-0	26.5	+0.3/-0	0.8	+/-0.05
27.5	+/-0.4	9	+0.2/-0	17	+0.1/-0	32	+0.3/-0	0.8	+/-0.05
27.5	+/-0.4	11	+0.2/-0	20	+0.1/-0	32	+0.3/-0	0.8	+/-0.05
27.5	+/-0.4	13	+0.2/-0	22	+0.1/-0	32	+0.3/-0	0.8	+/-0.05
27.5	+/-0.4	13	+0.2/-0	25	+0.1/-0	32	+0.3/-0	0.8	+/-0.05
27.5	+/-0.4	14	+0.2/-0	28	+0.1/-0	32	+0.3/-0	0.8	+/-0.05
27.5	+/-0.4	18	+0.2/-0	33	+0.1/-0	32	+0.3/-0	0.8	+/-0.05
27.5	+/-0.4	22	+0.2/-0	37	+0.1/-0	32	+0.3/-0	0.8	+/-0.05
37.5	+/-0.4	11	+0.3/-0	22	+0.1/-0	41.5	+0.3/-0	1	+/-0.05
37.5	+/-0.4	13	+0.3/-0	24	+0.1/-0	41.5	+0.3/-0	1	+/-0.05
37.5	+/-0.4	16	+0.3/-0	28.5	+0.1/-0	41.5	+0.3/-0	1	+/-0.05
37.5	+/-0.4	19	+0.3/-0	32	+0.1/-0	41.5	+0.3/-0	1	+/-0.05
37.5	+/-0.4	20	+0.3/-0	40	+0.1/-0	41.5	+0.3/-0	1	+/-0.05
37.5	+/-0.4	24	+0.3/-0	44	+0.1/-0	41.5	+0.3/-0	1	+/-0.05
37.5	+/-0.4	30	+0.3/-0	45	+0.1/-0	41.5	+0.3/-0	1	+/-0.05

Note: See Ordering Options Table for lead length (LL) options.

Performance Characteristics

Sections	1	1	1	1	2	2	2	2	2
Voltage Range (VDC)	100	160	250	400	630	1000	1250	1600	2000
Voltage Range (VAC)	63	90	125	160	300	400	450	450	500
Capacitance Range (µF)	0.047 – 0.15	0.033 – 0.1	0.015 – 0.047	0.01 – 0.047	0.01 – 2.2	0.0033 – 1.5	0.0022 – 0.82	0.001 – 0.56	0.0001 – 0.22
Capacitance Values	IEC E6 values for 1 section and 2 sections with C < 0.001 µF IEC E12 values for 2 sections with C > 0.001 µF								
Capacitance Tolerance	±2.5% (for 2 sections only), ±5%, ±10%								
Category Temperature Range	-55°C to +105°C								
Voltage Derating	The rated voltage is decreased with 1.25%/°C between +85°C and +105°C								
Climatic Category	IEC 60068–1, 55/105/56								

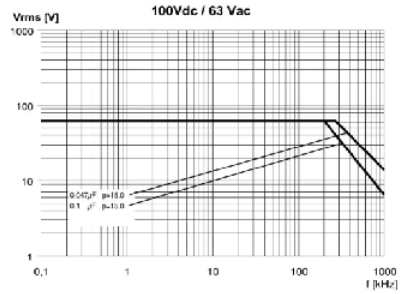
Self-Inductance L (Lead Length ~ 2 mm)					
Lead Spacing (mm)	15	22.5	27.5	37.5
L (nH) ≈	10	18	18	20

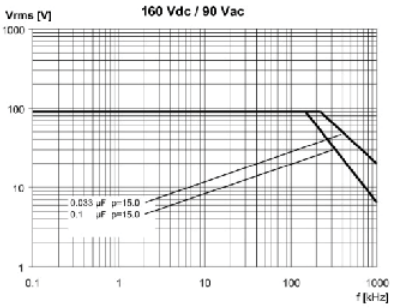
Dissipation Factor tanδ				
Measured at 25°C ± 5°C				
	C ≤ 0.1 µF	0.1 µF < C ≤ 1.0 µF	C > 1.0 µF
1 kHz	0.0003	0.0003	0.0003
10 kHz	0.0004	0.0006	
100 kHz	0.001		

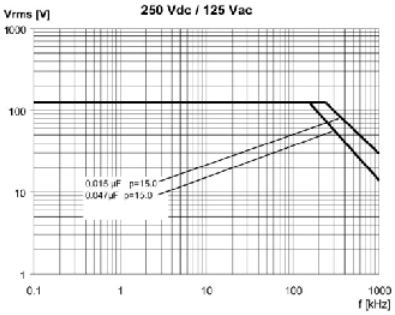
Insulation Resistance	
Measured at +25°C, 100 VDC 60 seconds	
Minimum Values Between Terminals	
C ≤ 0.33 µF	≥ 100,000 MΩ
C > 0.33 µF	≥ 30,000 MΩ • µF

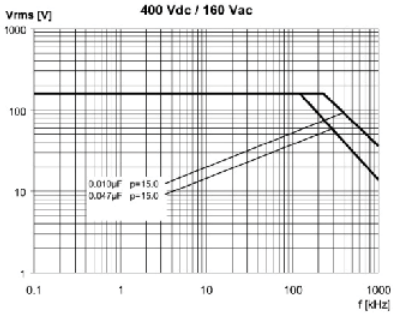
Test Voltage Between Terminals	2.5 x V_R for 1 section and 2.0 x V_R for 2 sections, applied for 2 seconds at 25°C ±5 °C

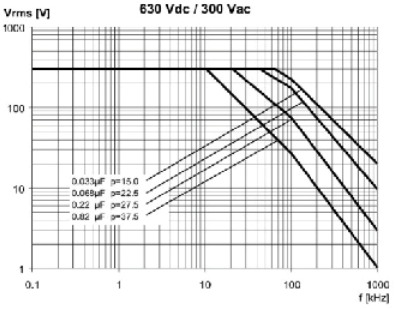
Maximum Voltage (V_{rms}) vs. Frequency (Sinusoidal Waveform/T ≤ 40ºC)

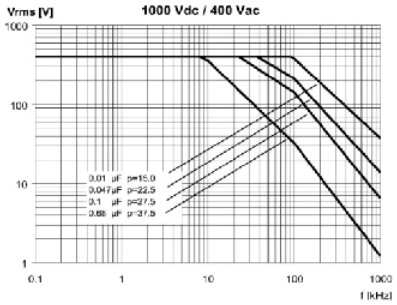


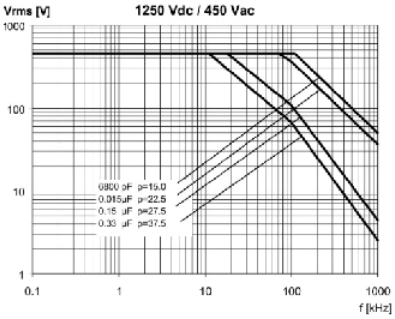


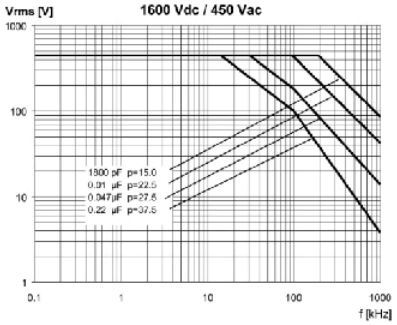


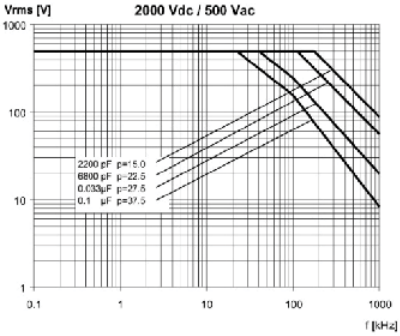






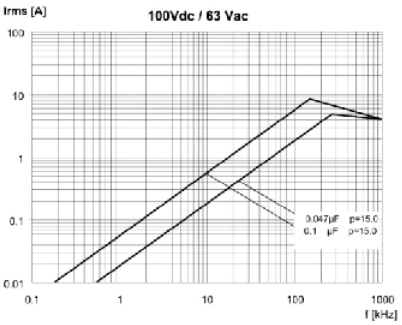


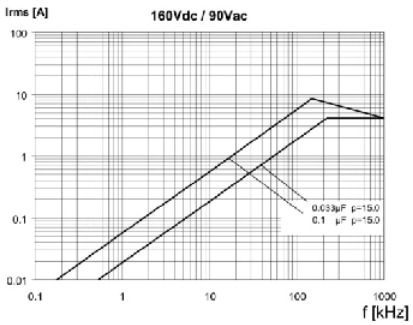


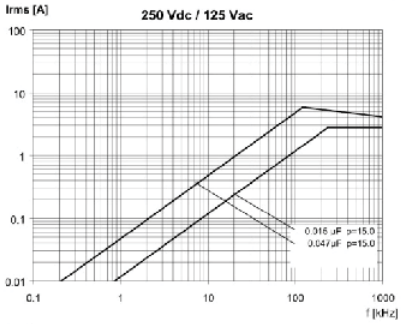


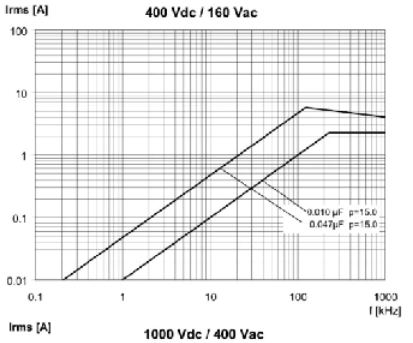
Note: p (pitch) in mm.

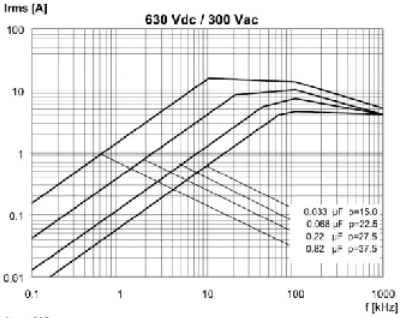
Maximum Current (I_{rms}) vs. Frequency (Sinusoidal Waveform/T ≤ 40ºC)

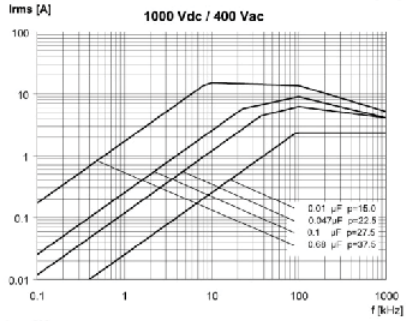


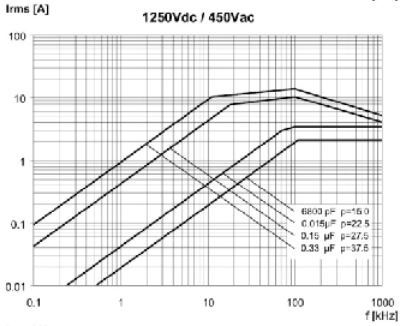


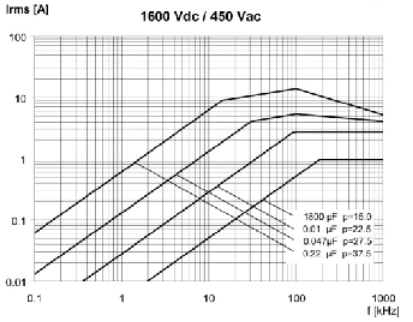


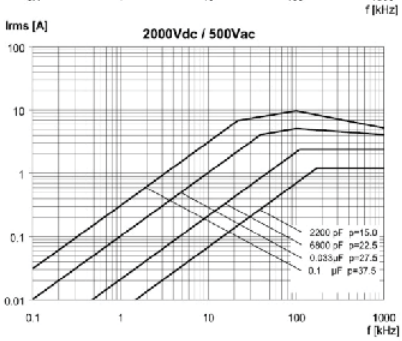












Note: p (pitch) in mm.

Environmental Test Data

Test	IEC Publication	Procedure	Requirements
Voltage Proof	60384–1 Clause 4.6	1.6 x V_R after 60 seconds	The capacitors must withstand the voltage without breakdowns or flashovers and without decreased insulation resistance below the value in each detail specification. No visible damage
	Clause 4.6 2.3	2 x V_R (minimum 400 VDC to case) after 60 seconds	As above
Vibration	60068–2–6 Test Fc	6 hours with 10 – 500 Hz and 0.75 mm amplitude or 98 m/s^2 depending on frequency	No visible damage tanδ ≤ 1.2 x stated value at 100 kHz Δ C/C ≤ ±0.5 %
Bump	60068–2–29 Test Eb	4,000 bumps with 390 m/s^2 mounted on PCB	Δ C/C ≤ ±0.5% tanδ ≤ 1.2 x stated value at 100 kHz Insulation resistance: ≥ 100,000 MΩ for C_R ≤ 0.33 µF ≥ 30,000 MΩ • µF for C_R > 0.33 µF
Resistance to Soldering Heat	60068–2–20 Method 1A	Solder bath at + 260°C ±5°C with screening	Immersion of the terminations into the solder bath shall be completed in a time not exceeding 1 second and the terminations shall remain immersed to the specified depth for 10 + 1 second and then be withdrawn. Δ C/C ≤ ±1.0% tanδ increase < 0.001 No visible damage
Climatic Sequence	60384–1 Paragraph 4:21	60068–2.2 dry heat 16 hours 60068–2–34 damp heat, one cycle 60068–2–1 Test Aa 2 hours	Insulation resistance: ≥ 100,000 MΩ for C_R ≤ 0.33 µF ≥ 30,000 MΩ • µF for C_R > 0.33 µF Δ C/C ≤ ±0.5% tanδ ≤ 1.2 x stated value at 100 kHz
Damp Heat Steady State	60068–2–3 Test Ca	+40°C and 90 – 95% RH	56 days no visible damage Insulation resistance: ≥ 50,000 MΩ for C_R ≤ 0.33 µF ≥ 15,000 MΩ • µF for C_R > 0.33 µF Δ C/C ≤ ±1% tanδ ≤ 1.2 x stated value at 100 kHz
Endurance, AC		1,000 hours at +85°C and 1.25 x V_R AC	No visible damage Δ C/C ≤ ±3% tanδ ≤ 1.5 x stated value at 100 kHz Insulation resistance: ≥ 100,000 MΩ for C_R ≤ 0.33 µF ≥ 30,000 MΩ • µF for C_R > 0.33 µF
Charge and Discharge	60384–17 Paragraph 4.13	10,000 pulses and with (2 x) dV/dt according to detail specification	tanδ (100 kHz) ≤ 2 x stated value (100 kHz) Δ C/C ≤ ±0.5% Insulation resistance: ≥ 50,000 MΩ for C_R ≤ 0.33 µF ≥ 15,000 MΩ • µF for C_R > 0.33 µF

Environmental Compliance

All KEMET pulse capacitors are RoHS Compliant.

RoHS Compliant

Table 1 – Ratings & Part Number Reference

VDC	VAC	Cap Value (µF)	Dimensions in mm			Lead Spacing (p)	dV/dt (V/µs)	Max K_0 (V^2/µs)	New KEMET Part Number	Legacy Part Number
			B	H	L					
100	63	0.047	5.0	11.0	18.0	15.0	2400	0.48 E6	73EI2470(1)00(2)	R73EI2470(1)00(2)
100	63	0.068	6.0	12.0	18.0	15.0	2400	0.48 E6	73EI2680(1)00(2)	R73EI2680(1)00(2)
100	63	0.1	7.5	13.5	18.0	15.0	2400	0.48 E6	73EI3100(1)00(2)	R73EI3100(1)00(2)
100	63	0.15	10.0	16.0	18.0	15.0	2400	0.48 E6	73EI3150(1)00(2)	R73EI3150(1)00(2)
160	90	0.033	5.0	11.0	18.0	15.0	3000	0.96 E6	73GI2330(1)00(2)	R73GI2330(1)00(2)
160	90	0.047	6.0	12.0	18.0	15.0	3000	0.96 E6	73GI2470(1)00(2)	R73GI2470(1)00(2)
160	90	0.068	7.5	13.5	18.0	15.0	3000	0.96 E6	73GI2680(1)00(2)	R73GI2680(1)00(2)
160	90	0.1	10.0	16.0	18.0	15.0	3000	0.96 E6	73GI3100(1)00(2)	R73GI3100(1)00(2)
250	125	0.015	5.0	11.0	18.0	15.0	4800	2.4 E6	73II2150(1)00(2)	R73II2150(1)00(2)
250	125	0.022	6.0	12.0	18.0	15.0	4800	2.4 E6	73II2220(1)00(2)	R73II2220(1)00(2)
250	125	0.033	7.5	13.5	18.0	15.0	4800	2.4 E6	73II2330(1)00(2)	R73II2330(1)00(2)
250	125	0.047	10.0	16.0	18.0	15.0	4800	2.4 E6	73II2470(1)00(2)	R73II2470(1)00(2)
400	160	0.01	5.0	11.0	18.0	15.0	6000	4.8 E6	73MI2100(1)00(2)	R73MI2100(1)00(2)
400	160	0.015	6.0	12.0	18.0	15.0	6000	4.8 E6	73MI2150(1)00(2)	R73MI2150(1)00(2)
400	160	0.022	7.5	13.5	18.0	15.0	6000	4.8 E6	73MI2220(1)00(2)	R73MI2220(1)00(2)
400	160	0.033	8.5	14.5	18.0	15.0	6000	4.8 E6	73MI2330(1)00(2)	R73MI2330(1)00(2)
400	160	0.047	10.0	16.0	18.0	15.0	6000	4.8 E6	73MI2470(1)00(2)	R73MI2470(1)00(2)
630	300	0.01	5.0	11.0	18.0	15.0	11000	14.0 E6	73PI2100(1)00(2)	R73PI2100(1)00(2)
630	300	0.012	5.0	11.0	18.0	15.0	11000	14.0 E6	73PI2120(1)00(2)	R73PI2120(1)00(2)
630	300	0.015	6.0	12.0	18.0	15.0	11000	14.0 E6	73PI2150(1)00(2)	R73PI2150(1)00(2)
630	300	0.018	6.0	12.0	18.0	15.0	11000	14.0 E6	73PI2180(1)00(2)	R73PI2180(1)00(2)
630	300	0.022	7.5	13.5	18.0	15.0	11000	14.0 E6	73PI2220(1)00(2)	R73PI2220(1)00(2)
630	300	0.027	7.5	13.5	18.0	15.0	11000	14.0 E6	73PI2270(1)00(2)	R73PI2270(1)00(2)
630	300	0.033	8.5	14.5	18.0	15.0	11000	14.0 E6	73PI2330(1)00(2)	R73PI2330(1)00(2)
630	300	0.039	10.0	16.0	18.0	15.0	11000	14.0 E6	73PI2390(1)00(2)	R73PI2390(1)00(2)
630	300	0.047	10.0	16.0	18.0	15.0	11000	14.0 E6	73PI2470(1)00(2)	R73PI2470(1)00(2)
630	300	0.039	6.0	15.0	26.5	22.5	11000	14.0 E6	73PN2390(1)00(2)	R73PN2390(1)00(2)
630	300	0.047	7.0	16.0	26.5	22.5	11000	14.0 E6	73PN2470(1)00(2)	R73PN2470(1)00(2)
630	300	0.056	7.0	16.0	26.5	22.5	11000	14.0 E6	73PN2560(1)00(2)	R73PN2560(1)00(2)
630	300	0.068	8.5	17.0	26.5	22.5	11000	14.0 E6	73PN2680(1)00(2)	R73PN2680(1)00(2)
630	300	0.082	10.0	18.5	26.5	22.5	11000	14.0 E6	73PN2820(1)00(2)	R73PN2820(1)00(2)
630	300	0.1	10.0	18.5	26.5	22.5	11000	14.0 E6	73PN3100(1)00(2)	R73PN3100(1)00(2)
630	300	0.1	9.0	17.0	32.0	27.5	11000	14.0 E6	73PR3100(1)00(2)	R73PR3100(1)00(2)
630	300	0.12	9.0	17.0	32.0	27.5	11000	14.0 E6	73PR3120(1)00(2)	R73PR3120(1)00(2)
630	300	0.15	11.0	20.0	32.0	27.5	11000	14.0 E6	73PR3150(1)00(2)	R73PR3150(1)00(2)
630	300	0.18	11.0	20.0	32.0	27.5	11000	14.0 E6	73PR3180(1)10(2)	R73PR3180(1)10(2)
630	300	0.18	13.0	22.0	32.0	27.5	11000	14.0 E6	73PR3180(1)00(2)	R73PR3180(1)00(2)
630	300	0.22	13.0	22.0	32.0	27.5	11000	14.0 E6	73PR3220(1)00(2)	R73PR3220(1)00(2)
630	300	0.27	13.0	25.0	32.0	27.5	11000	14.0 E6	73PR3270(1)10(2)	R73PR3270(1)10(2)
630	300	0.33	14.0	28.0	32.0	27.5	11000	14.0 E6	73PR3330(1)00(2)	R73PR3330(1)00(2)
630	300	0.39	14.0	28.0	32.0	27.5	11000	14.0 E6	73PR3390(1)10(2)	R73PR3390(1)10(2)
630	300	0.39	18.0	33.0	32.0	27.5	11000	14.0 E6	73PR3390(1)00(2)	R73PR3390(1)00(2)
630	300	0.47	18.0	33.0	32.0	27.5	11000	14.0 E6	73PR3470(1)00(2)	R73PR3470(1)00(2)
630	300	0.56	18.0	33.0	32.0	27.5	11000	14.0 E6	73PR3560(1)10(2)	R73PR3560(1)10(2)
630	300	0.56	22.0	37.0	32.0	27.5	11000	14.0 E6	73PR3560(1)00(2)	R73PR3560(1)00(2)
630	300	0.68	22.0	37.0	32.0	27.5	11000	14.0 E6	73PR3680(1)00(2)	R73PR3680(1)00(2)
630	300	0.82	22.0	37.0	32.0	27.5	11000	14.0 E6	73PR3820(1)10(2)	R73PR3820(1)10(2)
630	300	0.22	11.0	22.0	41.5	37.5	3000	3.8 E6	73PW3220(1)00(2)	R73PW3220(1)00(2)
630	300	0.27	11.0	22.0	41.5	37.5	3000	3.8 E6	73PW3270(1)00(2)	R73PW3270(1)00(2)
630	300	0.33	11.0	22.0	41.5	37.5	3000	3.8 E6	73PW3330(1)10(2)	R73PW3330(1)10(2)
630	300	0.33	13.0	24.0	41.5	37.5	3000	3.8 E6	73PW3330(1)00(2)	R73PW3330(1)00(2)
630	300	0.39	13.0	24.0	41.5	37.5	3000	3.8 E6	73PW3390(1)00(2)	R73PW3390(1)00(2)
630	300	0.47	13.0	24.0	41.5	37.5	3000	3.8 E6	73PW3470(1)10(2)	R73PW3470(1)10(2)
630	300	0.47	16.0	28.5	41.5	37.5	3000	3.8 E6	73PW3470(1)00(2)	R73PW3470(1)00(2)
630	300	0.56	16.0	28.5	41.5	37.5	3000	3.8 E6	73PW3560(1)00(2)	R73PW3560(1)00(2)
630	300	0.68	16.0	28.5	41.5	37.5	3000	3.8 E6	73PW3680(1)00(2)	R73PW3680(1)00(2)
630	300	0.82	19.0	32.0	41.5	37.5	3000	3.8 E6	73PW3820(1)00(2)	R73PW3820(1)00(2)
630	300	1	20.0	40.0	41.5	37.5	3000	3.8 E6	73PW4100(1)00(2)	R73PW4100(1)00(2)
630	300	1.2	20.0	40.0	41.5	37.5	3000	3.8 E6	73PW4120(1)00(2)	R73PW4120(1)00(2)
630	300	1.5	24.0	44.0	41.5	37.5	3000	3.8 E6	73PW4150(1)00(2)	R73PW4150(1)00(2)
VDC	VAC	Cap Value (µF)	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/µs)	Max K_0 (V^2/µs)	New KEMET Part Number	Legacy Part Number

(1) Insert lead and packaging code. See Ordering Options Table for available options.
(2) H = ±2.5% (for 2-section construction only), J = ±5%, K = ±10%.

Roll Over for Order Info.

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Cap Value (µF)	Dimensions in mm			Lead Spacing (p)	dV/dt (V/µs)	Max K_0 (V^2/µs)	New KEMET Part Number	Legacy Part Number
			B	H	L					
630	300	1.8	30.0	45.0	41.5	37.5	3000	3.8 E6	73PW4180(1)00(2)	R73PW4180(1)00(2)
630	300	2.2	30.0	45.0	41.5	37.5	3000	3.8 E6	73PW4220(1)00(2)	R73PW4220(1)00(2)
1000	400	0.0033	5.0	11.0	18.0	15.0	28000	56 E6	73QI1330(1)30(2)	R73QI1330(1)30(2)
1000	400	0.0039	5.0	11.0	18.0	15.0	28000	56 E6	73QI1390(1)30(2)	R73QI1390(1)30(2)
1000	400	0.0047	5.0	11.0	18.0	15.0	28000	56 E6	73QI1470(1)30(2)	R73QI1470(1)30(2)
1000	400	0.0056	5.0	11.0	18.0	15.0	28000	56 E6	73QI1560(1)30(2)	R73QI1560(1)30(2)
1000	400	0.0068	5.0	11.0	18.0	15.0	28000	56 E6	73QI1680(1)30(2)	R73QI1680(1)30(2)
1000	400	0.0082	5.0	11.0	18.0	15.0	28000	56 E6	73QI1820(1)30(2)	R73QI1820(1)30(2)
1000	400	0.01	6.0	12.0	18.0	15.0	28000	56 E6	73QI2100(1)30(2)	R73QI2100(1)30(2)
1000	400	0.012	6.0	12.0	18.0	15.0	28000	56 E6	73QI2120(1)30(2)	R73QI2120(1)30(2)
1000	400	0.015	7.5	13.5	18.0	15.0	28000	56 E6	73QI2150(1)30(2)	R73QI2150(1)30(2)
1000	400	0.018	8.5	14.5	18.0	15.0	28000	56 E6	73QI2180(1)30(2)	R73QI2180(1)30(2)
1000	400	0.022	8.5	14.5	18.0	15.0	28000	56 E6	73QI2220(1)30(2)	R73QI2220(1)30(2)
1000	400	0.027	10.0	16.0	18.0	15.0	28000	56 E6	73QI2270(1)30(2)	R73QI2270(1)30(2)
1000	400	0.015	6.0	15.0	26.5	22.5	11000	22 E6	73QN2150(1)30(2)	R73QN2150(1)30(2)
1000	400	0.018	6.0	15.0	26.5	22.5	11000	22 E6	73QN2180(1)30(2)	R73QN2180(1)30(2)
1000	400	0.022	6.0	15.0	26.5	22.5	11000	22 E6	73QN2220(1)30(2)	R73QN2220(1)30(2)
1000	400	0.027	7.0	16.0	26.5	22.5	11000	22 E6	73QN2270(1)30(2)	R73QN2270(1)30(2)
1000	400	0.033	7.0	16.0	26.5	22.5	11000	22 E6	73QN2330(1)30(2)	R73QN2330(1)30(2)
1000	400	0.039	8.5	17.0	26.5	22.5	11000	22 E6	73QN2390(1)30(2)	R73QN2390(1)30(2)
1000	400	0.047	10.0	18.5	26.5	22.5	11000	22 E6	73QN2470(1)30(2)	R73QN2470(1)30(2)
1000	400	0.056	10.0	18.5	26.5	22.5	11000	22 E6	73QN2560(1)30(2)	R73QN2560(1)30(2)
1000	400	0.068	11.0	20.0	26.5	22.5	11000	22 E6	73QN2680(1)30(2)	R73QN2680(1)30(2)
1000	400	0.047	9.0	17.0	32.0	27.5	11000	22 E6	73QR2470(1)30(2)	R73QR2470(1)30(2)
1000	400	0.056	9.0	17.0	32.0	27.5	11000	22 E6	73QR2560(1)30(2)	R73QR2560(1)30(2)
1000	400	0.068	9.0	17.0	32.0	27.5	11000	22 E6	73QR2680(1)30(2)	R73QR2680(1)30(2)
1000	400	0.082	9.0	17.0	32.0	27.5	11000	22 E6	73QR2820(1)40(2)	R73QR2820(1)40(2)
1000	400	0.082	11.0	20.0	32.0	27.5	11000	22 e6	73QR2820(1)30(2)	R73QR2820(1)30(2)
1000	400	0.1	11.0	20.0	32.0	27.5	11000	22 E6	73QR3100(1)30(2)	R73QR3100(1)30(2)
1000	400	0.12	11.0	20.0	32.0	27.5	11000	22 E6	73QR3120(1)40(2)	R73QR3120(1)40(2)
1000	400	0.12	13.0	22.0	32.0	27.5	11000	22 E6	73QR3120(1)30(2)	R73QR3120(1)30(2)
1000	400	0.15	13.0	22.0	32.0	27.5	11000	22 E6	73QR3150(1)30(2)	R73QR3150(1)30(2)
1000	400	0.18	13.0	25.0	32.0	27.5	11000	22 E6	73QR3180(1)40(2)	R73QR3180(1)40(2)
1000	400	0.22	14.0	28.0	32.0	27.5	11000	22 E6	73QR3220(1)30(2)	R73QR3220(1)30(2)
1000	400	0.27	18.0	33.0	32.0	27.5	11000	22 E6	73QR3270(1)30(2)	R73QR3270(1)30(2)
1000	400	0.33	18.0	33.0	32.0	27.5	11000	22 E6	73QR3330(1)30(2)	R73QR3330(1)30(2)
1000	400	0.47	22.0	37.0	32.0	27.5	11000	22 E6	73QR3470(1)30(2)	R73QR3470(1)30(2)
1000	400	0.12	11.0	22.0	41.5	37.5	4500	9 E6	73QW3120(1)30(2)	R73QW3120(1)30(2)
1000	400	0.15	11.0	22.0	41.5	37.5	4500	9 E6	73QW3150(1)30(2)	R73QW3150(1)30(2)
1000	400	0.18	11.0	22.0	41.5	37.5	4500	9 E6	73QW3180(1)30(2)	R73QW3180(1)30(2)
1000	400	0.22	13.0	24.0	41.5	37.5	4500	9 E6	73QW3220(1)30(2)	R73QW3220(1)30(2)
1000	400	0.27	13.0	24.0	41.5	37.5	4500	9 E6	73QW3270(1)40(2)	R73QW3270(1)40(2)
1000	400	0.27	16.0	28.5	41.5	37.5	4500	9 E6	73QW3270(1)30(2)	R73QW3270(1)30(2)
1000	400	0.33	16.0	28.5	41.5	37.5	4500	9 E6	73QW3330(1)30(2)	R73QW3330(1)30(2)
1000	400	0.39	16.0	28.5	41.5	37.5	4500	9 E6	73QW3390(1)30(2)	R73QW3390(1)30(2)
1000	400	0.47	19.0	32.0	41.5	37.5	4500	9 E6	73QW3470(1)30(2)	R73QW3470(1)30(2)
1000	400	0.56	19.0	32.0	41.5	37.5	4500	9 E6	73QW3560(1)30(2)	R73QW3560(1)30(2)
1000	400	0.68	20.0	40.0	41.5	37.5	4500	9 E6	73QW3680(1)30(2)	R73QW3680(1)30(2)
1000	400	0.82	20.0	40.0	41.5	37.5	4500	9 E6	73QW3820(1)30(2)	R73QW3820(1)30(2)
1000	400	1	24.0	44.0	41.5	37.5	4500	9 E6	73QW4100(1)30(2)	R73QW4100(1)30(2)
1000	400	1.2	30.0	45.0	41.5	37.5	4500	9 E6	73QW4120(1)30(2)	R73QW4120(1)30(2)
1000	400	1.5	30.0	45.0	41.5	37.5	4500	9 E6	73QW4150(1)40(2)	R73QW4150(1)40(2)
1250	450	0.0022	5.0	11.0	18.0	15.0	30000	75 E6	73RI1220(1)00(2)	R73RI1220(1)00(2)
1250	450	0.0027	5.0	11.0	18.0	15.0	30000	75 E6	73RI1270(1)00(2)	R73RI1270(1)00(2)
1250	450	0.0033	6.0	12.0	18.0	15.0	30000	75 E6	73RI1330(1)00(2)	R73RI1330(1)00(2)
1250	450	0.0039	6.0	12.0	18.0	15.0	30000	75 E6	73RI1390(1)00(2)	R73RI1390(1)00(2)
1250	450	0.0047	7.5	13.5	18.0	15.0	30000	75 E6	73RI1470(1)00(2)	R73RI1470(1)00(2)
1250	450	0.0056	7.5	13.5	18.0	15.0	30000	75 E6	73RI1560(1)00(2)	R73RI1560(1)00(2)
1250	450	0.0068	8.5	14.5	18.0	15.0	30000	75 E6	73RI1680(1)00(2)	R73RI1680(1)00(2)
1250	450	0.0082	10.0	16.0	18.0	15.0	30000	75 E6	73RI1820(1)00(2)	R73RI1820(1)00(2)
VDC	VAC	Cap Value (µF)	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/µs)	Max K_0 (V^2/µs)	New KEMET Part Number	Legacy Part Number

(1) Insert lead and packaging code. See Ordering Options Table for available options.
(2) H = ±2.5% (for 2-section construction only), J = ±5%, K = ±10%.

Roll Over for Order Info.

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Cap Value (µF)	Dimensions in mm			Lead Spacing (p)	dV/dt (V/µs)	Max K_0 (V^2/µs)	New KEMET Part Number	Legacy Part Number
			B	H	L					
1250	450	0.0082	6.0	15.0	26.5	22.5	11000	27 E6	73RN1820(1)00(2)	R73RN1820(1)00(2)
1250	450	0.01	6.0	15.0	26.5	22.5	11000	27 E6	73RN2100(1)00(2)	R73RN2100(1)00(2)
1250	450	0.012	6.0	15.0	26.5	22.5	11000	27 E6	73RN2120(1)00(2)	R73RN2120(1)00(2)
1250	450	0.015	7.0	16.0	26.5	22.5	11000	27 E6	73RN2150(1)00(2)	R73RN2150(1)00(2)
1250	450	0.018	7.0	16.0	26.5	22.5	11000	27 E6	73RN2180(1)00(2)	R73RN2180(1)00(2)
1250	450	0.022	8.5	17.0	26.5	22.5	11000	27 E6	73RN2220(1)00(2)	R73RN2220(1)00(2)
1250	450	0.027	10.0	18.5	26.5	22.5	11000	27 E6	73RN2270(1)00(2)	R73RN2270(1)00(2)
1250	450	0.033	10.0	18.5	26.5	22.5	11000	27 E6	73RN2330(1)00(2)	R73RN2330(1)00(2)
1250	450	0.039	9.0	17.0	32.0	27.5	11000	27 E6	73RR2390(1)00(2)	R73RR2390(1)00(2)
1250	450	0.047	11.0	20.0	32.0	27.5	11000	27 E6	73RR2470(1)00(2)	R73RR2470(1)00(2)
1250	450	0.056	11.0	20.0	32.0	27.5	11000	27 E6	73RR2560(1)00(2)	R73RR2560(1)00(2)
1250	450	0.068	13.0	22.0	32.0	27.5	11000	27 E6	73RR2680(1)00(2)	R73RR2680(1)00(2)
1250	450	0.082	13.0	25.0	32.0	27.5	11000	27 E6	73RR2820(1)10(2)	R73RR2820(1)10(2)
1250	450	0.1	13.0	25.0	32.0	27.5	11000	27 E6	73RR3100(1)10(2)	R73RR3100(1)10(2)
1250	450	0.12	14.0	28.0	32.0	27.5	11000	27 E6	73RR3120(1)10(2)	R73RR3120(1)10(2)
1250	450	0.12	18.0	33.0	32.0	27.5	11000	27 E6	73RR3120(1)00(2)	R73RR3120(1)00(2)
1250	450	0.15	18.0	33.0	32.0	27.5	11000	27 E6	73RR3150(1)00(2)	R73RR3150(1)00(2)
1250	450	0.18	18.0	33.0	32.0	27.5	11000	27 E6	73RR3180(1)00(2)	R73RR3180(1)00(2)
1250	450	0.22	22.0	37.0	32.0	27.5	11000	27 E6	73RR3220(1)00(2)	R73RR3220(1)00(2)
1250	450	0.082	11.0	22.0	41.5	37.5	5500	14 E6	73RW2820(1)00(2)	R73RW2820(1)00(2)
1250	450	0.1	11.0	22.0	41.5	37.5	5500	14 E6	73RW3100(1)00(2)	R73RW3100(1)00(2)
1250	450	0.12	11.0	22.0	41.5	37.5	5500	14 E6	73RW3120(1)10(2)	R73RW3120(1)10(2)
1250	450	0.12	13.0	24.0	41.5	37.5	5500	14 E6	73RW3120(1)00(2)	R73RW3120(1)00(2)
1250	450	0.15	13.0	24.0	41.5	37.5	5500	14 E6	73RW3150(1)00(2)	R73RW3150(1)00(2)
1250	450	0.18	13.0	24.0	41.5	37.5	5500	14 E6	73RW3180(1)10(2)	R73RW3180(1)10(2)
1250	450	0.18	16.0	28.5	41.5	37.5	5500	14 E6	73RW3180(1)00(2)	R73RW3180(1)00(2)
1250	450	0.22	16.0	28.5	41.5	37.5	5500	14 E6	73RW3220(1)00(2)	R73RW3220(1)00(2)
1250	450	0.27	16.0	28.5	41.5	37.5	5500	14 E6	73RW3270(1)00(2)	R73RW3270(1)00(2)
1250	450	0.33	19.0	32.0	41.5	37.5	5500	14 E6	73RW3330(1)00(2)	R73RW3330(1)00(2)
1250	450	0.39	20.0	40.0	41.5	37.5	5500	14 E6	73RW3390(1)00(2)	R73RW3390(1)00(2)
1250	450	0.47	20.0	40.0	41.5	37.5	5500	14 E6	73RW3470(1)00(2)	R73RW3470(1)00(2)
1250	450	0.56	20.0	40.0	41.5	37.5	5500	14 E6	73RW3560(1)00(2)	R73RW3560(1)00(2)
1250	450	0.68	24.0	44.0	41.5	37.5	5500	14 E6	73RW3680(1)00(2)	R73RW3680(1)00(2)
1600	450	0.001	5.0	11.0	18.0	15.0	34000	109 E6	73TI1100(1)00(2)	R73TI1100(1)00(2)
1600	450	0.0012	5.0	11.0	18.0	15.0	34000	109 E6	73TI1120(1)00(2)	R73TI1120(1)00(2)
1600	450	0.0015	5.0	11.0	18.0	15.0	34000	109 E6	73TI1150(1)00(2)	R73TI1150(1)00(2)
1600	450	0.0018	5.0	11.0	18.0	15.0	34000	109 E6	73TI1180(1)00(2)	R73TI1180(1)00(2)
1600	450	0.0022	6.0	12.0	18.0	15.0	34000	109 E6	73TI1220(1)00(2)	R73TI1220(1)00(2)
1600	450	0.0027	6.0	12.0	18.0	15.0	34000	109 E6	73TI1270(1)00(2)	R73TI1270(1)00(2)
1600	450	0.0033	7.5	13.5	18.0	15.0	34000	109 E6	73TI1330(1)00(2)	R73TI1330(1)00(2)
1600	450	0.0039	7.5	13.5	18.0	15.0	34000	109 E6	73TI1390(1)00(2)	R73TI1390(1)00(2)
1600	450	0.0047	8.5	14.5	18.0	15.0	34000	109 E6	73TI1470(1)00(2)	R73TI1470(1)00(2)
1600	450	0.0056	10.0	16.0	18.0	15.0	34000	109 E6	73TI1560(1)00(2)	R73TI1560(1)00(2)
1600	450	0.0068	10.0	16.0	18.0	15.0	34000	109 E6	73TI1680(1)00(2)	R73TI1680(1)00(2)
1600	450	0.0056	6.0	15.0	26.5	22.5	11000	35 E6	73TN1560(1)00(2)	R73TN1560(1)00(2)
1600	450	0.0068	6.0	15.0	26.5	22.5	11000	35 E6	73TN1680(1)00(2)	R73TN1680(1)00(2)
1600	450	0.0082	6.0	15.0	26.5	22.5	11000	35 E6	73TN1820(1)00(2)	R73TN1820(1)00(2)
1600	450	0.01	6.0	15.0	26.5	22.5	11000	35 E6	73TN2100(1)00(2)	R73TN2100(1)00(2)
1600	450	0.012	7.0	16.0	26.5	22.5	11000	35 E6	73TN2120(1)00(2)	R73TN2120(1)00(2)
1600	450	0.015	8.5	17.0	26.5	22.5	11000	35 E6	73TN2150(1)00(2)	R73TN2150(1)00(2)
1600	450	0.018	8.5	17.0	26.5	22.5	11000	35 E6	73TN2180(1)00(2)	R73TN2180(1)00(2)
1600	450	0.022	10.0	18.5	26.5	22.5	11000	35 E6	73TN2220(1)00(2)	R73TN2220(1)00(2)
1600	450	0.027	9.0	17.0	32.0	27.5	11000	35 E6	73TR2270(1)00(2)	R73TR2270(1)00(2)
1600	450	0.033	11.0	20.0	32.0	27.5	11000	35 E6	73TR2330(1)00(2)	R73TR2330(1)00(2)
1600	450	0.039	11.0	20.0	32.0	27.5	11000	35 E6	73TR2390(1)00(2)	R73TR2390(1)00(2)
1600	450	0.047	13.0	22.0	32.0	27.5	11000	35 E6	73TR2470(1)00(2)	R73TR2470(1)00(2)
1600	450	0.056	13.0	22.0	32.0	27.5	11000	35 E6	73TR2560(1)00(2)	R73TR2560(1)00(2)
1600	450	0.068	14.0	28.0	32.0	27.5	11000	35 E6	73TR2680(1)10(2)	R73TR2680(1)10(2)
1600	450	0.082	14.0	28.0	32.0	27.5	11000	35 E6	73TR2820(1)00(2)	R73TR2820(1)00(2)
1600	450	0.1	18.0	33.0	32.0	27.5	11000	35 E6	73TR3100(1)00(2)	R73TR3100(1)00(2)
VDC	VAC	Cap Value (µF)	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/µs)	Max K_0 (V^2/µs)	New KEMET Part Number	Legacy Part Number

(1) Insert lead and packaging code. See Ordering Options Table for available options.
(2) H = ±2.5% (for 2-section construction only), J = ±5%, K = ±10%.

Roll Over for Order Info.

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Cap Value (µF)	Dimensions in mm			Lead Spacing (p)	dV/dt (V/µs)	Max K_0 (V^2/µs)	New KEMET Part Number	Legacy Part Number
			B	H	L					
1600	450	0.12	18.0	33.0	32.0	27.5	11000	35 E6	73TR3120(1)00(2)	R73TR3120(1)00(2)
1600	450	0.15	22.0	37.0	32.0	27.5	11000	35 E6	73TR3150(1)00(2)	R73TR3150(1)00(2)
1600	450	0.18	22.0	37.0	32.0	27.5	11000	35 E6	73TR3180(1)00(2)	R73TR3180(1)00(2)
1600	450	0.033	11.0	22.0	41.5	37.5	6500	21 E6	73TW2330(1)00(2)	R73TW2330(1)00(2)
1600	450	0.039	11.0	22.0	41.5	37.5	6500	21 E6	73TW2390(1)00(2)	R73TW2390(1)00(2)
1600	450	0.047	11.0	22.0	41.5	37.5	6500	21 E6	73TW2470(1)00(2)	R73TW2470(1)00(2)
1600	450	0.056	11.0	22.0	41.5	37.5	6500	21 E6	73TW2560(1)00(2)	R73TW2560(1)00(2)
1600	450	0.068	11.0	22.0	41.5	37.5	6500	21 E6	73TW2680(1)00(2)	R73TW2680(1)00(2)
1600	450	0.082	11.0	22.0	41.5	37.5	6500	21 E6	73TW2820(1)00(2)	R73TW2820(1)00(2)
1600	450	0.1	13.0	24.0	41.5	37.5	6500	21 E6	73TW3100(1)00(2)	R73TW3100(1)00(2)
1600	450	0.12	16.0	28.5	41.5	37.5	6500	21 E6	73TW3120(1)00(2)	R73TW3120(1)00(2)
1600	450	0.15	16.0	28.5	41.5	37.5	6500	21 E6	73TW3150(1)00(2)	R73TW3150(1)00(2)
1600	450	0.18	16.0	28.5	41.5	37.5	6500	21 E6	73TW3180(1)00(2)	R73TW3180(1)00(2)
1600	450	0.22	19.0	32.0	41.5	37.5	6500	21 E6	73TW3220(1)00(2)	R73TW3220(1)00(2)
1600	450	0.27	20.0	40.0	41.5	37.5	6500	21 E6	73TW3270(1)00(2)	R73TW3270(1)00(2)
1600	450	0.33	20.0	40.0	41.5	37.5	6500	21 E6	73TW3330(1)00(2)	R73TW3330(1)00(2)
1600	450	0.39	24.0	44.0	41.5	37.5	6500	21 E6	73TW3390(1)00(2)	R73TW3390(1)00(2)
1600	450	0.47	24.0	44.0	41.5	37.5	6500	21 E6	73TW3470(1)10(2)	R73TW3470(1)10(2)
1600	450	0.47	30.0	45.0	41.5	37.5	6500	21 E6	73TW3470(1)00(2)	R73TW3470(1)00(2)
1600	450	0.56	24.0	44.0	41.5	37.5	6500	21 E6	73TW3560(1)10(2)	R73TW3560(1)10(2)
1600	450	0.56	30.0	45.0	41.5	37.5	6500	21 E6	73TW3560(1)00(2)	R73TW3560(1)00(2)
2000	500	0.0001	5.0	11.0	18.0	15.0	54000	216 E6	73UI0100(1)00(2)	R73UI0100(1)00(2)
2000	500	0.00015	5.0	11.0	18.0	15.0	54000	216 E6	73UI0150(1)00(2)	R73UI0150(1)00(2)
2000	500	0.00022	5.0	11.0	18.0	15.0	54000	216 E6	73UI0220(1)00(2)	R73UI0220(1)00(2)
2000	500	0.00033	5.0	11.0	18.0	15.0	54000	216 E6	73UI0330(1)00(2)	R73UI0330(1)00(2)
2000	500	0.00047	5.0	11.0	18.0	15.0	54000	216 E6	73UI0470(1)00(2)	R73UI0470(1)00(2)
2000	500	0.00068	5.0	11.0	18.0	15.0	54000	216 E6	73UI0680(1)00(2)	R73UI0680(1)00(2)
2000	500	0.001	6.0	12.0	18.0	15.0	54000	216 E6	73UI1100(1)00(2)	R73UI1100(1)00(2)
2000	500	0.0012	6.0	12.0	18.0	15.0	54000	216 E6	73UI1120(1)00(2)	R73UI1120(1)00(2)
2000	500	0.0015	7.5	13.5	18.0	15.0	54000	216 E6	73UI1150(1)00(2)	R73UI1150(1)00(2)
2000	500	0.0018	7.5	13.5	18.0	15.0	54000	216 E6	73UI1180(1)00(2)	R73UI1180(1)00(2)
2000	500	0.0022	8.5	14.5	18.0	15.0	54000	216 E6	73UI1220(1)00(2)	R73UI1220(1)00(2)
2000	500	0.0027	10.0	16.0	18.0	15.0	54000	216 E6	73UI1270(1)00(2)	R73UI1270(1)00(2)
2000	500	0.0027	6.0	15.0	26.5	22.5	11000	44 E6	73UN1270(1)00(2)	R73UN1270(1)00(2)
2000	500	0.0033	6.0	15.0	26.5	22.5	11000	44 E6	73UN1330(1)00(2)	R73UN1330(1)00(2)
2000	500	0.0039	6.0	15.0	26.5	22.5	11000	44 E6	73UN1390(1)00(2)	R73UN1390(1)00(2)
2000	500	0.0047	7.0	16.0	26.5	22.5	11000	44 E6	73UN1470(1)00(2)	R73UN1470(1)00(2)
2000	500	0.0056	7.0	16.0	26.5	22.5	11000	44 E6	73UN1560(1)00(2)	R73UN1560(1)00(2)
2000	500	0.0068	8.5	17.0	26.5	22.5	11000	44 E6	73UN1680(1)00(2)	R73UN1680(1)00(2)
2000	500	0.0082	8.5	17.0	26.5	22.5	11000	44 E6	73UN1820(1)00(2)	R73UN1820(1)00(2)
2000	500	0.01	10.0	18.5	26.5	22.5	11000	44 E6	73UN2100(1)00(2)	R73UN2100(1)00(2)
2000	500	0.012	11.0	20.0	26.5	22.5	11000	44 E6	73UN2120(1)00(2)	R73UN2120(1)00(2)
2000	500	0.01	9.0	17.0	32.0	27.5	11000	44 E6	73UR2100(1)00(2)	R73UR2100(1)00(2)
2000	500	0.012	9.0	17.0	32.0	27.5	11000	44 E6	73UR2120(1)00(2)	R73UR2120(1)00(2)
2000	500	0.015	11.0	20.0	32.0	27.5	11000	44 E6	73UR2150(1)00(2)	R73UR2150(1)00(2)
2000	500	0.018	13.0	22.0	32.0	27.5	11000	44 E6	73UR2180(1)00(2)	R73UR2180(1)00(2)
2000	500	0.022	13.0	22.0	32.0	27.5	11000	44 E6	73UR2220(1)00(2)	R73UR2220(1)00(2)
2000	500	0.027	14.0	28.0	32.0	27.5	11000	44 E6	73UR2270(1)10(2)	R73UR2270(1)10(2)
2000	500	0.033	14.0	28.0	32.0	27.5	11000	44 E6	73UR2330(1)10(2)	R73UR2330(1)10(2)
2000	500	0.033	18.0	33.0	32.0	27.5	11000	44 E6	73UR2330(1)00(2)	R73UR2330(1)00(2)
2000	500	0.039	18.0	33.0	32.0	27.5	11000	44 E6	73UR2390(1)00(2)	R73UR2390(1)00(2)
2000	500	0.047	18.0	33.0	32.0	27.5	11000	44 E6	73UR2470(1)00(2)	R73UR2470(1)00(2)
2000	500	0.056	22.0	37.0	32.0	27.5	11000	44 E6	73UR2560(1)00(2)	R73UR2560(1)00(2)
2000	500	0.068	22.0	37.0	32.0	27.5	11000	44 E6	73UR2680(1)00(2)	R73UR2680(1)00(2)
2000	500	0.018	11.0	22.0	41.5	37.5	9000	36 E6	73UW2180(1)00(2)	R73UW2180(1)00(2)
2000	500	0.022	11.0	22.0	41.5	37.5	9000	36 E6	73UW2220(1)00(2)	R73UW2220(1)00(2)
2000	500	0.027	11.0	22.0	41.5	37.5	9000	36 E6	73UW2270(1)00(2)	R73UW2270(1)00(2)
2000	500	0.033	13.0	24.0	41.5	37.5	9000	36 E6	73UW2330(1)00(2)	R73UW2330(1)00(2)
2000	500	0.039	13.0	24.0	41.5	37.5	9000	36 E6	73UW2390(1)00(2)	R73UW2390(1)00(2)
2000	500	0.047	16.0	28.5	41.5	37.5	9000	36 E6	73UW2470(1)00(2)	R73UW2470(1)00(2)
VDC	VAC	Cap Value (µF)	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/µs)	Max K_0 (V^2/µs)	New KEMET Part Number	Legacy Part Number

(1) Insert lead and packaging code. See Ordering Options Table for available options.
(2) H = ±2.5% (for 2-section construction only), J = ±5%, K = ±10%.

Roll Over for Order Info.

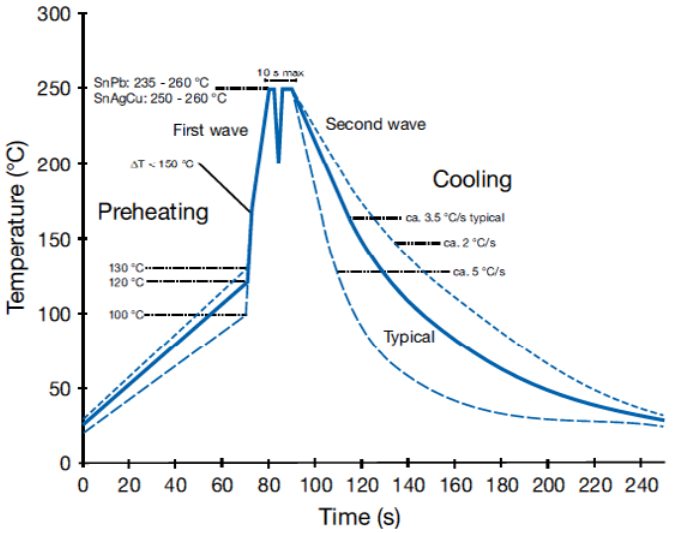
Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Cap Value (µF)	Dimensions in mm			Lead Spacing (p)	dV/dt (V/µs)	Max K_0 (V^2/µs)	New KEMET Part Number	Legacy Part Number
			B	H	L					
2000	500	0.056	16.0	28.5	41.5	37.5	9000	36 E6	73UW2560(1)00(2)	R73UW2560(1)00(2)
2000	500	0.068	16.0	28.5	41.5	37.5	9000	36 E6	73UW2680(1)00(2)	R73UW2680(1)00(2)
2000	500	0.082	19.0	32.0	41.5	37.5	9000	36 E6	73UW2820(1)00(2)	R73UW2820(1)00(2)
2000	500	0.1	20.0	40.0	41.5	37.5	9000	36 E6	73UW3100(1)00(2)	R73UW3100(1)00(2)
2000	500	0.12	20.0	40.0	41.5	37.5	9000	36 E6	73UW3120(1)00(2)	R73UW3120(1)00(2)
2000	500	0.15	24.0	44.0	41.5	37.5	9000	36 E6	73UW3150(1)00(2)	R73UW3150(1)00(2)
2000	500	0.18	30.0	45.0	41.5	37.5	9000	36 E6	73UW3180(1)00(2)	R73UW3180(1)00(2)
2000	500	0.22	30.0	45.0	41.5	37.5	9000	36 E6	73UW3220(1)00(2)	R73UW3220(1)00(2)
VDC	VAC	Cap Value (µF)	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/µs)	Max K_0 (V^2/µs)	New KEMET Part Number	Legacy Part Number

(1) Insert lead and packaging code. See Ordering Options Table for available options.
(2) H = ±2.5% (for 2-section construction only), J = ±5%, K = ±10%.

Soldering Process

The implementation of the RoHS Directive has required the selection SnAuCu (SAC) alloys or SnCu alloys as primary solder. This has increased the liquidus temperature from that of 183ºC for SnPb eutectic alloy to 217ºC – 221ºC for the new alloys. As a result, the heat stress to components, even in wave soldering, has increased considerably due to higher pre-heat and wave temperatures. Polypropylene capacitors are especially sensitive to heat (melting point of polypropylene is 160ºC – 170ºC). Wave soldering can be destructive especially for mechanically small polypropylene capacitors and great care must be taken during soldering. The solder profiles from KEMET are highly recommended. You may also refer to the wave soldering curve from IEC Publication 61760–1 Edition 2. Please consult KEMET with any questions.



Marking

- KEMET's logo
- Series
- Dielectric code (KP)
- Capacitance
- Capacitance tolerance
- Rated DC voltage
- Manufacturing date code

Packaging Quantities

Lead Spacing	Thickness (mm)	Height (mm)	Length (mm)	Bulk Short Leads	Bulk Long Leads	Standard Reel ø 355 mm	Large Reel ø 500 mm	Ammo	Pizza
15	4	10	18	2500	1500	750	1500	1000	1411
	5	11	18	1000	1250	600	1250	800	1139
	6	12	18	1750	1000	500	1000	680	935
	7.5	13.5	18	1000	800	350	800	500	748
	6	17.5	18	1000	800	500	1000	680	935
	7.5	14.5	18	1000	750	350	800	500	748
	8.5	14.5	18	1000	650	300	700	440	663
	9	12.5	18	1000	700	270	650	410	629
	7.5	18.5	18	900	600	350	800	500	748
	10	16	18	750	550	300	600	380	561
	13	12	18	750	520	200	480	280	425
	11	19	18	450	400	250	500	340	510
22.5	6	15	26.5	1404	702	300	700	464	660
	7	16	26.5	1188	594	250	550	380	564
	8.5	17	26.5	972	486	250	450	280	468
	10	18.5	26.5	810	405	160	350	235	396
	11	20	26.5	630	378	190	350	217	360
	13	22	26.5	540	324	150	300	200	300
27.5	9	17	32	816	408		450		
	10	20	32	600	360		350		
	11	20	32	560	336		350		
	13	22	32	480	288		300		
	13	25	32	480	288				
	14	28	32	352	176				
	15	24.5	32	400	240				
	18	33	32	256	128				
	22	37	32	168	112				

PHE448 Series Polypropylene Film/Foil, Radial

Overview

The PHE448 Series is a capacitor with polypropylene film dielectric and metal foil electrodes, encapsulated in self-extinguishing resin in a box of material meeting the requirements of UL 94 V–0.

Applications

Typical applications include high frequency and high voltage applications requiring capacitors with extremely high current handling capability, i.e., high dV/dt values.

Benefits

- Rated voltage: 1,600 – 2,000 VDC
- Rated voltage: 650 – 700 VAC
- Capacitance range: 0.0001 – 0.022 µF
- Lead spacing: 15 mm
- Capacitance tolerance: ±5%, other tolerances on request
- Climatic category: 55/105/56, IEC 60068–1
- Tape and reel packaging in accordance with IEC 60286–2
- RoHS Compliant and lead-free terminations
- Category temperature range of -55˚C to +105˚C

Legacy Part Number System

PHE448	R	B	4150	J	R06
Series	Rated Voltage (VDC)	Lead Spacing (mm)	Capacitance Code (pF)	Capacitance Tolerance	Lead and Packaging Code
Polypropylene Film/Foil	R = 1,600 S = 2,000	B = 15.0	Digits 2 – 4 indicate the first three digits of the cap value. First digit indicates the total number of digits in the cap value.	J = ±5% Other tolerances on request	See Ordering Options Table

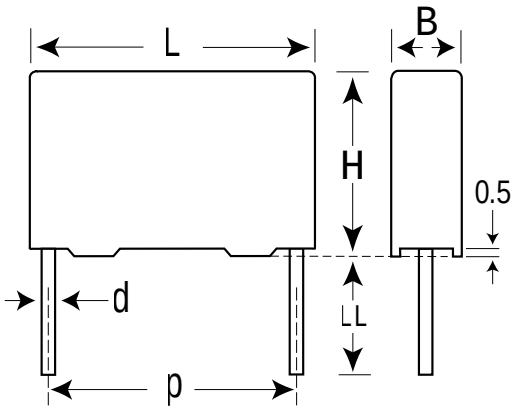
New KEMET Part Number System

F	448	B	D	152	J	1K6	C
Capacitor Class	Series	Lead Spacing (mm)	Size Code	Capacitance Code (pF)	Capacitance Tolerance	Rated Voltage (VDC)	Lead and Packaging Code
F = Film	Polypropylene Film/Foil	B = 15.0	See Dimension Table	First two digits indicate the two most significant digits of the capacitance value in picofarads. The third digit is the number of following zeros.	J = ±5%, Other tolerances on request	1K6 = 1,600 2K0 = 2,000	See Ordering Options Table

Ordering Options Table

Lead Spacing Nominal (mm)	Type of Leads and Packaging	Lead Length (mm)	KEMET Lead and Packaging Code	Legacy Lead and Packaging Code
15	Standard Lead and Packaging Options			
	Bulk (Bag) – Short Leads	6 +0/-1	C	R06
	Bulk (Bag) – Long Leads	17 +0/-1	A	R17
	Other Lead and Packaging Options			
	Bulk (Bag) – Max Length Leads	30 +5/-0	ALW0L	R30
	Tape & Reel (Standard Reel)	H_0= 18.5 +/-0.5	L	R17T0
	Tape & Reel (Large Reel)	H_0= 18.5 +/-0.5	P	R17T1
Native 15 formed to 7.5	Ammo Pack	H_0= 16.5 +/-0.5	XLAF1	R25XA
	Tape & Reel (Standard Reel)	H_0= 16.5 +/-0.5	XLTF1	R25X2

Dimensions – Millimeters



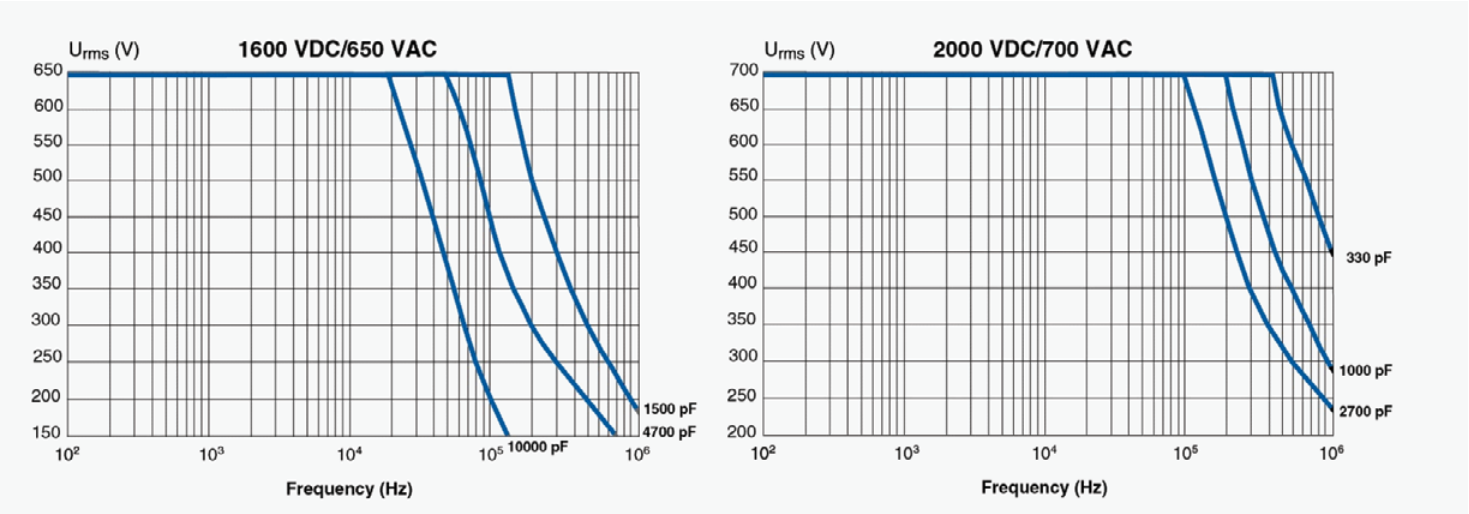
KEMET Size Code	Legacy Size Code	p		B		H		L		d	
		Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance
BD	B04	15	+/-0.4	5.5	Maximum	10.5	Maximum	18	Maximum	0.8	+/-0.05
BL	B06	15	+/-0.4	7.5	Maximum	14.5	Maximum	18	Maximum	0.8	+/-0.05
BJ	B10	15	+/-0.4	6.5	Maximum	12.5	Maximum	18	Maximum	0.8	+/-0.05
BQ	B11	15	+/-0.4	8.5	Maximum	16	Maximum	18	Maximum	0.8	+/-0.05
BV	B14	15	+/-0.4	9.5	Maximum	17.5	Maximum	18	Maximum	0.8	+/-0.05
BY	B16	15	+/-0.4	11	Maximum	19	Maximum	18	Maximum	0.8	+/-0.05

Note: See Ordering Options Table for lead length (LL) options.

Performance Characteristics

Voltage Range (VDC)	1,600	2,000
Voltage Range (VAC)	650	700
Capacitance Range (µF)	0.0015 – 0.022	0.0001 – 0.0033
Capacitance Values	In accordance with IEC E12 series	
Capacitance Tolerance	±5%, other tolerances on request	
Category Temperature Range	-55°C to +105°C	
Rated Temperature	+85°C	
Voltage Derating	The rated voltage is decreased with 1.3%/°C between +85°C and +105°C	
Climatic Category	IEC 60068–1, 55/105/56	
Dissipation Factor tanδ	Maximum Values at +23°C	
	1 kHz	0.0003
	10 kHz	0.0005
	100 kHz	0.001
Insulation Resistance	Measured at +23°C, 100 VDC 60 seconds for V_R < 500 VDC and at 500 VDC for V_R ≥ 500 VDC	
	Minimum Values Between Terminals	
	≥ 100,000 MΩ	
	Minimum Values Between Terminals and Case	
	≥ 100,000 MΩ	

Derating of V_{rms} vs. Frequency, +85ºC Ambient Temperature and 10ºC Internal Heating, Typical Values



Environmental Test Data

Test	IEC Publication	Procedure	Requirements
Voltage Proof	60384–1 Clause 4.6	1.6 x V_R after 60 seconds	The capacitors must withstand the voltage without breakdowns or flashovers and without decreased insulation resistance below the value in each detail specification. No visible damage
	Clause 4.6 2.3	2 x V_R (minimum 400 VDC to case) after 60 seconds	As above
Vibration	60068–2–6 Test Fc	6 hours with 10 – 500 Hz and 0.75 mm amplitude or 98 m/s^2 depending on frequency	No visible damage tanδ ≤ 1.2 x stated value at 100 kHz Δ C/C ≤ ±0.5 %
Bump	60068–2–29 Test Eb	4,000 bumps with 390 m/s^2 mounted on PCB	Δ C/C ≤ ±0.5% tanδ ≤ 1.2 x stated value at 100 kHz Insulation resistance: ≥ 100,000 MΩ for C_R ≤ 0.33 µF ≥ 30,000 MΩ • µF for C_R > 0.33 µF
Resistance to Soldering Heat	60068–2–20 Method 1A	Solder bath at + 260°C ±5°C with screening	Immersion of the terminations into the solder bath shall be completed in a time not exceeding 1 second and the terminations shall remain immersed to the specified depth for 10 + 1 second and then be withdrawn. Δ C/C ≤ ±1.0% tanδ increase < 0.001 No visible damage
Climatic Sequence	60384–1 Paragraph 4:21	60068–2.2 dry heat 16 hours 60068–2–34 damp heat, one cycle 60068–2–1 Test Aa 2 hours	Insulation resistance: ≥ 100,000 MΩ for C_R ≤ 0.33 µF ≥ 30,000 MΩ • µF for C_R > 0.33 µF Δ C/C ≤ ±0.5% tanδ ≤ 1.2 x stated value at 100 kHz
Damp Heat Steady State	60068–2–3 Test Ca	+40°C and 90 – 95% RH	56 days no visible damage Insulation resistance: ≥ 50,000 MΩ for C_R ≤ 0.33 µF ≥ 15,000 MΩ • µF for C_R > 0.33 µF Δ C/C ≤ ±1% tanδ ≤ 1.2 x stated value at 100 kHz
Endurance, AC		1,000 hours at +85°C and 1.25 x V_R AC	No visible damage Δ C/C ≤ ±3% tanδ ≤ 1.5 x stated value at 100 kHz Insulation resistance: ≥ 100,000 MΩ for C_R ≤ 0.33 µF ≥ 30,000 MΩ • µF for C_R > 0.33 µF
Charge and Discharge	60384–17 Paragraph 4.13	10,000 pulses and with (2 x) dV/dt according to detail specification	tanδ (100 kHz) ≤ 2 x stated value (100 kHz) Δ C/C ≤ ±0.5% Insulation resistance: ≥ 50,000 MΩ for C_R ≤ 0.33 µF ≥ 15,000 MΩ • µF for C_R > 0.33 µF

Environmental Compliance

All KEMET pulse capacitors are RoHS Compliant.

RoHS Compliant

Table 1 – Ratings & Part Number Reference

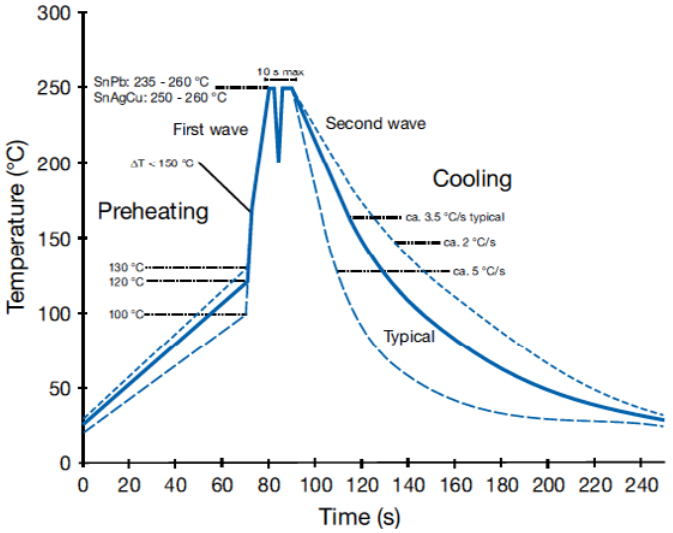
VDC	VAC	Cap Value (µF)	Dimensions in mm			Lead Spacing (p)	dV/dt (V/µs)	Size Code (New/Legacy)	R_{thha} ºC/W 85ºC 0.2m/s	New KEMET Part Number	Legacy Part Number
			B	H	L						
1600	650	0.0015	5.5	10.5	18.0	15	15000	BD/B04	87	F448BD152J1K6(1)	PHE448RB4150J(1)
1600	650	0.0018	5.5	10.5	18.0	15	15000	BD/B04	86	F448BD182J1K6(1)	PHE448RB4180J(1)
1600	650	0.0022	5.5	10.5	18.0	15	15000	BD/B04	84	F448BD222J1K6(1)	PHE448RB4220J(1)
1600	650	0.0027	6.5	12.5	18.0	15	15000	BJ/B10	82	F448BJ272J1K6(1)	PHE448RB4270J(1)
1600	650	0.0033	6.5	12.5	18.0	15	15000	BJ/B10	82	F448BJ332J1K6(1)	PHE448RB4330J(1)
1600	650	0.0039	6.5	12.5	18.0	15	15000	BJ/B10	82	F448BJ392J1K6(1)	PHE448RB4390J(1)
1600	650	0.0047	6.5	12.5	18.0	15	15000	BJ/B10	82	F448BJ472J1K6(1)	PHE448RB4470J(1)
1600	650	0.0056	7.5	14.5	18.0	15	15000	BL/B06	78	F448BL562J1K6(1)	PHE448RB4560J(1)
1600	650	0.0068	7.5	14.5	18.0	15	15000	BL/B06	78	F448BL682J1K6(1)	PHE448RB4680J(1)
1600	650	0.0082	8.5	16.0	18.0	15	15000	BQ/B11	70	F448BQ822J1K6(1)	PHE448RB4820J(1)
1600	650	0.01	8.5	16.0	18.0	15	15000	BQ/B11	70	F448BQ103J1K6(1)	PHE448RB5100J(1)
1600	650	0.012	9.5	17.5	18.0	15	15000	BV/B14	60	F448BV123J1K6(1)	PHE448RB5120J(1)
1600	650	0.015	9.5	17.5	18.0	15	15000	BV/B14	60	F448BV153J1K6(1)	PHE448RB5150J(1)
1600	650	0.018	11.0	19.0	18.0	15	15000	BY/B16	55	F448BY183J1K6(1)	PHE448RB5180J(1)
1600	650	0.022	11.0	19.0	18.0	15	15000	BY/B16	55	F448BY223K1K6(2)	PHE448RB5220K(2)
2000	700	0.0001	5.5	10.5	18.0	15	25000	BD/B04	87	F448BD101J2K0(1)	PHE448SB3100J(1)
2000	700	0.00012	5.5	10.5	18.0	15	25000	BD/B04	87	F448BD121J2K0(1)	PHE448SB3120J(1)
2000	700	0.00015	5.5	10.5	18.0	15	25000	BD/B04	87	F448BD151J2K0(1)	PHE448SB3150J(1)
2000	700	0.00018	5.5	10.5	18.0	15	25000	BD/B04	87	F448BD181J2K0(1)	PHE448SB3180J(1)
2000	700	0.00022	5.5	10.5	18.0	15	25000	BD/B04	87	F448BD221J2K0(1)	PHE448SB3220J(1)
2000	700	0.00027	5.5	10.5	18.0	15	25000	BD/B04	87	F448BD271J2K0(1)	PHE448SB3270J(1)
2000	700	0.00033	5.5	10.5	18.0	15	25000	BD/B04	86	F448BD331J2K0(1)	PHE448SB3330J(1)
2000	700	0.00039	5.5	10.5	18.0	15	25000	BD/B04	86	F448BD391J2K0(1)	PHE448SB3390J(1)
2000	700	0.00047	5.5	10.5	18.0	15	25000	BD/B04	86	F448BD471J2K0(1)	PHE448SB3470J(1)
2000	700	0.00056	5.5	10.5	18.0	15	25000	BD/B04	85	F448BD561J2K0(1)	PHE448SB3560J(1)
2000	700	0.00068	5.5	10.5	18.0	15	25000	BD/B04	85	F448BD681J2K0(1)	PHE448SB3680J(1)
2000	700	0.00082	5.5	10.5	18.0	15	25000	BD/B04	85	F448BD821J2K0(1)	PHE448SB3820J(1)
2000	700	0.001	5.5	10.5	18.0	15	25000	BD/B04	84	F448BD102J2K0(1)	PHE448SB4100J(1)
2000	700	0.0012	6.5	12.5	18.0	15	25000	BJ/B10	82	F448BJ122J2K0(1)	PHE448SB4120J(1)
2000	700	0.0015	6.5	12.5	18.0	15	25000	BJ/B10	82	F448BJ152J2K0(1)	PHE448SB4150J(1)
2000	700	0.0018	7.5	14.5	18.0	15	25000	BL/B06	78	F448BL182J2K0(1)	PHE448SB4180J(1)
2000	700	0.0022	8.5	16.0	18.0	15	25000	BQ/B11	70	F448BQ222J2K0(1)	PHE448SB4220J(1)
2000	700	0.0027	8.5	16.0	18.0	15	25000	BQ/B11	70	F448BQ272J2K0(1)	PHE448SB4270J(1)
2000	700	0.0033	9.5	17.5	18.0	15	25000	BV/B14	60	F448BV332J2K0(1)	PHE448SB4330J(1)
VDC	VAC	Cap Value (µF)	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/µs)	Size Code (New/Legacy)	R_{thha} ºC/W 85ºC 0.2m/s	New KEMET Part Number	Legacy Part Number

(1) Insert lead and packaging code. See Order Options Table for available options.
(2) K = ±10% (only available tolerance).

Roll Over for Order Info.

Soldering Process

The implementation of the RoHS Directive has required the selection SnAuCu (SAC) alloys or SnCu alloys as primary solder. This has increased the liquidus temperature from that of 183ºC for SnPb eutectic alloy to 217ºC – 221ºC for the new alloys. As a result, the heat stress to components, even in wave soldering, has increased considerably due to higher pre-heat and wave temperatures. Polypropylene capacitors are especially sensitive to heat (melting point of polypropylene is 160ºC – 170ºC). Wave soldering can be destructive especially for mechanically small polypropylene capacitors and great care must be taken during soldering. The solder profiles from KEMET are highly recommended. You may also refer to the wave soldering curve from IEC Publication 61760–1 Edition 2. Please consult KEMET with any questions.



Marking

- KEMET's logo
- Series
- Capacitance
- Capacitance tolerance
- Rated DC voltage
- Manufacturing date code

Packaging Quantities

KEMET Size Code	Legacy Size Code	Lead Spacing	Thickness (mm)	Height (mm)	Length (mm)	Bulk Short Leads	Bulk Long Leads	Standard Reel ø 360 mm	Large Reel ø 500 mm	Standard Reel Formed	Ammo Formed
BD	B04	15	5.5	10.5	18	1000	800	600	1200	550	570
BE	B05		5.5	12.5	18	1000	800	600	1200	550	570
BL	B06		7.5	14.5	18	800	400	400	800	350	378
BJ	B10		6.5	12.5	18	1000	600	500	1000	450	480
BQ	B11		8.5	16	18	600	400	400	800	350	324
BM	B12		8	15	18	600	400	400	800	350	351
BV	B14		9.5	17.5	18	500	300	350	700	250	297
BG	B15		6	12	18	1000	800	500	1000	450	520
BY	B16		11	19	18	450	250	300	600	250	252
BU	B17		13	12.5	18	400	300	250	500	200	216

A72 Series Polypropylene Film/Foil, Axial

Overview

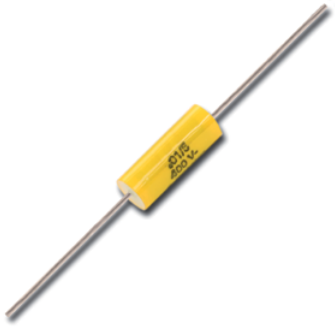
The A72 Series is a capacitor with polypropylene film and metal foil or metallized film and metal foil electrodes. The capacitor is encapsulated in self-extinguishing resin in a box of material meeting the requirements of UL 94 V–0 and protected with polyester tape wrapping and thermosetting resin end fill.

Applications

Typical applications include switching spikes suppression and resonant capacitors in switched mode power supply (SMPS), and deflection circuits in televisions (S-correction and flyback tuning) as well as applications with high voltage and high current.

Benefits

- Rated voltage: 100 – 2,000 VDC
- Rated voltage: 63 – 500 VAC
- Capacitance range: 47 – 0.33 µF
- Diameter: 5 – 22.5 mm
- Length: 11 – 33 mm
- Capacitance tolerance: ±5%, ±10%, ±20%
- Climatic category: 55/105/56, IEC 60068–1
- Tape and reel packaging in accordance with IEC 60286–1
- Category temperature range of -55˚C to +105˚C



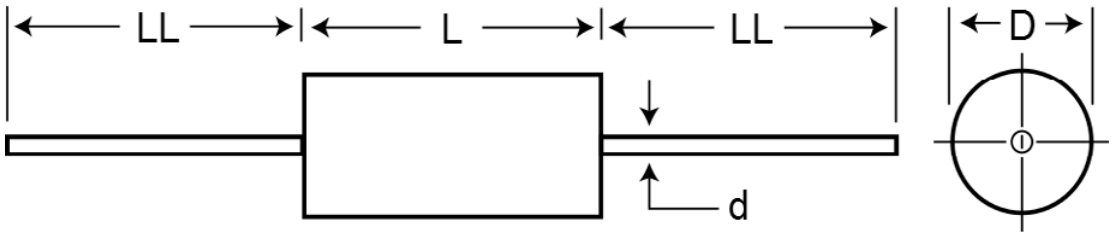
Part Number System

A72	E	F	1470	AA	00	J
Series	Rated Voltage (VDC)	Length (mm)	Capacitance Code (pF)	Lead and Packaging Code	Internal Use	Capacitance Tolerance
Polypropylene Film/Foil	E = 100 I = 250 M = 400 P = 630 Q = 1000 S = 1500 U = 2000	F = 11 H= 14 K = 20.5 Q = 28 T = 33	Digits 2 – 4 indicate the first three digits of the capacitance value. First digit indicates the number of zeros to be added.	See Ordering Options Table	00, 02 (Standard)	J = ±5% K = ±10% M = ±20%

Ordering Options Table

Type of Leads and Packaging	Lead Length (mm)	Lead and Packaging Code
Bulk (Bag) – Straight Leads	40 +/-5	AA
Tape & Reel (Standard Reel)		26

Dimensions – Millimeters



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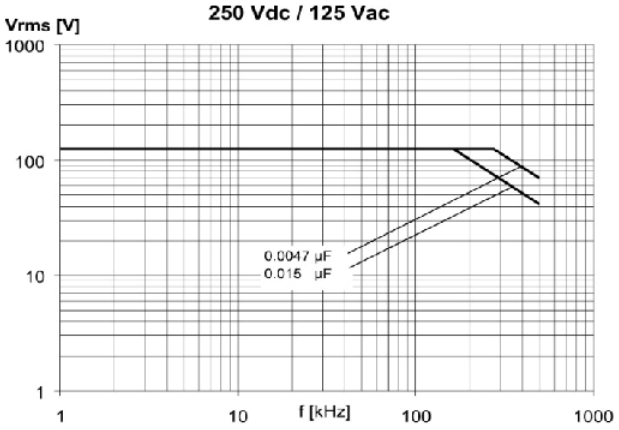
Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance
5	Maximum	11	Maximum	0.5	+/-0.05
6.5	Maximum	16.5	Maximum	0.6	+/-0.05
7	Maximum	16.5	Maximum	0.6	+/-0.05
7.5	Maximum	16.5	Maximum	0.8	+/-0.05
8	Maximum	16.5	Maximum	0.8	+/-0.05
8	Maximum	20.5	Maximum	0.8	+/-0.05
8	Maximum	28	Maximum	0.8	+/-0.05
8.5	Maximum	16.5	Maximum	0.8	+/-0.05
8.5	Maximum	20.5	Maximum	0.8	+/-0.05
8.5	Maximum	28	Maximum	0.8	+/-0.05
9	Maximum	16.5	Maximum	0.8	+/-0.05
9	Maximum	28	Maximum	0.8	+/-0.05
9.5	Maximum	20.5	Maximum	0.8	+/-0.05
9.5	Maximum	28	Maximum	0.8	+/-0.05
10	Maximum	28	Maximum	0.8	+/-0.05
11	Maximum	20.5	Maximum	0.8	+/-0.05
11	Maximum	28	Maximum	0.8	+/-0.05
11.5	Maximum	28	Maximum	0.8	+/-0.05
12.5	Maximum	28	Maximum	0.8	+/-0.05
13	Maximum	28	Maximum	0.8	+/-0.05
13.5	Maximum	28	Maximum	0.8	+/-0.05
13.5	Maximum	33	Maximum	0.8	+/-0.05
14	Maximum	33	Maximum	0.8	+/-0.05
16	Maximum	33	Maximum	1	+/-0.05
Note: See Ordering Options Table for lead length (LL) options.					

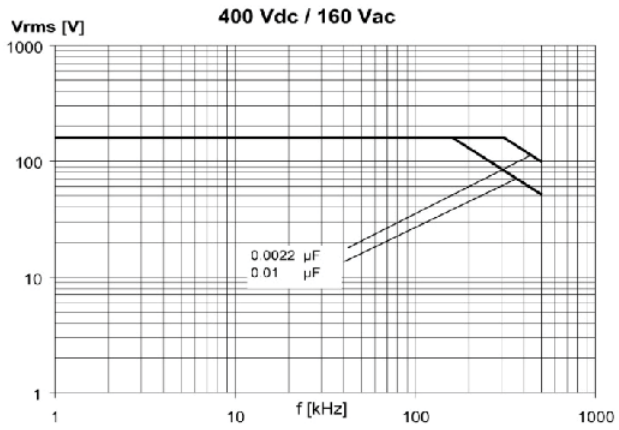
D		L		d	
Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance
16.5	Maximum	33	Maximum	1	+/-0.05
18	Maximum	33	Maximum	1	+/-0.05
19	Maximum	33	Maximum	1	+/-0.05
19.5	Maximum	33	Maximum	1	+/-0.05
20	Maximum	33	Maximum	1	+/-0.05
22.5	Maximum	33	Maximum	1	+/-0.05
Note: See Ordering Options Table for lead length (LL) options.					

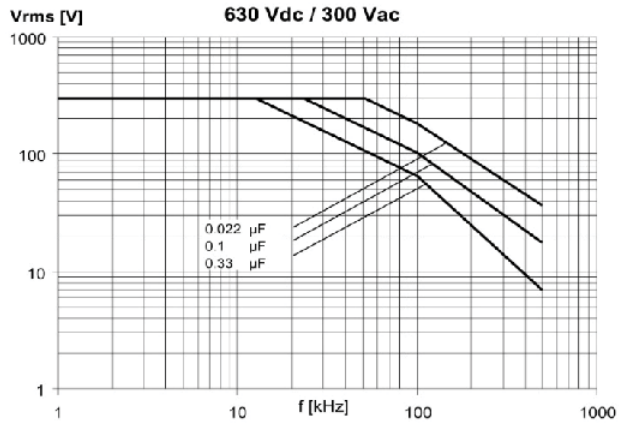
Performance Characteristics

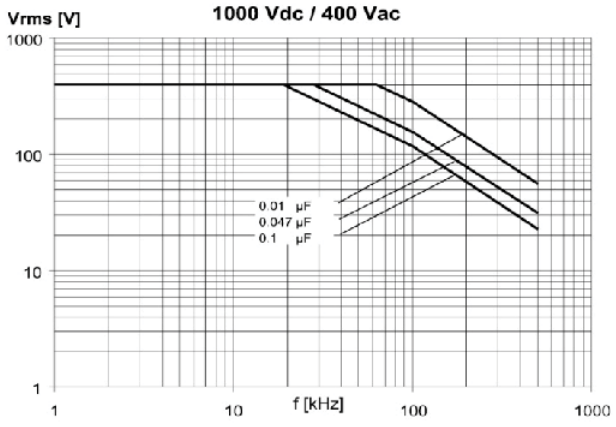
Voltage Range (VDC)	100	250	400	630	1000	1500	2000
Voltage Range (VAC)	63	125	160	300	400	450	500
Capacitance Range (µF)	0.0047 – 0.01	0.0022 – 0.015	0.000047 – 0.01	0.015 – 0.33	0.0033 – 0.1	0.0022 – 0.068	0.001 – 0.047
Capacitance Values	IEC E6 Values						
Capacitance Tolerance	±5%, ±10%, ±20%						
Category Temperature Range	-55°C to +105°C						
Voltage Derating	The rated voltage is decreased with 1.25%/°C between +85°C and +105°C						
Climatic Category	IEC 60068–1, 55/105/56						
Self-Inductance	Approximately 1 nH/mm for the total length of capacitor winding and the leads						
Dissipation Factor tanδ	Measured at 25°C ±5°C						
			C ≤ 0.1 µF		C ≥ 0.1 µF		
	10 kHz		0.0005		0.0005		
	100 kHz		0.001		-		
Insulation Resistance	Measured at +25°C, 100 VDC 60 seconds						
	Minimum Values Between Terminals						
	100,000 MΩ						
Test Voltage Between Terminals	2 x V_R applied for 2 seconds at 25°C ±5°C						

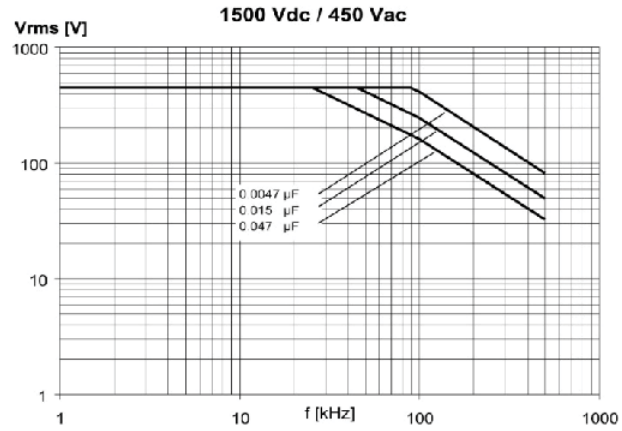
Maximum Voltage (V_{rms}) vs. Frequency (Sinusoidal Waveform/T ≤ +40ºC)

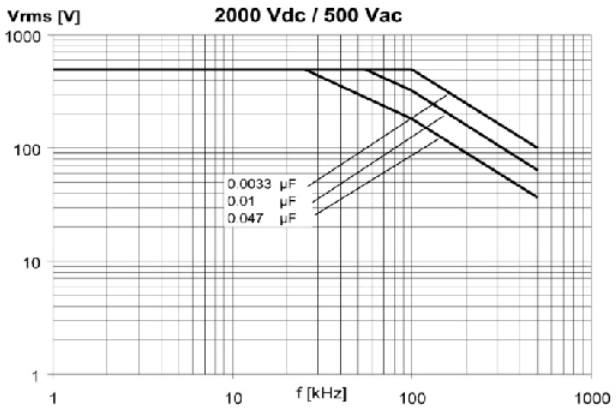




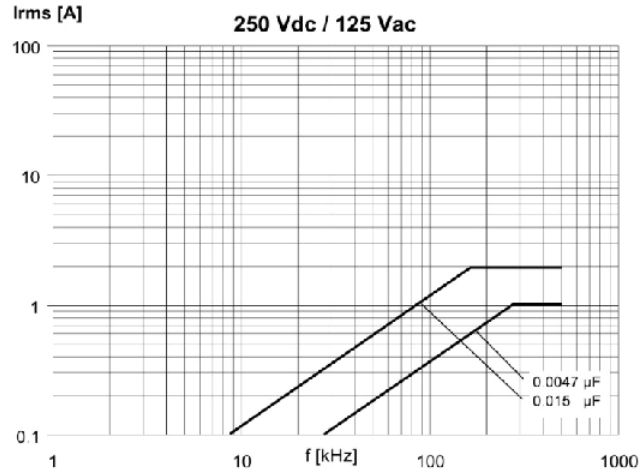


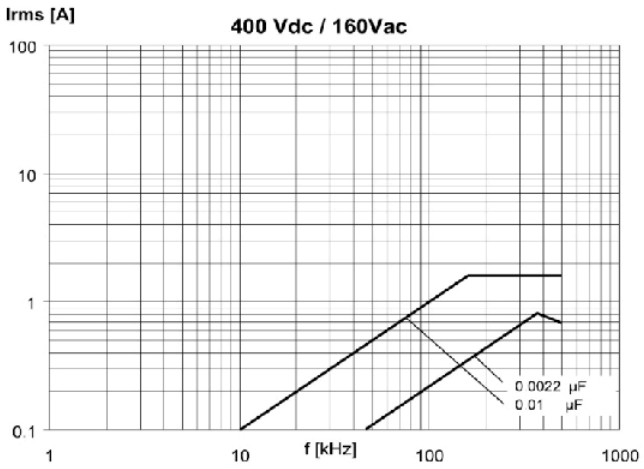


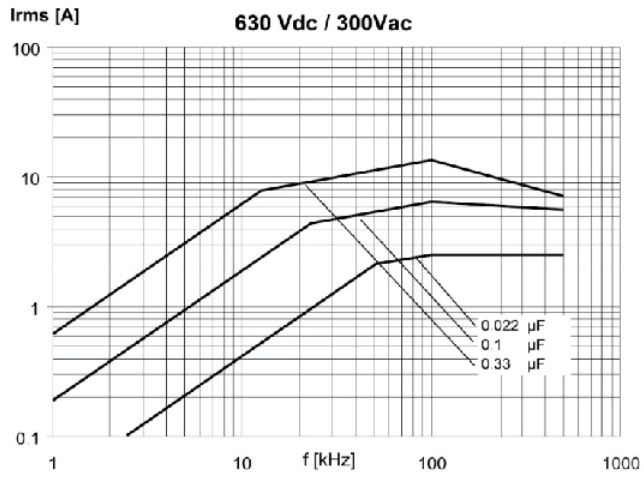


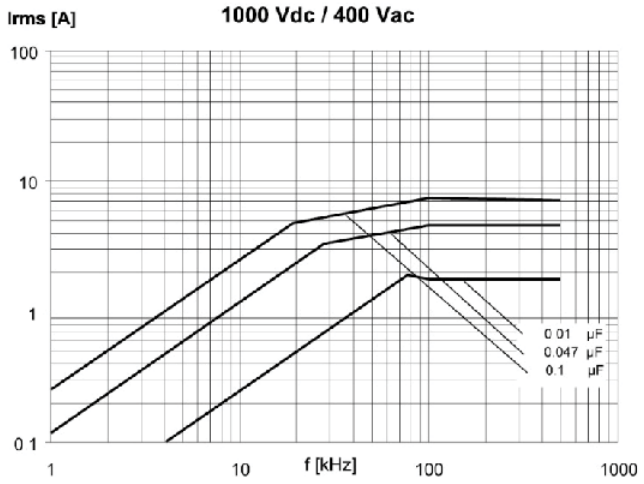


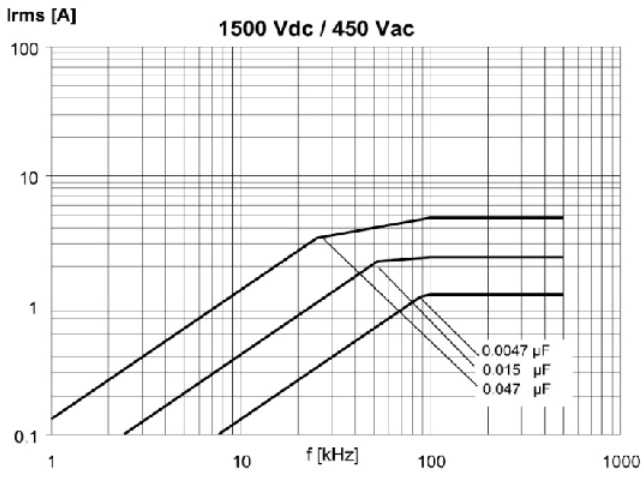
Maximum Current (I_{rms}) vs. Frequency (Sinusoidal Waveform/T ≤ +40ºC)

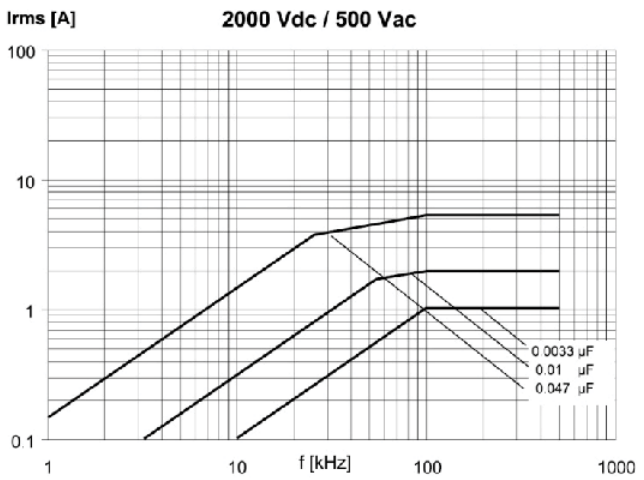












Environmental Test Data

Test	IEC Publication	Procedure	Requirements
Voltage Proof	60384–1 Clause 4.6	1.6 x V_R after 60 seconds	The capacitors must withstand the voltage without breakdowns or flashovers and without decreased insulation resistance below the value in each detail specification. No visible damage
	Clause 4.6 2.3	2 x V_R (minimum 400 VDC to case) after 60 seconds	As above
Resistance to Soldering Heat	60068–2–20 Method 1A	Solder bath at + 260°C ±5°C with screening	Immersion of the terminations into the solder bath shall be completed in a time not exceeding 1 second and the terminations shall remain immersed to the specified depth for 10 + 1 second and then be withdrawn. Δ C/C ≤ ±1.0% tanδ increase < 0.001 No visible damage
Climatic Sequence	60384–1 Paragraph 4:21	60068–2.2 dry heat 16 hours 60068–2–34 damp heat, one cycle 60068–2–1 Test Aa 2 hours	Insulation resistance: ≥ 100,000 MΩ for C_R ≤ 0.33 µF ≥ 30,000 MΩ • µF for C_R > 0.33 µF Δ C/C ≤ ±0.5% tanδ ≤ 1.2 x stated value at 100 kHz
Damp Heat Steady State	60068–2–3 Test Ca	+40°C and 90 – 95% RH	56 days no visible damage Insulation resistance: ≥ 50,000 MΩ for C_R ≤ 0.33 µF ≥ 15,000 MΩ • µF for C_R > 0.33 µF Δ C/C ≤ ±1% tanδ ≤ 1.2 x stated value at 100 kHz
Endurance, AC		1,000 hours at +85°C and 1.25 x V_R AC	No visible damage Δ C/C ≤ ±3% tanδ ≤ 1.5 x stated value at 100 kHz Insulation resistance: ≥ 100,000 MΩ for C_R ≤ 0.33 µF ≥ 30,000 MΩ • µF for C_R > 0.33 µF

Environmental Compliance

Capacitors with capacitance values ≤ 0.0042 µF are not RoHS Compliant.
Capacitors with capacitance values > 0.0042 µF are RoHS Compliant.

RoHS Compliant

Table 1 – Ratings & Part Number Reference

VDC	VAC	Cap Value (µF)	Dimensions in mm		dV/dt (V/µs)	Max K_0 (V^2/µs)	New KEMET Part Number	Legacy Part Number
			D max	L max				
100	63	0.0047	5.0	11.0	3000	0.60 E3	72EF1470(1)00(2)	A72EF1470(1)00(2)
100	63	0.0068	5.0	11.0	3000	0.60 E3	72EF1680(1)00(2)	A72EF1680(1)00(2)
100	63	0.01	5.0	11.0	3000	0.60 E3	72EF2100(1)00(2)	A72EF2100(1)00(2)
250	125	0.0022	5.0	11.0	5000	2.50 E3	72IF1220(1)00(2)	A72IF1220(1)00(2)
250	125	0.0033	5.0	11.0	5000	2.50 E3	72IF1330(1)00(2)	A72IF1330(1)00(2)
250	125	0.0047	7.0	16.5	4500	2.30 E3	72II1470(1)00(2)	A72II1470(1)00(2)
250	125	0.0068	7.0	16.5	4500	2.30 E3	72II1680(1)00(2)	A72II1680(1)00(2)
250	125	0.01	7.5	16.5	4500	2.30 E3	72II2100(1)00(2)	A72II2100(1)00(2)
250	125	0.015	8.5	16.5	4500	2.30 E3	72II2150(1)00(2)	A72II2150(1)00(2)
400	160	0.000047	5.0	11.0	13000	10.0 E3	72MF0047(1)00(2)	A72MF0047(1)00(2)
400	160	0.000068	5.0	11.0	13000	10.0 E3	72MF0068(1)00(2)	A72MF0068(1)00(2)
400	160	0.0001	5.0	11.0	13000	10.0 E3	72MF0100(1)00(2)	A72MF0100(1)00(2)
400	160	0.00015	5.0	11.0	13000	10.0 E3	72MF0150(1)00(2)	A72MF0150(1)00(2)
400	160	0.00022	5.0	11.0	13000	10.0 E3	72MF0220(1)00(2)	A72MF0220(1)00(2)
400	160	0.00033	5.0	11.0	13000	10.0 E3	72MF0330(1)00(2)	A72MF0330(1)00(2)
400	160	0.00047	5.0	11.0	13000	10.0 E3	72MF0470(1)00(2)	A72MF0470(1)00(2)
400	160	0.00068	5.0	11.0	13000	10.0 E3	72MF0680(1)00(2)	A72MF0680(1)00(2)
400	160	0.001	5.0	11.0	13000	10.0 E3	72MF1100(1)00(2)	A72MF1100(1)00(2)
400	160	0.0015	5.0	11.0	13000	10.0 E3	72MF1150(1)00(2)	A72MF1150(1)00(2)
400	160	0.0022	6.5	16.5	6500	5.2 E3	72MI1220(1)00(2)	A72MI1220(1)00(2)
400	160	0.0033	6.5	16.5	6500	5.2 E3	72MI1330(1)00(2)	A72MI1330(1)00(2)
400	160	0.0047	7.0	16.5	6500	5.2 E3	72MI1470(1)00(2)	A72MI1470(1)00(2)
400	160	0.0068	8.0	16.5	6500	5.2 E3	72MI1680(1)00(2)	A72MI1680(1)00(2)
400	160	0.01	9.0	16.5	6500	5.2 E3	72MI2100(1)00(2)	A72MI2100(1)00(2)
630	300	0.015	8.5	20.5	4300	5.4 E3	72PK2150(1)00(2)	A72PK2150(1)00(2)
630	300	0.022	9.5	20.5	4300	5.4 E3	72PK2220(1)00(2)	A72PK2220(1)00(2)
630	300	0.033	9.0	28.0	2600	3.3 E3	72PQ2330(1)00(2)	A72PQ2330(1)00(2)
630	300	0.047	10.0	28.0	2600	3.3 E3	72PQ2470(1)00(2)	A72PQ2470(1)00(2)
630	300	0.068	11.5	28.0	2600	3.3 E3	72PQ2680(1)00(2)	A72PQ2680(1)00(2)
630	300	0.1	13.5	28.0	2600	3.3 E3	72PQ3100(1)00(2)	A72PQ3100(1)00(2)
630	300	0.15	14.0	33.0	1800	2.3 E3	72PT3150(1)00(2)	A72PT3150(1)00(2)
630	300	0.22	16.5	33.0	1800	2.3 E3	72PT3220(1)00(2)	A72PT3220(1)00(2)
630	300	0.33	19.5	33.0	1800	2.3 E3	72PT3330(1)00(2)	A72PT3330(1)00(2)
1000	400	0.0033	8.5	20.5	14000	28.0 E3	72QK1330(1)00(2)	A72QK1330(1)00(2)
1000	400	0.0047	9.5	20.5	14000	28.0 E3	72QK1470(1)00(2)	A72QK1470(1)00(2)
1000	400	0.0068	8.0	28.0	5000	10.0 E3	72QQ1680(1)02(2)	A72QQ1680(1)02(2)
1000	400	0.01	8.5	28.0	5000	10.0 E3	72QQ2100(1)02(2)	A72QQ2100(1)02(2)
1000	400	0.015	10.0	28.0	5000	10.0 E3	72QQ2150(1)02(2)	A72QQ2150(1)02(2)
1000	400	0.022	11.0	28.0	5000	10.0 E3	72QQ2220(1)02(2)	A72QQ2220(1)02(2)
1000	400	0.033	13.0	28.0	5000	10.0 E3	72QQ2330(1)02(2)	A72QQ2330(1)02(2)
1000	400	0.047	14.0	33.0	3700	7.4 E3	72QT2470(1)02(2)	A72QT2470(1)02(2)
1000	400	0.068	16.0	33.0	3700	7.4 E3	72QT2680(1)02(2)	A72QT2680(1)02(2)
1000	400	0.1	19.0	33.0	3700	7.4 E3	72QT3100(1)02(2)	A72QT3100(1)02(2)
1500	450	0.0022	8.0	20.5	17000	51 E3	72SK1220(1)00(2)	A72SK1220(1)00(2)
1500	450	0.0033	9.5	20.5	17000	51 E3	72SK1330(1)00(2)	A72SK1330(1)00(2)
1500	450	0.0047	8.5	28.0	6000	18 E3	72SQ1470(1)00(2)	A72SQ1470(1)00(2)
1500	450	0.0068	8.5	28.0	6000	18 E3	72SQ1680(1)00(2)	A72SQ1680(1)00(2)
1500	450	0.01	9.5	28.0	6000	18 E3	72SQ2100(1)00(2)	A72SQ2100(1)00(2)
1500	450	0.015	11.0	28.0	6000	18 E3	72SQ2150(1)00(2)	A72SQ2150(1)00(2)
1500	450	0.022	12.5	28.0	6000	18 E3	72SQ2220(1)00(2)	A72SQ2220(1)00(2)
1500	450	0.033	13.5	33.0	4500	13 E3	72ST2330(1)00(2)	A72ST2330(1)00(2)
1500	450	0.047	16.0	33.0	4500	13 E3	72ST2470(1)00(2)	A72ST2470(1)00(2)
1500	450	0.068	18.0	33.0	4500	13 E3	72ST2680(1)00(2)	A72ST2680(1)00(2)
2000	500	0.001	8.5	20.5	27000	108 E3	72UK1100(1)00(2)	A72UK1100(1)00(2)
2000	500	0.0015	9.5	20.5	27000	108 E3	72UK1150(1)00(2)	A72UK1150(1)00(2)
2000	500	0.0022	11.0	20.5	27000	108 E3	72UK1220(1)00(2)	A72UK1220(1)00(2)
2000	500	0.0033	9.0	28.0	9800	39 E3	72UQ1330(1)00(2)	A72UQ1330(1)00(2)
2000	500	0.0047	9.5	28.0	9800	39 E3	72UQ1470(1)00(2)	A72UQ1470(1)00(2)
2000	500	0.0068	11.0	28.0	9800	39 E3	72UQ1680(1)00(2)	A72UQ1680(1)00(2)
VDC	VAC	Cap Value (µF)	B (mm)	H (mm)	dV/dt (V/µs)	Max K_0 (V^2/µs)	New KEMET Part Number	Legacy Part Number

(1) Insert lead and packaging code. See Ordering Options Table for available options.
(2) J = 5%, K = 10%, M = 20%.

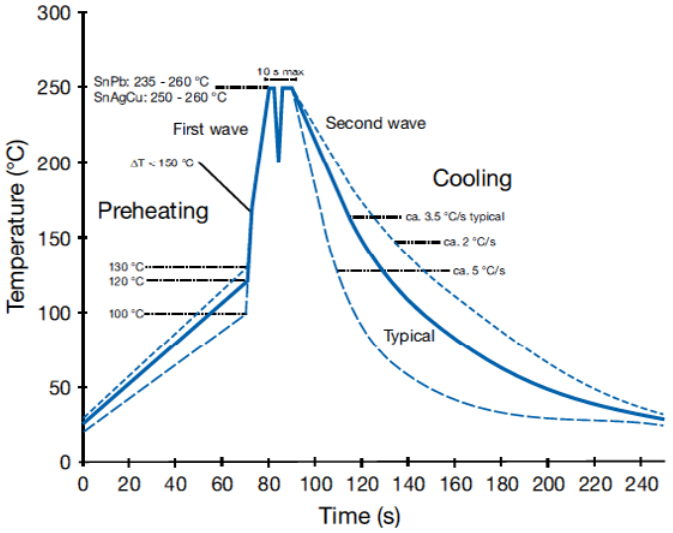
Table 1 – Ratings & Part Number Reference

VDC	VAC	Cap Value (µF)	Dimensions in mm		dV/dt (V/µs)	Max K_0 (V^2/µs)	New KEMET Part Number	Legacy Part Number
			D max	L max				
2000	500	0.01	13.0	28.0	9800	39 E3	72UQ2100(1)00(2)	A72UQ2100(1)00(2)
2000	500	0.015	13.5	33.0	7000	28 E3	72UT2150(1)00(2)	A72UT2150(1)00(2)
2000	500	0.022	16.0	33.0	7000	28 E3	72UT2220(1)00(2)	A72UT2220(1)00(2)
2000	500	0.033	20.0	33.0	7000	28 E3	72UT2330(1)00(2)	A72UT2330(1)00(2)
2000	500	0.047	22.5	33.0	7000	28 E3	72UT2470(1)00(2)	A72UT2470(1)00(2)
VDC	VAC	Cap Value (µF)	B (mm)	H (mm)	dV/dt (V/µs)	Max K_0 (V^2/µs)	New KEMET Part Number	Legacy Part Number

(1) Insert lead and packaging code. See Ordering Options Table for available options.
(2) J = 5%, K = 10%, M = 20%.

Soldering Process

The implementation of the RoHS Directive has required the selection SnAuCu (SAC) alloys or SnCu alloys as primary solder. This has increased the liquidus temperature from that of 183ºC for SnPb eutectic alloy to 217ºC – 221ºC for the new alloys. As a result, the heat stress to components, even in wave soldering, has increased considerably due to higher pre-heat and wave temperatures. Polypropylene capacitors are especially sensitive to heat (melting point of polypropylene is 160ºC – 170ºC). Wave soldering can be destructive especially for mechanically small polypropylene capacitors and great care must be taken during soldering. The solder profiles from KEMET are highly recommended. You may also refer to the wave soldering curve from IEC Publication 61760–1 Edition 2. Please consult KEMET with any questions.



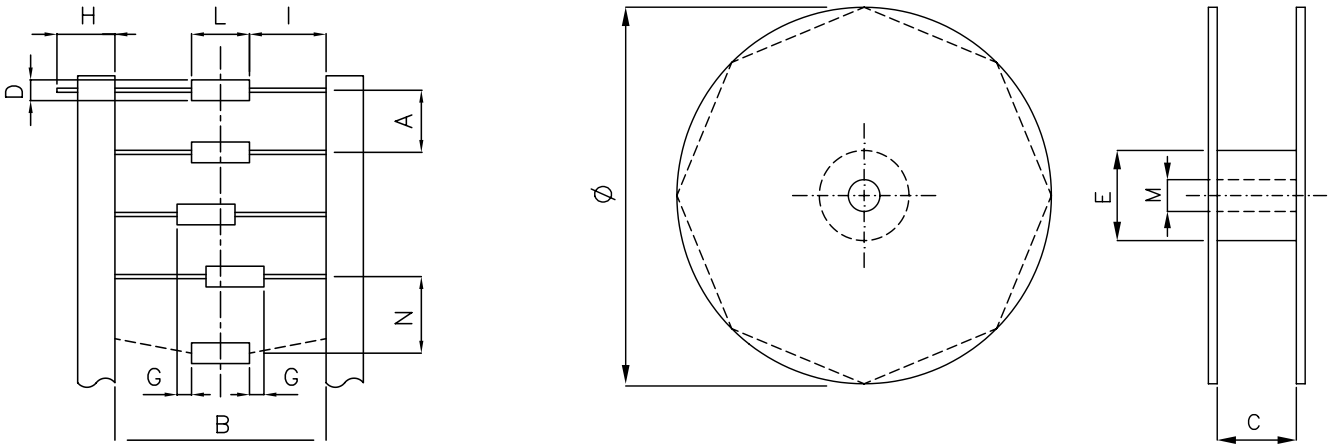
Marking

- KEMET's logo
- Series
- Dielectric code MKP
- Capacitance
- Capacitance tolerance
- Rated DC voltage

Packaging Quantities

Diameter	Length	Bulk Long Leads	Standard Reel ø 355 mm
5	11	1500	3000
6.5	16.5	1200	1300
7	16.5	1750	1100
7.5	16.5	1500	1000
8	16.5	1250	900
8	20.5	1000	900
8	28	500	900
8.5	16.5	1000	800
8.5	20.5	750	800
8.5	28	500	800
9	16.5	1000	800
9	28	500	800
9.5	20.5	750	600
9.5	28	500	600
10	28	500	600
11	20.5	500	400
11	28	500	400
11.5	28	300	400
12.5	28	300	400
13	28	300	400
13.5	28	300	300
13.5	33	300	300
14	33	300	300
16	33	200	250
16.5	33	200	250
18	33	200	200
19	33	150	150
19.5	33	150	150
20	33	150	150
22.5	33	100	

Lead Taping & Packaging (IEC 60286–1)



Taping Specification

Description	Symbol	Dimensions (mm)
Component diameter	D	4.5 – 19.5
Body length	L	11 – 33
Component lead spacing	A(1)	See Table 1
Reel core diameter	E	85
Arbor hole diameter	M	30
Reel diameter	ø	355 maximum
Tape width	H	6 ±0.5/9 ±1(2)
Body location (lateral deviation)	G	≤ 0.7
Body location (longitudinal deviation)	N	≤ 1.2
Tape spacing	B	See Table 2
Lead length from the component body to the adhesive tape	I	≥ 20
Distance between reel flanges	C	See Table 2

(1) Maximum cumulative feed hole error 1.5 mm per 6 parts.
(2) 9 ±1 for capacitor with L ≥ 31.5.

Table 1

Dimensions in mm	
Diameter	$A^{\pm 0.5}$
≤ 5	5
5.1 – 9.5	10
9.6 – 14.7	15
14.8 – 19.5	15

Table 2

Dimensions in mm			
Length	Class	$B^{\pm 1.5}$	C
≤ 11	I	52.4	75
14 – 20.5	II	63.6	86
≥ 26	III	73	98

General Purpose, Pulse and DC Transient Suppression

F5A Series Metallized Polyester Film with Integrated Ceramic Varistor, 18 – 63 VDC

Overview

The F5A Series is a metallized polypropylene (MKT) film capacitor with integrated ceramic capacitor encapsulated in a thermosetting resin-filled plastic box with tinned wire leads. Box material is solvent resistant and flame retardant meeting the requirements of UL 94 V–0.

Applications

Typical applications include worldwide use as EMI/RFI and transient voltage suppressors for automotive motors and other suppression applications. These include engine blower fans, central locking systems, heating/air-conditioning blowers, electric sun roofs, electric window regulators, fuel/oil pumps, electric windshield wipers and electrically operated seats. This through-hole EMI/RFI suppression element is mainly used for automotive applications without a printed circuit board, e.g., motor suppression or mixed through-hole and surface mount printed circuit boards.

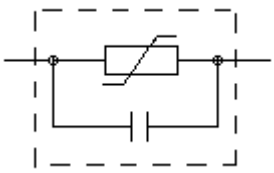
Benefits

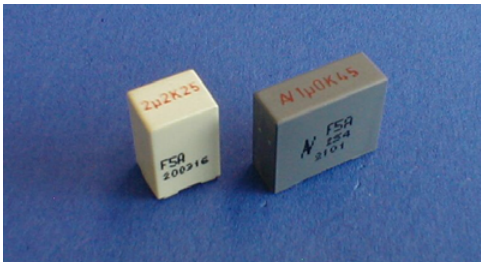
- Low inductive MKT capacitors in parallel construction with a ceramic varistor in a single case provide superior suppression results
- Approvals: AEC–Q200, ISO 7637
- Rated voltage: 18 – 63 VDC
- Capacitance range: 0.1 µF to 2.2 µF
- Lead spacing: 5 – 10 mm
- Capacitance tolerance: ±10%, ±20%
- Climatic category: 55/125/56 IEC 60068–1
- Tape and reel packaging in accordance with IEC 60286–2
- RoHS Compliant and lead-free terminations
- Operating temperature range: -55˚C to +125˚C

Part Number System

F5A	H	C	4100	DQ	A	6	K
Series	Rated Voltage (VDC)	Lead Spacing (mm)	Capacitance Code (pF)	Lead and Packaging Code	Varistor Voltage V_v @ 1 mA	Size Code	Capacitance Tolerance
Film Capacitor/ Ceramic Varistor Unit	B = 18 H = 25 J = 30 N = 45 C = 50 D = 63	C = 5 F = 10	Digits 2 – 4 indicate the first three digits of the capacitance value. First digit indicates the number of zeros to be added.	See Ordering Options Table	See Varistor Voltage Table	See Dimension Table	K = ±10% M = ±20%

Circuit Diagram

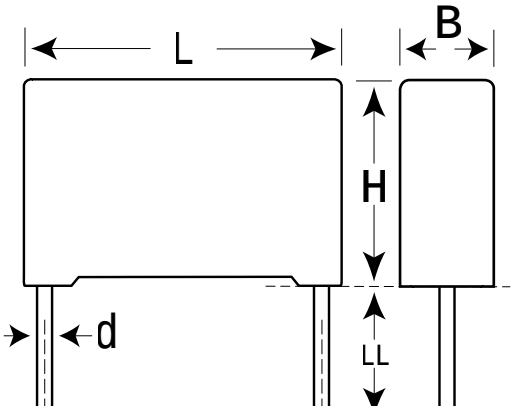




Ordering Options Table

Lead Spacing Nominal (mm)	Type of Leads and Packaging	Lead Length (mm)	Lead and Packaging Code
5	Standard Lead and Packaging Options		
	Bulk (Bag) – Short Leads	4 +2/-0	AA
	Ammo Pack	H_0= 18.5 +/-0.5	DQ
	Other Lead and Packaging Options		
	Bulk (Bag) – Long Leads	17 +1/-2	Z3
	Tape & Reel (Standard Reel)	H_0= 18.5 +/-0.5	CK
10	Standard Lead and Packaging Options		
	Bulk (Bag) – Short Leads	4 +2/-0	AA
	Ammo Pack	H_0= 18.5 +/-0.5	DQ
	Other Lead and Packaging Options		
	Bulk (Bag) – Long Leads	17 +1/-2	Z3
	Tape & Reel (Large Reel)	H_0= 18.5 +/-0.5	CK

Dimensions – Millimeters



Rated Capacitance µF	Size Code	p		B		H		L		d	
		Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance
0.1 – 0.47	5	5.0	+/-0.4	4.6	Maximum	9.6	Maximum	7.4	Maximum	0.6	+/-0.05
0.56 – 1.5	6	5.0	+/-0.4	5.1	Maximum	10.1	Maximum	7.5	Maximum	0.6	+/-0.05
1.8 – 2.2	7	5.0	+/-0.4	6.1	Maximum	11.1	Maximum	7.5	Maximum	0.6	+/-0.05
0.1 – 1.0	2	10.0	+/-0.4	5.2	Maximum	11.1	Maximum	13.4	Maximum	0.7	+/-0.05
1.2 – 1.5	3	10.0	+/-0.4	6.2	Maximum	12.1	Maximum	13.4	Maximum	0.7	+/-0.05
Note: See Ordering Options Table for lead length (LL) options.											

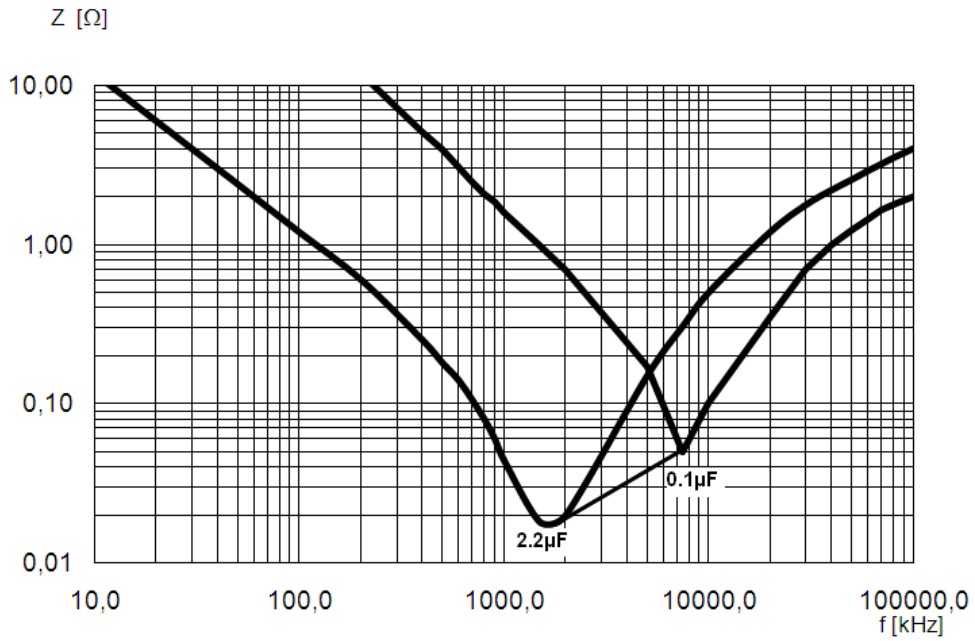
Varistor Voltage Table

Part Number Digit 4		Part Number Digit 12		Clamping Voltage (1A, Pulse 8/20 µs)
Letter	V_r (VDC)	Letter	V_v (VDC)	V_C (V)
B	18	B	22	38
B	18	E	27	44
H	25	A	33	54
J	30	D	39	65
J	30	I	47	77
N	45	B	56	90
C	50	C	68	110
D	63	C	82	135

Performance Characteristics

Rated Voltage	18 – 63 VDC (For temperature over 100°C a decreasing factor of 2% per degree has to be applied on the rated voltage V_R)
Capacitance Range	0.1 – 2.2 µF
Capacitance Tolerance	±10%, ±20%
Temperature Range	-55°C to +125°C
Climatic Category	55/125/56, IEC 60068–1
Leakage Current	≤ 50 µA at V_R
Approvals	AEC–Q200, ISO 7637
Dissipation Factor	0.01 (1 kHz at 25°C ±5°C)
Test Voltage Between Terminals	100 VDC
Insulation Resistance	V_R < 24 V 1MΩ @ 12 V, V_R ≥ 24 V 1MΩ @ 24 V
Varistor	Multilayer ceramic, EIA case size 1206
Peak Current Pulse	8/20 µs
Peak Current for V_v< 50 V	200 A
Peak Current for V_v> 50 V	100 A

Impedance Graph



Environmental Test Data

Test	Conditions	Performance	
Damp Heat Steady State	+40°C ±2°C and 93% ±2% RH, 56 days	Δ C/C	≤ 5%
		V_v change	≤ 10%
		DF change	≤ 50 x 10^{-4} @ 1 kHz
		Leakage current at V_R	≤ 100 µA
Endurance	+125°C ±2°C/100°C ±2°C, 0.5 x V_R/1.0 x V_R, 1,000 hours	Δ C/C	≤ 10%
		V_v change	≤ 10%
		DF change	≤ 50 x 10^{-4} @ 1 kHz
		Leakage current at V_R	≤ 100 µA
Resistance to Soldering Heat	+260°C ±5°C, 10 ±1 second	Δ C/C	≤ 3%
		V_v change	≤ 5%
		DF change	≤ 30 x 10^{-4} @ 1 kHz
		Leakage current at V_R	≤ 50 µA
Peak Current Derating	Reference CECC 42,000/Test C 2.1, 100 times (2 ms), 120 seconds between each current peak	Δ C/C	≤ 10%
		V_v change	≤ 10%
		DF change	≤ 30 x 10^{-4} @ 1 kHz
		Leakage current at V_R	≤ 100 µA
Long Term Stability (After 2 Years)	-40°C to +80°C, ≤ 70% Humidity	Δ C/C	≤ 3%
		V_v change	≤ 5%
		DF change	≤ 20 x 10^{-4} @ 1 kHz
		Leakage current at V_R	≤ 50 µA
Reliability Failure Criteria	Reference MIL HDB 217 +40°C ±2°C, 0.5 x V_R, ≤ 5 FIT	Δ C/C	> 10%
		V_v change	≤ 10%
		DF change	≤ 20 x 10^{-4} @ 1 kHz
		Leakage current at V_R	≤ 200 µA

Environmental Compliance

All KEMET EMI capacitors are RoHS Compliant.

RoHS Compliant

Table 1 – Ratings & Part Number Reference

Cap Value (µF)	VDC	Max Dimensions in mm			Lead Spacing (p)	Varistor Voltage (VDC)	New KEMET Part Number	Legacy Part Number
		B	H	L				
0.10	18	4.6	9.6	7.4	5.0	22	5ABC3100(1)B5(2)	F5ABC3100(1)B5(2)
0.10	18	4.6	9.6	7.4	5.0	27	5ABC3100(1)E5(2)	F5ABC3100(1)E5(2)
0.22	18	4.6	9.6	7.4	5.0	22	5ABC3220(1)B5(2)	F5ABC3220(1)B5(2)
0.22	18	4.6	9.6	7.4	5.0	27	5ABC3220(1)E5(2)	F5ABC3220(1)E5(2)
0.33	18	4.6	9.6	7.4	5.0	22	5ABC3330(1)B5(2)	F5ABC3330(1)B5(2)
0.33	18	4.6	9.6	7.4	5.0	27	5ABC3330(1)E5(2)	F5ABC3330(1)E5(2)
0.47	18	4.6	9.6	7.4	5.0	22	5ABC3470(1)B5(2)	F5ABC3470(1)B5(2)
0.47	18	4.6	9.6	7.4	5.0	27	5ABC3470(1)E5(2)	F5ABC3470(1)E5(2)
0.56	18	5.1	10.1	7.5	5.0	22	5ABC3560(1)B6(2)	F5ABC3560(1)B6(2)
0.56	18	5.1	10.1	7.5	5.0	27	5ABC3560(1)E6(2)	F5ABC3560(1)E6(2)
0.68	18	5.1	10.1	7.5	5.0	22	5ABC3680(1)B6(2)	F5ABC3680(1)B6(2)
0.68	18	5.1	10.1	7.5	5.0	27	5ABC3680(1)E6(2)	F5ABC3680(1)E6(2)
0.82	18	5.1	10.1	7.5	5.0	22	5ABC3820(1)B6(2)	F5ABC3820(1)B6(2)
0.82	18	5.1	10.1	7.5	5.0	27	5ABC3820(1)E6(2)	F5ABC3820(1)E6(2)
1.00	18	5.1	10.1	7.5	5.0	22	5ABC4100(1)B6(2)	F5ABC4100(1)B6(2)
1.00	18	5.1	10.1	7.5	5.0	27	5ABC4100(1)E6(2)	F5ABC4100(1)E6(2)
1.20	18	5.1	10.1	7.5	5.0	22	5ABC4120(1)B6(2)	F5ABC4120(1)B6(2)
1.20	18	5.1	10.1	7.5	5.0	27	5ABC4120(1)E6(2)	F5ABC4120(1)E6(2)
1.50	18	5.1	10.1	7.5	5.0	22	5ABC4150(1)B6(2)	F5ABC4150(1)B6(2)
1.50	18	5.1	10.1	7.5	5.0	27	5ABC4150(1)E6(2)	F5ABC4150(1)E6(2)
1.80	18	6.1	11.1	7.5	5.0	22	5ABC4180(1)B7(2)	F5ABC4180(1)B7(2)
1.80	18	6.1	11.1	7.5	5.0	27	5ABC4180(1)E7(2)	F5ABC4180(1)E7(2)
2.20	18	6.1	11.1	7.5	5.0	22	5ABC4220(1)B7(2)	F5ABC4220(1)B7(2)
2.20	18	6.1	11.1	7.5	5.0	27	5ABC4220(1)E7(2)	F5ABC4220(1)E7(2)
0.10	25	4.6	9.6	7.4	5.0	33	5AHC3100(1)A5(2)	F5AHC3100(1)A5(2)
0.22	25	4.6	9.6	7.4	5.0	33	5AHC3220(1)A5(2)	F5AHC3220(1)A5(2)
0.33	25	4.6	9.6	7.4	5.0	33	5AHC3330(1)A5(2)	F5AHC3330(1)A5(2)
0.47	25	4.6	9.6	7.4	5.0	33	5AHC3470(1)A5(2)	F5AHC3470(1)A5(2)
0.56	25	5.1	10.1	7.5	5.0	33	5AHC3560(1)A6(2)	F5AHC3560(1)A6(2)
0.68	25	5.1	10.1	7.5	5.0	33	5AHC3680(1)A6(2)	F5AHC3680(1)A6(2)
0.82	25	5.1	10.1	7.5	5.0	33	5AHC3820(1)A6(2)	F5AHC3820(1)A6(2)
1.00	25	5.1	10.1	7.5	5.0	33	5AHC4100(1)A6(2)	F5AHC4100(1)A6(2)
1.20	25	5.1	10.1	7.5	5.0	33	5AHC4120(1)A6(2)	F5AHC4120(1)A6(2)
1.50	25	5.1	10.1	7.5	5.0	33	5AHC4150(1)A6(2)	F5AHC4150(1)A6(2)
1.80	25	6.1	11.1	7.5	5.0	33	5AHC4180(1)A7(2)	F5AHC4180(1)A7(2)
2.20	25	6.1	11.1	7.5	5.0	33	5AHC4220(1)A7(2)	F5AHC4220(1)A7(2)
0.10	30	4.6	9.6	7.4	5.0	39	5AJC3100(1)D5(2)	F5AJC3100(1)D5(2)
0.10	30	4.6	9.6	7.4	5.0	47	5AJC3100(1)I5(2)	F5AJC3100(1)I5(2)
0.22	30	4.6	9.6	7.4	5.0	39	5AJC3220(1)D5(2)	F5AJC3220(1)D5(2)
0.22	30	4.6	9.6	7.4	5.0	47	5AJC3220(1)I5(2)	F5AJC3220(1)I5(2)
0.33	30	4.6	9.6	7.4	5.0	39	5AJC3330(1)D5(2)	F5AJC3330(1)D5(2)
0.33	30	4.6	9.6	7.4	5.0	47	5AJC3330(1)I5(2)	F5AJC3330(1)I5(2)
0.47	30	4.6	9.6	7.4	5.0	39	5AJC3470(1)D5(2)	F5AJC3470(1)D5(2)
0.47	30	4.6	9.6	7.4	5.0	47	5AJC3470(1)I5(2)	F5AJC3470(1)I5(2)
0.56	30	5.1	10.1	7.5	5.0	39	5AJC3560(1)D6(2)	F5AJC3560(1)D6(2)
0.56	30	5.1	10.1	7.5	5.0	47	5AJC3560(1)I6(2)	F5AJC3560(1)I6(2)
0.68	30	5.1	10.1	7.5	5.0	39	5AJC3680(1)D6(2)	F5AJC3680(1)D6(2)
0.68	30	5.1	10.1	7.5	5.0	47	5AJC3680(1)I6(2)	F5AJC3680(1)I6(2)
0.82	30	5.1	10.1	7.5	5.0	39	5AJC3820(1)D6(2)	F5AJC3820(1)D6(2)
0.82	30	5.1	10.1	7.5	5.0	47	5AJC3820(1)I6(2)	F5AJC3820(1)I6(2)
1.00	30	5.1	10.1	7.5	5.0	39	5AJC4100(1)D6(2)	F5AJC4100(1)D6(2)
1.00	30	5.1	10.1	7.5	5.0	47	5AJC4100(1)I6(2)	F5AJC4100(1)I6(2)
1.20	30	5.1	10.1	7.5	5.0	39	5AJC4120(1)D6(2)	F5AJC4120(1)D6(2)
1.20	30	5.1	10.1	7.5	5.0	47	5AJC4120(1)I6(2)	F5AJC4120(1)I6(2)
1.50	30	5.1	10.1	7.5	5.0	39	5AJC4150(1)D6(2)	F5AJC4150(1)D6(2)
1.50	30	5.1	10.1	7.5	5.0	47	5AJC4150(1)I6(2)	F5AJC4150(1)I6(2)
1.80	30	6.1	11.1	7.5	5.0	39	5AJC4180(1)D7(2)	F5AJC4180(1)D7(2)
1.80	30	6.1	11.1	7.5	5.0	47	5AJC4180(1)I7(2)	F5AJC4180(1)I7(2)
2.20	30	6.1	11.1	7.5	5.0	39	5AJC4220(1)D7(2)	F5AJC4220(1)D7(2)
Cap Value (µF)	VDC	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	Varistor Voltage (VDC)	New KEMET Part Number	Legacy Part Number

(1) Insert lead and packaging code. See Ordering Options Table for available options.
(2) K = 10%, M = 20%.

Roll Over for Order Info.

Table 1 – Ratings & Part Number Reference cont'd

Cap Value (µF)	VDC	Max Dimensions in mm			Lead Spacing (p)	Varistor Voltage (VDC)	New KEMET Part Number	Legacy Part Number
		B	H	L				
2.20	30	6.1	11.1	7.5	5.0	47	5AJC4220(1)I7(2)	F5AJC4220(1)I7(2)
0.10	45	4.6	9.6	7.4	5.0	56	5ANC3100(1)B5(2)	F5ANC3100(1)B5(2)
0.22	45	4.6	9.6	7.4	5.0	56	5ANC3220(1)B5(2)	F5ANC3220(1)B5(2)
0.33	45	4.6	9.6	7.4	5.0	56	5ANC3330(1)B5(2)	F5ANC3330(1)B5(2)
0.47	45	4.6	9.6	7.4	5.0	56	5ANC3470(1)B5(2)	F5ANC3470(1)B5(2)
0.56	45	5.1	10.1	7.5	5.0	56	5ANC3560(1)B6(2)	F5ANC3560(1)B6(2)
0.68	45	5.1	10.1	7.5	5.0	56	5ANC3680(1)B6(2)	F5ANC3680(1)B6(2)
0.82	45	5.1	10.1	7.5	5.0	56	5ANC3820(1)B6(2)	F5ANC3820(1)B6(2)
1.00	45	5.1	10.1	7.5	5.0	56	5ANC4100(1)B6(2)	F5ANC4100(1)B6(2)
1.20	45	5.1	10.1	7.5	5.0	56	5ANC4120(1)B6(2)	F5ANC4120(1)B6(2)
1.50	45	5.1	10.1	7.5	5.0	56	5ANC4150(1)B6(2)	F5ANC4150(1)B6(2)
1.80	45	6.1	11.1	7.5	5.0	56	5ANC4180(1)B7(2)	F5ANC4180(1)B7(2)
2.20	45	6.1	11.1	7.5	5.0	56	5ANC4220(1)B7(2)	F5ANC4220(1)B7(2)
0.10	50	4.6	9.6	7.4	5.0	68	5ACC3100(1)C5(2)	F5ACC3100(1)C5(2)
0.22	50	4.6	9.6	7.4	5.0	68	5ACC3220(1)C5(2)	F5ACC3220(1)C5(2)
0.33	50	4.6	9.6	7.4	5.0	68	5ACC3330(1)C5(2)	F5ACC3330(1)C5(2)
0.47	50	4.6	9.6	7.4	5.0	68	5ACC3470(1)C5(2)	F5ACC3470(1)C5(2)
0.56	50	5.1	10.1	7.5	5.0	68	5ACC3560(1)C6(2)	F5ACC3560(1)C6(2)
0.68	50	5.1	10.1	7.5	5.0	68	5ACC3680(1)C6(2)	F5ACC3680(1)C6(2)
0.82	50	5.1	10.1	7.5	5.0	68	5ACC3820(1)C6(2)	F5ACC3820(1)C6(2)
1.00	50	5.1	10.1	7.5	5.0	68	5ACC4100(1)C6(2)	F5ACC4100(1)C6(2)
1.20	50	5.1	10.1	7.5	5.0	68	5ACC4120(1)C6(2)	F5ACC4120(1)C6(2)
1.50	50	5.1	10.1	7.5	5.0	68	5ACC4150(1)C6(2)	F5ACC4150(1)C6(2)
1.80	50	6.1	11.1	7.5	5.0	68	5ACC4180(1)C7(2)	F5ACC4180(1)C7(2)
2.20	50	6.1	11.1	7.5	5.0	68	5ACC4220(1)C7(2)	F5ACC4220(1)C7(2)
0.10	63	4.6	9.6	7.4	5.0	68	5ADC3100(1)C5(2)	F5ADC3100(1)C5(2)
0.22	63	4.6	9.6	7.4	5.0	68	5ADC3220(1)C5(2)	F5ADC3220(1)C5(2)
0.33	63	4.6	9.6	7.4	5.0	68	5ADC3330(1)C5(2)	F5ADC3330(1)C5(2)
0.47	63	4.6	9.6	7.4	5.0	68	5ADC3470(1)C5(2)	F5ADC3470(1)C5(2)
0.56	63	5.1	10.1	7.5	5.0	68	5ADC3560(1)C6(2)	F5ADC3560(1)C6(2)
0.68	63	5.1	10.1	7.5	5.0	68	5ADC3680(1)C6(2)	F5ADC3680(1)C6(2)
0.82	63	5.1	10.1	7.5	5.0	68	5ADC3820(1)C6(2)	F5ADC3820(1)C6(2)
1.00	63	5.1	10.1	7.5	5.0	68	5ADC4100(1)C6(2)	F5ADC4100(1)C6(2)
1.20	63	5.1	10.1	7.5	5.0	68	5ADC4120(1)C6(2)	F5ADC4120(1)C6(2)
1.50	63	5.1	10.1	7.5	5.0	68	5ADC4150(1)C6(2)	F5ADC4150(1)C6(2)
1.80	63	6.1	11.1	7.5	5.0	68	5ADC4180(1)C7(2)	F5ADC4180(1)C7(2)
2.20	63	6.1	11.1	7.5	5.0	68	5ADC4220(1)C7(2)	F5ADC4220(1)C7(2)
0.10	18	5.2	11.1	13.4	10.0	22	5ABF3100(1)B2(2)	F5ABF3100(1)B2(2)
0.10	18	5.2	11.1	13.4	10.0	27	5ABF3100(1)E2(2)	F5ABF3100(1)E2(2)
0.22	18	5.2	11.1	13.4	10.0	22	5ABF3220(1)B2(2)	F5ABF3220(1)B2(2)
0.22	18	5.2	11.1	13.4	10.0	27	5ABF3220(1)E2(2)	F5ABF3220(1)E2(2)
0.33	18	5.2	11.1	13.4	10.0	22	5ABF3330(1)B2(2)	F5ABF3330(1)B2(2)
0.33	18	5.2	11.1	13.4	10.0	27	5ABF3330(1)E2(2)	F5ABF3330(1)E2(2)
0.47	18	5.2	11.1	13.4	10.0	22	5ABF3470(1)B2(2)	F5ABF3470(1)B2(2)
0.47	18	5.2	11.1	13.4	10.0	27	5ABF3470(1)E2(2)	F5ABF3470(1)E2(2)
0.56	18	5.2	11.1	13.4	10.0	22	5ABF3560(1)B2(2)	F5ABF3560(1)B2(2)
0.56	18	5.2	11.1	13.4	10.0	27	5ABF3560(1)E2(2)	F5ABF3560(1)E2(2)
0.68	18	5.2	11.1	13.4	10.0	22	5ABF3680(1)B2(2)	F5ABF3680(1)B2(2)
0.68	18	5.2	11.1	13.4	10.0	27	5ABF3680(1)E2(2)	F5ABF3680(1)E2(2)
0.82	18	5.2	11.1	13.4	10.0	22	5ABF3820(1)B2(2)	F5ABF3820(1)B2(2)
0.82	18	5.2	11.1	13.4	10.0	27	5ABF3820(1)E2(2)	F5ABF3820(1)E2(2)
1.00	18	5.2	11.1	13.4	10.0	22	5ABF4100(1)B2(2)	F5ABF4100(1)B2(2)
1.00	18	5.2	11.1	13.4	10.0	27	5ABF4100(1)E2(2)	F5ABF4100(1)E2(2)
1.20	18	6.2	12.1	13.4	10.0	22	5ABF4120(1)B3(2)	F5ABF4120(1)B3(2)
1.20	18	6.2	12.1	13.4	10.0	27	5ABF4120(1)E3(2)	F5ABF4120(1)E3(2)
1.50	18	6.2	12.1	13.4	10.0	22	5ABF4150(1)B3(2)	F5ABF4150(1)B3(2)
1.50	18	6.2	12.1	13.4	10.0	27	5ABF4150(1)E3(2)	F5ABF4150(1)E3(2)
0.10	25	5.2	11.1	13.4	10.0	33	5AHF3100(1)A2(2)	F5AHF3100(1)A2(2)
0.22	25	5.2	11.1	13.4	10.0	33	5AHF3220(1)A2(2)	F5AHF3220(1)A2(2)
Cap Value (µF)	VDC	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	Varistor Voltage (VDC)	New KEMET Part Number	Legacy Part Number

(1) Insert lead and packaging code. See Ordering Options Table for available options.
(2) K = 10%, M = 20%.

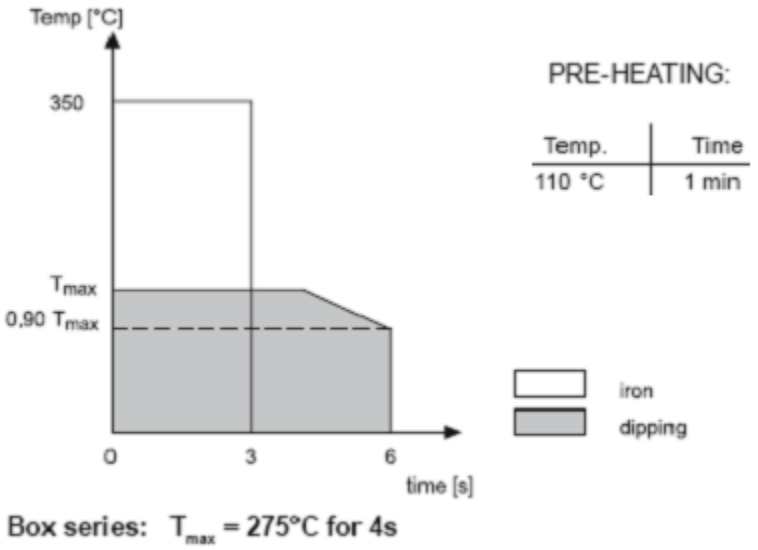
Table 1 – Ratings & Part Number Reference cont'd

Cap Value (µF)	VDC	Max Dimensions in mm			Lead Spacing (p)	Varistor Voltage (VDC)	New KEMET Part Number	Legacy Part Number
		B	H	L				
0.33	25	5.2	11.1	13.4	10.0	33	5AHF3330(1)A2(2)	F5AHF3330(1)A2(2)
0.47	25	5.2	11.1	13.4	10.0	33	5AHF3470(1)A2(2)	F5AHF3470(1)A2(2)
0.56	25	5.2	11.1	13.4	10.0	33	5AHF3560(1)A2(2)	F5AHF3560(1)A2(2)
0.68	25	5.2	11.1	13.4	10.0	33	5AHF3680(1)A2(2)	F5AHF3680(1)A2(2)
0.82	25	5.2	11.1	13.4	10.0	33	5AHF3820(1)A2(2)	F5AHF3820(1)A2(2)
1.00	25	5.2	11.1	13.4	10.0	33	5AHF4100(1)A2(2)	F5AHF4100(1)A2(2)
1.20	25	6.2	12.1	13.4	10.0	33	5AHF4120(1)A3(2)	F5AHF4120(1)A3(2)
1.50	25	6.2	12.1	13.4	10.0	33	5AHF4150(1)A3(2)	F5AHF4150(1)A3(2)
0.10	30	5.2	11.1	13.4	10.0	39	5AJF3100(1)D2(2)	F5AJF3100(1)D2(2)
0.10	30	5.2	11.1	13.4	10.0	47	5AJF3100(1)I2(2)	F5AJF3100(1)I2(2)
0.22	30	5.2	11.1	13.4	10.0	39	5AJF3220(1)D2(2)	F5AJF3220(1)D2(2)
0.22	30	5.2	11.1	13.4	10.0	47	5AJF3220(1)I2(2)	F5AJF3220(1)I2(2)
0.33	30	5.2	11.1	13.4	10.0	39	5AJF3330(1)D2(2)	F5AJF3330(1)D2(2)
0.33	30	5.2	11.1	13.4	10.0	47	5AJF3330(1)I2(2)	F5AJF3330(1)I2(2)
0.47	30	5.2	11.1	13.4	10.0	39	5AJF3470(1)D2(2)	F5AJF3470(1)D2(2)
0.47	30	5.2	11.1	13.4	10.0	47	5AJF3470(1)I2(2)	F5AJF3470(1)I2(2)
0.56	30	5.2	11.1	13.4	10.0	39	5AJF3560(1)D2(2)	F5AJF3560(1)D2(2)
0.56	30	5.2	11.1	13.4	10.0	47	5AJF3560(1)I2(2)	F5AJF3560(1)I2(2)
0.68	30	5.2	11.1	13.4	10.0	39	5AJF3680(1)D2(2)	F5AJF3680(1)D2(2)
0.68	30	5.2	11.1	13.4	10.0	47	5AJF3680(1)I2(2)	F5AJF3680(1)I2(2)
0.82	30	5.2	11.1	13.4	10.0	39	5AJF3820(1)D2(2)	F5AJF3820(1)D2(2)
0.82	30	5.2	11.1	13.4	10.0	47	5AJF3820(1)I2(2)	F5AJF3820(1)I2(2)
1.00	30	5.2	11.1	13.4	10.0	39	5AJF4100(1)D2(2)	F5AJF4100(1)D2(2)
1.00	30	5.2	11.1	13.4	10.0	47	5AJF4100(1)I2(2)	F5AJF4100(1)I2(2)
1.20	30	6.2	12.1	13.4	10.0	39	5AJF4120(1)D3(2)	F5AJF4120(1)D3(2)
1.20	30	6.2	12.1	13.4	10.0	47	5AJF4120(1)I3(2)	F5AJF4120(1)I3(2)
1.50	30	6.2	12.1	13.4	10.0	39	5AJF4150(1)D3(2)	F5AJF4150(1)D3(2)
1.50	30	6.2	12.1	13.4	10.0	47	5AJF4150(1)I3(2)	F5AJF4150(1)I3(2)
0.10	45	5.2	11.1	13.4	10.0	56	5ANF3100(1)B2(2)	F5ANF3100(1)B2(2)
0.22	45	5.2	11.1	13.4	10.0	56	5ANF3220(1)B2(2)	F5ANF3220(1)B2(2)
0.33	45	5.2	11.1	13.4	10.0	56	5ANF3330(1)B2(2)	F5ANF3330(1)B2(2)
0.47	45	5.2	11.1	13.4	10.0	56	5ANF3470(1)B2(2)	F5ANF3470(1)B2(2)
0.56	45	5.2	11.1	13.4	10.0	56	5ANF3560(1)B2(2)	F5ANF3560(1)B2(2)
0.68	45	5.2	11.1	13.4	10.0	56	5ANF3680(1)B2(2)	F5ANF3680(1)B2(2)
0.82	45	5.2	11.1	13.4	10.0	56	5ANF3820(1)B2(2)	F5ANF3820(1)B2(2)
1.00	45	5.2	11.1	13.4	10.0	56	5ANF4100(1)B2(2)	F5ANF4100(1)B2(2)
1.20	45	6.2	12.1	13.4	10.0	56	5ANF4120(1)B3(2)	F5ANF4120(1)B3(2)
1.50	45	6.2	12.1	13.4	10.0	56	5ANF4150(1)B3(2)	F5ANF4150(1)B3(2)
0.10	50	5.2	11.1	13.4	10.0	68	5ACF3100(1)C2(2)	F5ACF3100(1)C2(2)
0.22	50	5.2	11.1	13.4	10.0	68	5ACF3220(1)C2(2)	F5ACF3220(1)C2(2)
0.33	50	5.2	11.1	13.4	10.0	68	5ACF3330(1)C2(2)	F5ACF3330(1)C2(2)
0.47	50	5.2	11.1	13.4	10.0	68	5ACF3470(1)C2(2)	F5ACF3470(1)C2(2)
0.56	50	5.2	11.1	13.4	10.0	68	5ACF3560(1)C2(2)	F5ACF3560(1)C2(2)
0.68	50	5.2	11.1	13.4	10.0	68	5ACF3680(1)C2(2)	F5ACF3680(1)C2(2)
0.82	50	5.2	11.1	13.4	10.0	68	5ACF3820(1)C2(2)	F5ACF3820(1)C2(2)
1.00	50	5.2	11.1	13.4	10.0	68	5ACF4100(1)C2(2)	F5ACF4100(1)C2(2)
1.20	50	6.2	12.1	13.4	10.0	68	5ACF4120(1)C3(2)	F5ACF4120(1)C3(2)
1.50	50	6.2	12.1	13.4	10.0	68	5ACF4150(1)C3(2)	F5ACF4150(1)C3(2)
0.10	63	5.2	11.1	13.4	10.0	68	5ADF3100(1)C2(2)	F5ADF3100(1)C2(2)
0.22	63	5.2	11.1	13.4	10.0	68	5ADF3220(1)C2(2)	F5ADF3220(1)C2(2)
0.33	63	5.2	11.1	13.4	10.0	68	5ADF3330(1)C2(2)	F5ADF3330(1)C2(2)
0.47	63	5.2	11.1	13.4	10.0	68	5ADF3470(1)C2(2)	F5ADF3470(1)C2(2)
0.56	63	5.2	11.1	13.4	10.0	68	5ADF3560(1)C2(2)	F5ADF3560(1)C2(2)
0.68	63	5.2	11.1	13.4	10.0	68	5ADF3680(1)C2(2)	F5ADF3680(1)C2(2)
0.82	63	5.2	11.1	13.4	10.0	68	5ADF3820(1)C2(2)	F5ADF3820(1)C2(2)
1.00	63	5.2	11.1	13.4	10.0	68	5ADF4100(1)C2(2)	F5ADF4100(1)C2(2)
1.20	63	6.2	12.1	13.4	10.0	68	5ADF4120(1)C3(2)	F5ADF4120(1)C3(2)
1.50	63	6.2	12.1	13.4	10.0	68	5ADF4150(1)C3(2)	F5ADF4150(1)C3(2)
Cap Value (µF)	VDC	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	Varistor Voltage (VDC)	New KEMET Part Number	Legacy Part Number

(1) Insert lead and packaging code. See Ordering Options Table for available options.
(2) K = 10%, M = 20%.

Maximum Soldering Temperature

- Set the temperature so that inside the element the maximum temperature is below 160°C
- Solder within the following temperature profiles, especially for iron soldering:



Box series: T_{max} = 275°C for 4s

General Conditions

- If two solderings are needed, please apply a recovery time until the temperature on the capacitor surface is below 50°C.
- Avoid any passing through adhesive curing oven when fixing surface mount parts in combination with through-hole parts. Insert through-hole parts only after the curing of surface mount parts.
- Avoid reflow soldering by combining the lead type with surface mount parts

Marking

- Capacitance
- Tolerance
- DC rated voltage
- Series (F5A)
- Manufacturing date code

Packaging Quantities

Lead Spacing	Thickness (mm)	Height (mm)	Length (mm)	Bulk Short Leads	Bulk Long Leads	Standard Reel ø 355 mm	Large Reel ø 500 mm	Ammo
5	4.6	9.6	7.4	1500	2000	1400		1900
	5.1	10.1	7.5	1000	1500	1200		1700
	6.1	11.1	7.5	2000	1000	1000		1400
	7.3	13.1	7.5	1500	750	800		1150
10	5.2	11.1	13.4	1300	2000	600	1250	800
	6.2	12.1	13.4	1000	1800	500	1000	680

General Purpose, Pulse and DC Transient Suppression

F5B Series Metallized Polyester Film with Integrated Suppression Diode, 18 – 63 VDC

Overview

The F5B Series is a metallized polyester film capacitor with an integrated suppression diode encapsulated in a thermosetting resin-filled plastic box with tinned wire leads. Box material is solvent resistant and flame retardant meeting the requirements of UL 94 V–0.

Applications

Typical applications include worldwide use as EMI/RFI and advanced transient voltage suppressors for automotive motors and other suppression applications such as engine blower fans, central locking systems, heating/air-conditioning blowers, electric sun roofs, electric window regulators, fuel/oil pumps, electric windshield wipers and electrically operated seats. This through-hole EMI/RFI suppression element is mainly used for automotive applications without a printed circuit board, e.g., motor suppression or mixed through-hole and surface mount printed circuit boards.

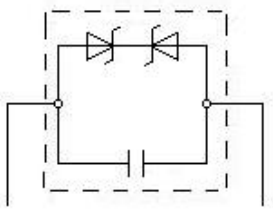
Benefits

- Low inductive MKT capacitors in parallel construction with a high power bidirectional transient voltage suppressor diode in a single case provide superior suppression results
- Approvals: AEC–Q200 (in progress), ISO7637
- Rated voltage: 18 – 63 VDC
- Capacitance range: 0.1 µF to 2.2 µF
- Lead spacing: 5 mm
- Capacitance tolerance: ±10%, ±20%
- Climatic category: 55/125/56, IEC 60068-1
- Tape and reel packaging in accordance with IEC 60286-2
- RoHS Compliant and lead-free terminations
- Operating temperature range: -55˚C to +125˚C

Part Number System

F5B	H	C	4100	DQ	A	7	K
Series	Rated Voltage (VDC)	Lead Spacing (mm)	Capacitance Code (pF)	Lead and Packaging Code	Diode Breakdown Voltage V_{BR} @ 1 mA	Size Code	Capacitance Tolerance
Film Capacitor/ Diode Unit	B = 18 H = 25 J = 30 N = 45 C = 50 D = 63	C = 5	Digits 2 – 4 indicate the first three digits of the capacitance value. First digit indicates the number of zeros to be added.	See Ordering Options Table	See Diode Breakdown Voltage Table	See Dimension Table	K = ±10% M = ±20%

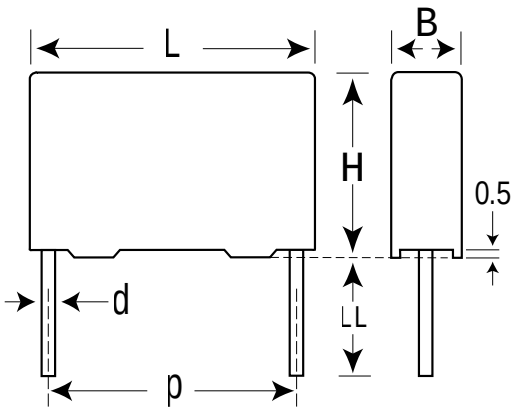
Circuit Diagram



Ordering Options Table

Lead Spacing Nominal (mm)	Type of Leads and Packaging	Lead Length (mm)	Lead and Packaging Code
5	Standard Lead and Packaging Options		
	Bulk (Bag) – Short Leads	4 +2/-0	AA
	Ammo Pack	H_0= 18.5 +/-0.5	DQ
	Other Lead and Packaging Options		
	Bulk (Bag) – Long Leads	17 +1/-2	Z3
	Tape & Reel (Standard Reel)	H_0= 18.5 +/-0.5	CK

Dimensions – Millimeters



Rated Capacitance µF	Size Code	p		B		H		L		d	
		Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance
0.1 – 1.2	7	5	+/-0.4	6.1	Maximum	11.1	Maximum	7.5	Maximum	0.6	+/-0.05
1.5 – 2.2	8	5	+/-0.4	7.3	Maximum	13.1	Maximum	7.5	Maximum	0.6	+/-0.05
Note: See Ordering Options Table for lead length (LL) options.											

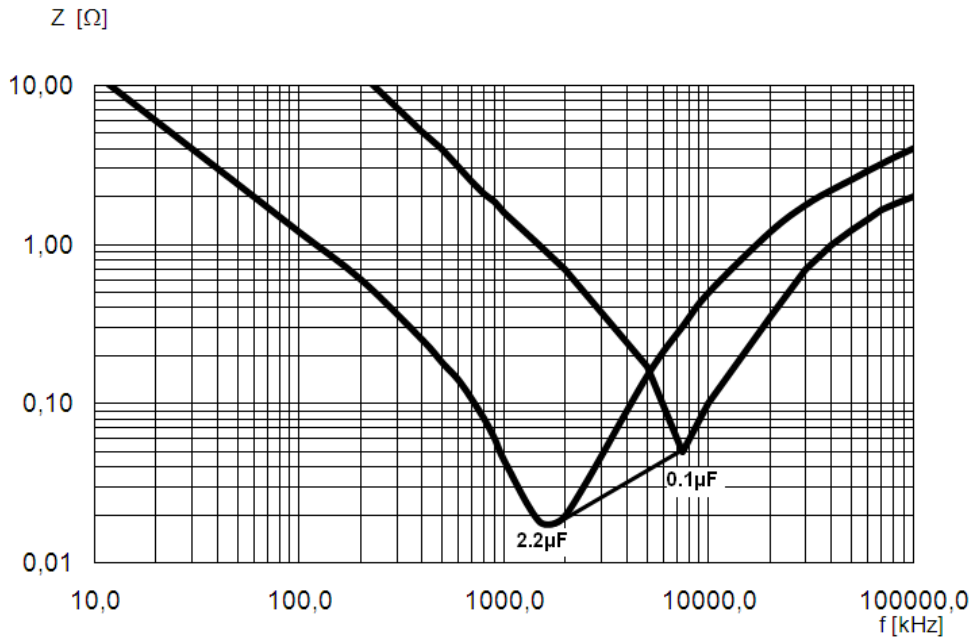
Diode Breakdown Voltage & Clamping Voltage Table

Part Number Digit 4		Part Number Digit 12		Clamping Voltage (Pulse 10/700 µs)	
Letter	V_r (VDC)	Letter	V_{BR} (VDC)	V_C (V)	I_p (A)
B	18	B	22	28	24
B	18	E	27	33	31
H	25	A	30	36	20
H	25	C	33	40	19
J	30	D	36	43	18
J	30	I	39	46	17
J	30	N	44	52	16
N	45	B	53	62	14
C	50	C	68	78	12
D	63	C	78	89	11

Performance Characteristics

Rated Voltage	18 – 63 VDC (For temperature over 100°C a decreasing factor of 2% per degree has to be applied on the rated voltage V_R)
Capacitance Range	0.1 – 2.2 µF
Capacitance Tolerance	±10%, ±20%
Temperature Range	-55°C to +125°C
Climatic Category	55/125/56, IEC 60068–1
Leakage Current	≤ 50 µA at V_R
Approvals	AEC–Q200 (in progress), ISO 7637–2
Dissipation Factor	0.01 (1 kHz at 25°C ± 5°C)
Test Voltage Between Terminals	100 VDC
Insulation Resistance	V_R < 24 V 1MΩ @ 12 V, V_R ≥ 24 V 1MΩ @ 24 V
Diode	600 W TVS diode, bidirectional
Peak Current Pulse	10/700 µs
Peak Current	See Diode Breakdown Voltage & Clamping Voltage Table

Impedance Graph



Environmental Test Data

Test	Conditions	Performance	
Damp Heat Steady State	+40°C ±2°C and 93% ±2% RH, 56 days	Δ C/C	≤ 5%
		V_{BR} change	≤ 10%
		DF change	≤ 50 x 10^{-4} @ 1 kHz
		Leakage current at V_R	≤ 100 µA
Endurance	+125°C ±2°C/100°C ±2°C, 0.5 x V_R/1.0 x V_R, 1,000 hours	Δ C/C	≤ 10%
		V_{BR} change	≤ 10%
		DF change	≤ 50 x 10^{-4} @ 1 kHz
		Leakage current at V_R	≤ 100 µA
Resistance to Soldering Heat	+260°C ±5°C, 10 ±1 second	Δ C/C	≤ 3%
		V_{BR} change	≤ 5%
		DF change	≤ 30 x 10^{-4} @ 1 kHz
		Leakage current at V_R	≤ 50 µA
Peak Current Derating	Pulse 10/700 µs, 300 V_p, 100 cycles with alternating polarity, 120 seconds between each current peak	Δ C/C	≤ 10%
		V_{BR} change	≤ 10%
		DF change	≤ 30 x 10^{-4} @ 1 kHz
		Leakage current at V_R	≤ 100 µA
Long Term Stability (After 2 Years)	-40°C to +80°C, ≤ 70% humidity	Δ C/C	≤ 3%
		V_{BR} change	≤ 5%
		DF change	≤ 20 x 10^{-4} @ 1 kHz
		Leakage current at V_R	≤ 50 µA
Reliability Failure Criteria	Reference MIL HDB 217 +40°C ±2°C, 0.5 x V_R, ≤ 5 FIT	Δ C/C	> 10%
		V_{BR} change	≤ 10%
		DF change	≤ 20 x 10^{-4} @ 1 kHz
		Leakage current at V_R	≤ 200 µA

Environmental Compliance

All KEMET EMI capacitors are RoHS Compliant.

RoHS Compliant

Table 1 – Ratings & Part Number Reference

Cap Value (µF)	VDC	Max Dimensions in mm			Lead Spacing (p)	Varistor Voltage (VDC)	New KEMET Part Number	Legacy Part Number
		B	H	L				
0.10	18	6.1	11.1	7.5	5.0	22	5BBC3100(1)B7(2)	F5BBC3100(1)B7(2)
0.10	18	6.1	11.1	7.5	5.0	27	5BBC3100(1)E7(2)	F5BBC3100(1)E7(2)
0.22	18	6.1	11.1	7.5	5.0	22	5BBC3220(1)B7(2)	F5BBC3220(1)B7(2)
0.22	18	6.1	11.1	7.5	5.0	27	5BBC3220(1)E7(2)	F5BBC3220(1)E7(2)
0.33	18	6.1	11.1	7.5	5.0	22	5BBC3330(1)B7(2)	F5BBC3330(1)B7(2)
0.33	18	6.1	11.1	7.5	5.0	27	5BBC3330(1)E7(2)	F5BBC3330(1)E7(2)
0.47	18	6.1	11.1	7.5	5.0	22	5BBC3470(1)B7(2)	F5BBC3470(1)B7(2)
0.47	18	6.1	11.1	7.5	5.0	27	5BBC3470(1)E7(2)	F5BBC3470(1)E7(2)
0.56	18	6.1	11.1	7.5	5.0	22	5BBC3560(1)B7(2)	F5BBC3560(1)B7(2)
0.56	18	6.1	11.1	7.5	5.0	27	5BBC3560(1)E7(2)	F5BBC3560(1)E7(2)
0.68	18	6.1	11.1	7.5	5.0	22	5BBC3680(1)B7(2)	F5BBC3680(1)B7(2)
0.68	18	6.1	11.1	7.5	5.0	27	5BBC3680(1)E7(2)	F5BBC3680(1)E7(2)
0.82	18	6.1	11.1	7.5	5.0	22	5BBC3820(1)B7(2)	F5BBC3820(1)B7(2)
0.82	18	6.1	11.1	7.5	5.0	27	5BBC3820(1)E7(2)	F5BBC3820(1)E7(2)
1.00	18	6.1	11.1	7.5	5.0	22	5BBC4100(1)B7(2)	F5BBC4100(1)B7(2)
1.00	18	6.1	11.1	7.5	5.0	27	5BBC4100(1)E7(2)	F5BBC4100(1)E7(2)
1.20	18	6.1	11.1	7.5	5.0	22	5BBC4120(1)B7(2)	F5BBC4120(1)B7(2)
1.20	18	6.1	11.1	7.5	5.0	27	5BBC4120(1)E7(2)	F5BBC4120(1)E7(2)
1.50	18	7.3	13.1	7.5	5.0	22	5BBC4150(1)B8(2)	F5BBC4150(1)B8(2)
1.50	18	7.3	13.1	7.5	5.0	27	5BBC4150(1)E8(2)	F5BBC4150(1)E8(2)
1.80	18	7.3	13.1	7.5	5.0	22	5BBC4180(1)B8(2)	F5BBC4180(1)B8(2)
1.80	18	7.3	13.1	7.5	5.0	27	5BBC4180(1)E8(2)	F5BBC4180(1)E8(2)
2.20	18	7.3	13.1	7.5	5.0	22	5BBC4220(1)B8(2)	F5BBC4220(1)B8(2)
2.20	18	7.3	13.1	7.5	5.0	27	5BBC4220(1)E8(2)	F5BBC4220(1)E8(2)
0.10	25	6.1	11.1	7.5	5.0	30	5BHC3100(1)A7(2)	F5BHC3100(1)A7(2)
0.10	25	6.1	11.1	7.5	5.0	33	5BHC3100(1)C7(2)	F5BHC3100(1)C7(2)
0.22	25	6.1	11.1	7.5	5.0	30	5BHC3220(1)A7(2)	F5BHC3220(1)A7(2)
0.22	25	6.1	11.1	7.5	5.0	33	5BHC3220(1)C7(2)	F5BHC3220(1)C7(2)
0.33	25	6.1	11.1	7.5	5.0	30	5BHC3330(1)A7(2)	F5BHC3330(1)A7(2)
0.33	25	6.1	11.1	7.5	5.0	33	5BHC3330(1)C7(2)	F5BHC3330(1)C7(2)
0.47	25	6.1	11.1	7.5	5.0	30	5BHC3470(1)A7(2)	F5BHC3470(1)A7(2)
0.47	25	6.1	11.1	7.5	5.0	33	5BHC3470(1)C7(2)	F5BHC3470(1)C7(2)
0.56	25	6.1	11.1	7.5	5.0	30	5BHC3560(1)A7(2)	F5BHC3560(1)A7(2)
0.56	25	6.1	11.1	7.5	5.0	33	5BHC3560(1)C7(2)	F5BHC3560(1)C7(2)
0.68	25	6.1	11.1	7.5	5.0	30	5BHC3680(1)A7(2)	F5BHC3680(1)A7(2)
0.68	25	6.1	11.1	7.5	5.0	33	5BHC3680(1)C7(2)	F5BHC3680(1)C7(2)
0.82	25	6.1	11.1	7.5	5.0	30	5BHC3820(1)A7(2)	F5BHC3820(1)A7(2)
0.82	25	6.1	11.1	7.5	5.0	33	5BHC3820(1)C7(2)	F5BHC3820(1)C7(2)
1.00	25	6.1	11.1	7.5	5.0	30	5BHC4100(1)A7(2)	F5BHC4100(1)A7(2)
1.00	25	6.1	11.1	7.5	5.0	33	5BHC4100(1)C7(2)	F5BHC4100(1)C7(2)
1.20	25	6.1	11.1	7.5	5.0	30	5BHC4120(1)A7(2)	F5BHC4120(1)A7(2)
1.20	25	6.1	11.1	7.5	5.0	33	5BHC4120(1)C7(2)	F5BHC4120(1)C7(2)
1.50	25	7.3	13.1	7.5	5.0	30	5BHC4150(1)A8(2)	F5BHC4150(1)A8(2)
1.50	25	7.3	13.1	7.5	5.0	33	5BHC4150(1)C8(2)	F5BHC4150(1)C8(2)
1.80	25	7.3	13.1	7.5	5.0	30	5BHC4180(1)A8(2)	F5BHC4180(1)A8(2)
1.80	25	7.3	13.1	7.5	5.0	33	5BHC4180(1)C8(2)	F5BHC4180(1)C8(2)
2.20	25	7.3	13.1	7.5	5.0	30	5BHC4220(1)A8(2)	F5BHC4220(1)A8(2)
2.20	25	7.3	13.1	7.5	5.0	33	5BHC4220(1)C8(2)	F5BHC4220(1)C8(2)
0.10	30	6.1	11.1	7.5	5.0	36	5BJC3100(1)D7(2)	F5BJC3100(1)D7(2)
0.10	30	6.1	11.1	7.5	5.0	39	5BJC3100(1)I7(2)	F5BJC3100(1)I7(2)
0.10	30	6.1	11.1	7.5	5.0	44	5BJC3100(1)N7(2)	F5BJC3100(1)N7(2)
0.22	30	6.1	11.1	7.5	5.0	36	5BJC3220(1)D7(2)	F5BJC3220(1)D7(2)
0.22	30	6.1	11.1	7.5	5.0	39	5BJC3220(1)I7(2)	F5BJC3220(1)I7(2)
0.22	30	6.1	11.1	7.5	5.0	44	5BJC3220(1)N7(2)	F5BJC3220(1)N7(2)
0.33	30	6.1	11.1	7.5	5.0	36	5BJC3330(1)D7(2)	F5BJC3330(1)D7(2)
0.33	30	6.1	11.1	7.5	5.0	39	5BJC3330(1)I7(2)	F5BJC3330(1)I7(2)
0.33	30	6.1	11.1	7.5	5.0	44	5BJC3330(1)N7(2)	F5BJC3330(1)N7(2)
0.47	30	6.1	11.1	7.5	5.0	36	5BJC3470(1)D7(2)	F5BJC3470(1)D7(2)
0.47	30	6.1	11.1	7.5	5.0	39	5BJC3470(1)I7(2)	F5BJC3470(1)I7(2)
0.47	30	6.1	11.1	7.5	5.0	44	5BJC3470(1)N7(2)	F5BJC3470(1)N7(2)
Cap Value (µF)	VDC	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	Varistor Voltage (VDC)	New KEMET Part Number	Legacy Part Number

(1) Insert lead and packaging code. See Ordering Options Table for available options.

(2) Capacitance tolerance: K= +/-10%, M = +/-20%.

Roll Over for Order Info.

Table 1 – Ratings & Part Number Reference cont'd

Cap Value (µF)	VDC	Max Dimensions in mm			Lead Spacing (p)	Varistor Voltage (VDC)	New KEMET Part Number	Legacy Part Number
		B	H	L				
0.56	30	6.1	11.1	7.5	5.0	36	5BJC3560(1)D7(2)	F5BJC3560(1)D7(2)
0.56	30	6.1	11.1	7.5	5.0	39	5BJC3560(1)I7(2)	F5BJC3560(1)I7(2)
0.56	30	6.1	11.1	7.5	5.0	44	5BJC3560(1)N7(2)	F5BJC3560(1)N7(2)
0.68	30	6.1	11.1	7.5	5.0	36	5BJC3680(1)D7(2)	F5BJC3680(1)D7(2)
0.68	30	6.1	11.1	7.5	5.0	39	5BJC3680(1)I7(2)	F5BJC3680(1)I7(2)
0.68	30	6.1	11.1	7.5	5.0	44	5BJC3680(1)N7(2)	F5BJC3680(1)N7(2)
0.82	30	6.1	11.1	7.5	5.0	36	5BJC3820(1)D7(2)	F5BJC3820(1)D7(2)
0.82	30	6.1	11.1	7.5	5.0	39	5BJC3820(1)I7(2)	F5BJC3820(1)I7(2)
0.82	30	6.1	11.1	7.5	5.0	44	5BJC3820(1)N7(2)	F5BJC3820(1)N7(2)
1.00	30	6.1	11.1	7.5	5.0	36	5BJC4100(1)D7(2)	F5BJC4100(1)D7(2)
1.00	30	6.1	11.1	7.5	5.0	39	5BJC4100(1)I7(2)	F5BJC4100(1)I7(2)
1.00	30	6.1	11.1	7.5	5.0	44	5BJC4100(1)N7(2)	F5BJC4100(1)N7(2)
1.20	30	6.1	11.1	7.5	5.0	36	5BJC4120(1)D7(2)	F5BJC4120(1)D7(2)
1.20	30	6.1	11.1	7.5	5.0	39	5BJC4120(1)I7(2)	F5BJC4120(1)I7(2)
1.20	30	6.1	11.1	7.5	5.0	44	5BJC4120(1)N7(2)	F5BJC4120(1)N7(2)
1.50	30	7.3	13.1	7.5	5.0	36	5BJC4150(1)D8(2)	F5BJC4150(1)D8(2)
1.50	30	7.3	13.1	7.5	5.0	39	5BJC4150(1)I8(2)	F5BJC4150(1)I8(2)
1.50	30	7.3	13.1	7.5	5.0	44	5BJC4150(1)N8(2)	F5BJC4150(1)N8(2)
1.80	30	7.3	13.1	7.5	5.0	36	5BJC4180(1)D8(2)	F5BJC4180(1)D8(2)
1.80	30	7.3	13.1	7.5	5.0	39	5BJC4180(1)I8(2)	F5BJC4180(1)I8(2)
1.80	30	7.3	13.1	7.5	5.0	44	5BJC4180(1)N8(2)	F5BJC4180(1)N8(2)
2.20	30	7.3	13.1	7.5	5.0	36	5BJC4220(1)D8(2)	F5BJC4220(1)D8(2)
2.20	30	7.3	13.1	7.5	5.0	39	5BJC4220(1)I8(2)	F5BJC4220(1)I8(2)
2.20	30	7.3	13.1	7.5	5.0	44	5BJC4220(1)N8(2)	F5BJC4220(1)N8(2)
0.10	45	6.1	11.1	7.5	5.0	53	5BNC3100(1)B7(2)	F5BNC3100(1)B7(2)
0.22	45	6.1	11.1	7.5	5.0	53	5BNC3220(1)B7(2)	F5BNC3220(1)B7(2)
0.33	45	6.1	11.1	7.5	5.0	53	5BNC3330(1)B7(2)	F5BNC3330(1)B7(2)
0.47	45	6.1	11.1	7.5	5.0	53	5BNC3470(1)B7(2)	F5BNC3470(1)B7(2)
0.56	45	6.1	11.1	7.5	5.0	53	5BNC3560(1)B7(2)	F5BNC3560(1)B7(2)
0.68	45	6.1	11.1	7.5	5.0	53	5BNC3680(1)B7(2)	F5BNC3680(1)B7(2)
0.82	45	6.1	11.1	7.5	5.0	53	5BNC3820(1)B7(2)	F5BNC3820(1)B7(2)
1.00	45	6.1	11.1	7.5	5.0	53	5BNC4100(1)B7(2)	F5BNC4100(1)B7(2)
1.20	45	6.1	11.1	7.5	5.0	53	5BNC4120(1)B7(2)	F5BNC4120(1)B7(2)
1.50	45	7.3	13.1	7.5	5.0	53	5BNC4150(1)B8(2)	F5BNC4150(1)B8(2)
1.80	45	7.3	13.1	7.5	5.0	53	5BNC4180(1)B8(2)	F5BNC4180(1)B8(2)
2.20	45	7.3	13.1	7.5	5.0	53	5BNC4220(1)B8(2)	F5BNC4220(1)B8(2)
0.10	50	6.1	11.1	7.5	5.0	68	5BCC3100(1)C7(2)	F5BCC3100(1)C7(2)
0.22	50	6.1	11.1	7.5	5.0	68	5BCC3220(1)C7(2)	F5BCC3220(1)C7(2)
0.33	50	6.1	11.1	7.5	5.0	68	5BCC3330(1)C7(2)	F5BCC3330(1)C7(2)
0.47	50	6.1	11.1	7.5	5.0	68	5BCC3470(1)C7(2)	F5BCC3470(1)C7(2)
0.56	50	6.1	11.1	7.5	5.0	68	5BCC3560(1)C7(2)	F5BCC3560(1)C7(2)
0.68	50	6.1	11.1	7.5	5.0	68	5BCC3680(1)C7(2)	F5BCC3680(1)C7(2)
0.82	50	6.1	11.1	7.5	5.0	68	5BCC3820(1)C7(2)	F5BCC3820(1)C7(2)
1.00	50	6.1	11.1	7.5	5.0	68	5BCC4100(1)C7(2)	F5BCC4100(1)C7(2)
1.20	50	6.1	11.1	7.5	5.0	68	5BCC4120(1)C7(2)	F5BCC4120(1)C7(2)
1.50	50	7.3	13.1	7.5	5.0	68	5BCC4150(1)C8(2)	F5BCC4150(1)C8(2)
1.80	50	7.3	13.1	7.5	5.0	68	5BCC4180(1)C8(2)	F5BCC4180(1)C8(2)
2.20	50	7.3	13.1	7.5	5.0	68	5BCC4220(1)C8(2)	F5BCC4220(1)C8(2)
0.10	63	6.1	11.1	7.5	5.0	82	5BDC3100(1)C7(2)	F5BDC3100(1)C7(2)
0.22	63	6.1	11.1	7.5	5.0	82	5BDC3220(1)C7(2)	F5BDC3220(1)C7(2)
0.33	63	6.1	11.1	7.5	5.0	82	5BDC3330(1)C7(2)	F5BDC3330(1)C7(2)
0.47	63	6.1	11.1	7.5	5.0	82	5BDC3470(1)C7(2)	F5BDC3470(1)C7(2)
0.56	63	6.1	11.1	7.5	5.0	82	5BDC3560(1)C7(2)	F5BDC3560(1)C7(2)
0.68	63	6.1	11.1	7.5	5.0	82	5BDC3680(1)C7(2)	F5BDC3680(1)C7(2)
0.82	63	6.1	11.1	7.5	5.0	82	5BDC3820(1)C7(2)	F5BDC3820(1)C7(2)
1.00	63	6.1	11.1	7.5	5.0	82	5BDC4100(1)C7(2)	F5BDC4100(1)C7(2)
1.20	63	6.1	11.1	7.5	5.0	82	5BDC4120(1)C7(2)	F5BDC4120(1)C7(2)
1.50	63	7.3	13.1	7.5	5.0	82	5BDC4150(1)C8(2)	F5BDC4150(1)C8(2)
1.80	63	7.3	13.1	7.5	5.0	82	5BDC4180(1)C8(2)	F5BDC4180(1)C8(2)
2.20	63	7.3	13.1	7.5	5.0	82	5BDC4220(1)C8(2)	F5BDC4220(1)C8(2)
Cap Value (µF)	VDC	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	Varistor Voltage (VDC)	New KEMET Part Number	Legacy Part Number

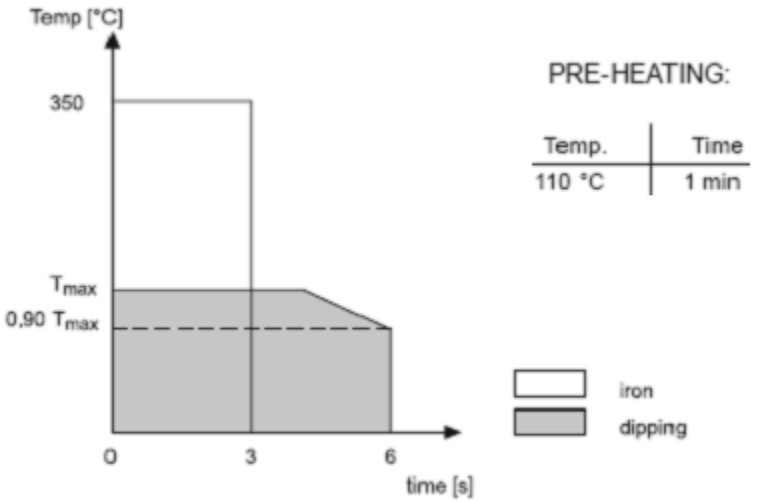
(1) Insert lead and packaging code. See Ordering Options Table for available options.

(2) Capacitance tolerance: K= +/-10%, M = +/-20%.

Roll Over for Order Info.

Maximum Soldering Temperature

- Set the temperature so that inside the element the maximum temperature is below 160°C
- Solder within the following temperature profiles, especially for iron soldering:



Box series: T_{max} = 275°C for 4s

General Conditions

- If two solderings are needed, please apply a recovery time until the temperature on the capacitor surface is below 50°C.
- Avoid any passing through adhesive curing oven when fixing surface mount parts in combination with through-hole parts. Insert through-hole parts only after the curing of surface mount parts.
- Avoid reflow soldering by combining the lead type with surface mount parts

Marking

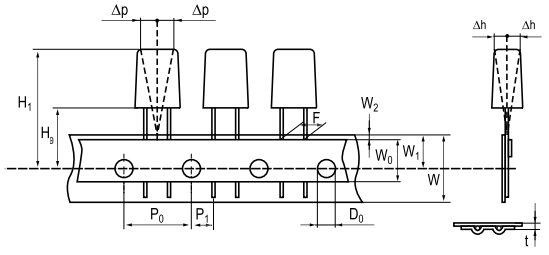
- Capacitance
- Tolerance
- DC rated voltage
- Series (F5B)
- Manufacturing date code

Packaging Quantities

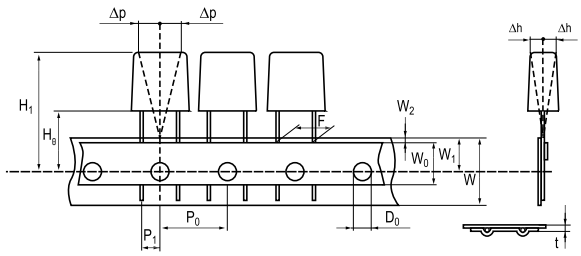
Lead Spacing	Thickness (mm)	Height (mm)	Length (mm)	Bulk Short Leads	Bulk Long Leads	Standard Reel ø 355 mm	Ammo
5	4.6	9.6	7.4	1500	2000	1400	1900
	5.1	10.1	7.5	1000	1500	1200	1700
	6.1	11.1	7.5	2000	1000	1000	1400
	7.3	13.1	7.5	1500	750	800	1150

Lead Taping & Packaging (IEC 60286–2)

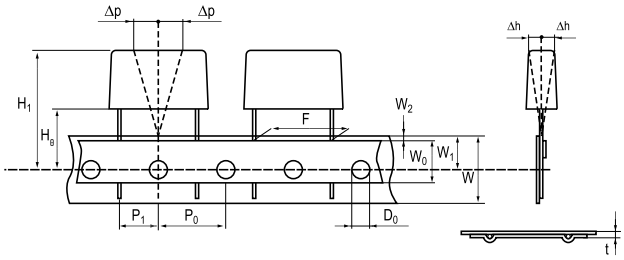
Lead Spacing 5 mm



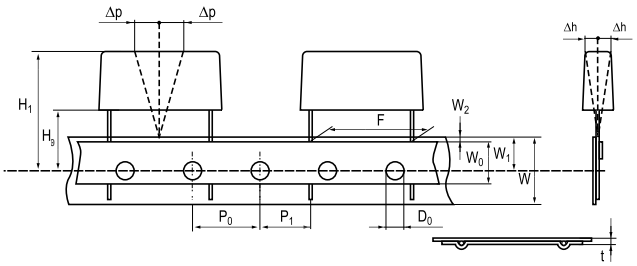
Lead Spacing 7.5 mm



Lead Spacing 10 – 15 mm



Lead Spacing 22.5 – 27.5 mm



Taping Specification

Dimensions in mm									Standard IEC 60286–2
Lead spacing	+6/-0.1	F	5	7.5	10	15	22.5	27.5	F
Carrier tape width	+1/-0.5	W	18	18	18	18	18	18	$18^{+1/-0.5}$
Hold-down tape width	Minimum	W_0	6	6	9	10	10	10	
Position of sprocket hole	+/-0.5	W_1	9	9	9	9	9	9	$9^{+0.75/-0.5}$
Distance between tapes	Maximum	W_2	3	3	3	3	3	3	3
Sprocket hole diameter	+/-0.2	D_0	4	4	4	4	4	4	4
Feed hole lead spacing	+/-0.2(1)	P_0(3)	12.7	12.7	12.7	12.7	12.7	12.7	12.7
Distance lead – feed hole	+/-0.7	P_1	3.85	3.75	7.7	5.2	7.8	5.3	P1
Deviation tape – plane	Maximum	Δp	1.3	1.3	1.3	1.3	1.3	1.3	1.3
Lateral deviation	+/-2	Δh	2	2	2	2	2	2	2
Total thickness	+/-0.2	t	0.7	0.7	0.7	0.7	0.9^{MAX}	0.9^{MAX}	0.9^{MAX}
Sprocket hole/cap body	+/-0.5	H_0(2)	$18.5^{+/-0.5}$	$18.5^{+/-0.5}$	$18.5^{+/-0.5}$	$18.5^{+/-0.5}$	$18.5^{+/-0.5}$	$18.5^{+/-0.5}$	$18^{+2/-0}$

(1) Maximum cumulative feed hole error, 1 mm per 20 parts.
(2) 16.5 mm available on request.
(3) 15 mm available on request (F ≥ 10 mm).

General Purpose, Pulse and DC Transient Suppression

F5D Series Metallized Polyester Film with Integrated Ceramic Capacitor, 63 – 100 VDC

Overview

The F5D Series is a metallized polyester (MKT) film capacitor with integrated ceramic capacitor encapsulated in a thermosetting resin-filled plastic box with tinned wire leads. Box material is solvent resistant and flame retardant meeting the requirements of UL 94 V–0.

Applications

Typical applications include worldwide use as EMI/RFI suppressors for automotive motors and other suppression applications such as engine blower fans, central locking systems, heating/air-conditioning blowers, electric sun roofs, electric window regulators, fuel/oil pumps, electric windshield wipers and electrically operated seats. This through-hole EMI/RFI suppression element is mainly used for automotive applications without a printed circuit board, e.g., motor suppression or mixed through-hole and surface mount printed circuit boards.

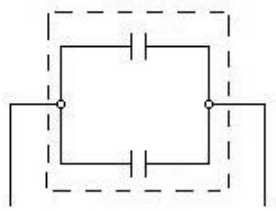
Benefits

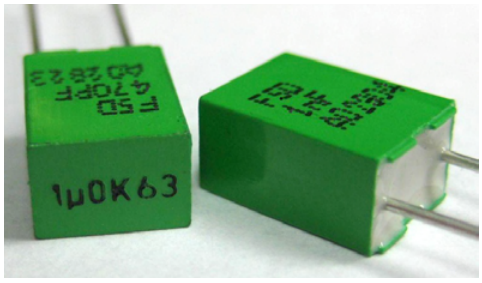
- Low inductive MKT capacitors in parallel construction with a ceramic capacitor in a single case provide superior suppression results
- Approvals: AEC–Q200, ISO 7637–2
- Rated voltage: 63 – 100 VDC
- Capacitance range: 0.1 – 2.2 µF
- Capacitance tolerance: ±10%, ±20%
- Climatic category: 55/125/56, IEC 60068–1
- Tape and reel packaging in accordance with IEC 60286–2
- RoHS Compliant and lead-free terminations
- Operating temperature range: -55˚C to +125˚C

Part Number System

F5D	D	C	3100	DQ	W	5	M
Series	Rated Voltage (VDC)	Lead Spacing (mm)	Capacitance Code (pF)	Lead and Packaging Code	Ceramic Capacitor Value	Size Code	Capacitance Tolerance
Film Capacitor/ Ceramic Capacitor Unit	D = 63 E = 100	C = 5 mm F= 10 mm	Digits 2 – 4 indicate the first three digits of the capacitance value. First digit indicates the number of zeros to be added.	See Ordering Options Table	See Ceramic Capacitor Table	See Dimension Table	K = ±10% M = ±20%

Circuit Diagram

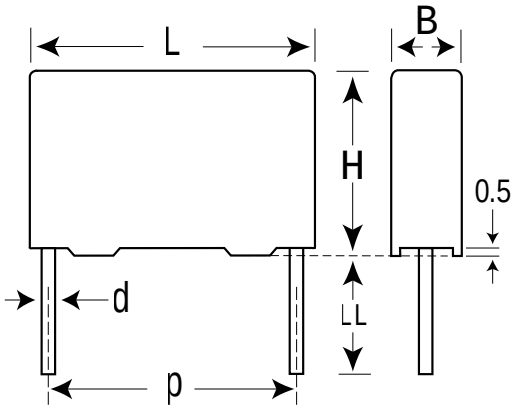




Ordering Options Table

Lead Spacing Nominal (mm)	Type of Leads and Packaging	Lead Length (mm)	Lead and Packaging Code
5	Standard Lead and Packaging Options		
	Bulk (Bag) – Short Leads	4 +2/-0	AA
	Ammo Pack	H_0= 18.5 +/-0.5	DQ
	Other Lead and Packaging Options		
	Bulk (Bag) – Long Leads	17 +1/-2	Z3
	Tape & Reel (Standard Reel)	H_0= 18.5 +/-0.5	CK
10	Standard Lead and Packaging Options		
	Bulk (Bag) – Short Leads	4 +2/-0	AA
	Ammo Pack	H_0= 18.5 +/-0.5	DQ
	Other Lead and Packaging Options		
	Bulk (Bag) – Long Leads	17 +1/-2	Z3
	Tape & Reel (Large Reel)	H_0= 18.5 +/-0.5	CK

Dimensions – Millimeters



Rated Capacitance µF		Size Code	p		B		H		L		d	
V_r = 63 V	V_r = 100 V	(Digit 13)	Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance
0.1 – 0.47	0.1 – 0.33	5	5.0	+/-0.4	4.6	Maximum	9.6	Maximum	7.4	Maximum	0.6	+/-0.05
0.56 – 1.5	0.47 – 1.0	6	5.0	+/-0.4	5.1	Maximum	10.1	Maximum	7.5	Maximum	0.6	+/-0.05
1.8	1.2 – 1.5	7	5.0	+/-0.4	6.1	Maximum	11.1	Maximum	7.5	Maximum	0.6	+/-0.05
0.1 – 1.0	0.1 – 1.0	2	10.0	+/-0.4	5.2	Maximum	11.1	Maximum	13.4	Maximum	0.75	+/-0.05
1.2 – 1.5	1.2 – 1.5	3	10.0	+/-0.4	6.2	Maximum	12.1	Maximum	13.4	Maximum	0.75	+/-0.05

Note: See Ordering Options Table for lead length (LL) options.

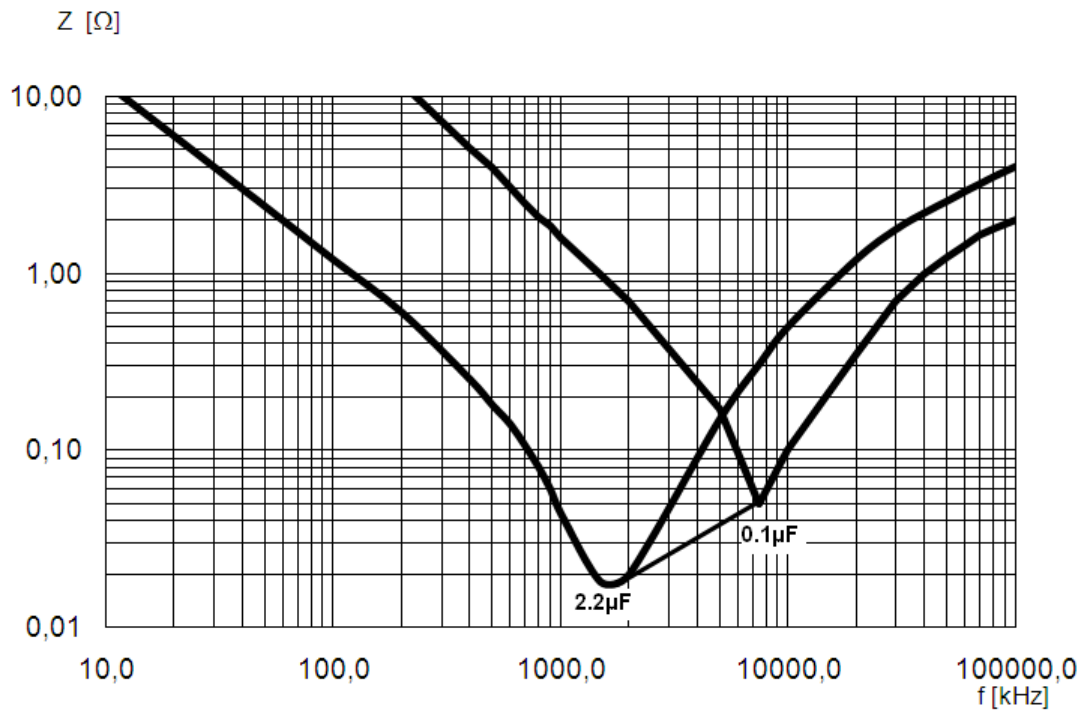
Ceramic Capacitor Value

Ceramic Capacitor Value	Digit 12
10 pF	U
22 pF	V
47 pF	W
68 pF	X
100 pF	E
220 pF	G
470 pF	A
680 pF	H
1 nF	C
2.2 nF	F
4.7 nF	B
6.8 nF	N
10 nF	D
47 nF	R
68 nF	T
100 nF	S

Performance Characteristics

Rated Voltage	63 – 100 VDC (For temperature over 100°C a decreasing factor of 2% per degree has to be applied on the rated voltage V_R)
Capacitance Range	0.1 – 2.2 µF (See Ceramic Capacitor Value Table)
Capacitance Tolerance	±10%, ±20%
Temperature Range	-55°C to +125°C
Climatic Category	55/125/56, IEC 60068–1
Leakage Current	≤ 10 µA at V_R
Approvals	AEC–Q200, ISO 7637
Dissipation Factor	0.025 (1 kHz at 25°C ± 5°C)
Test Voltage Between Terminals	1.6 x V_R
Insulation Resistance	100 MΩ @ 50 V

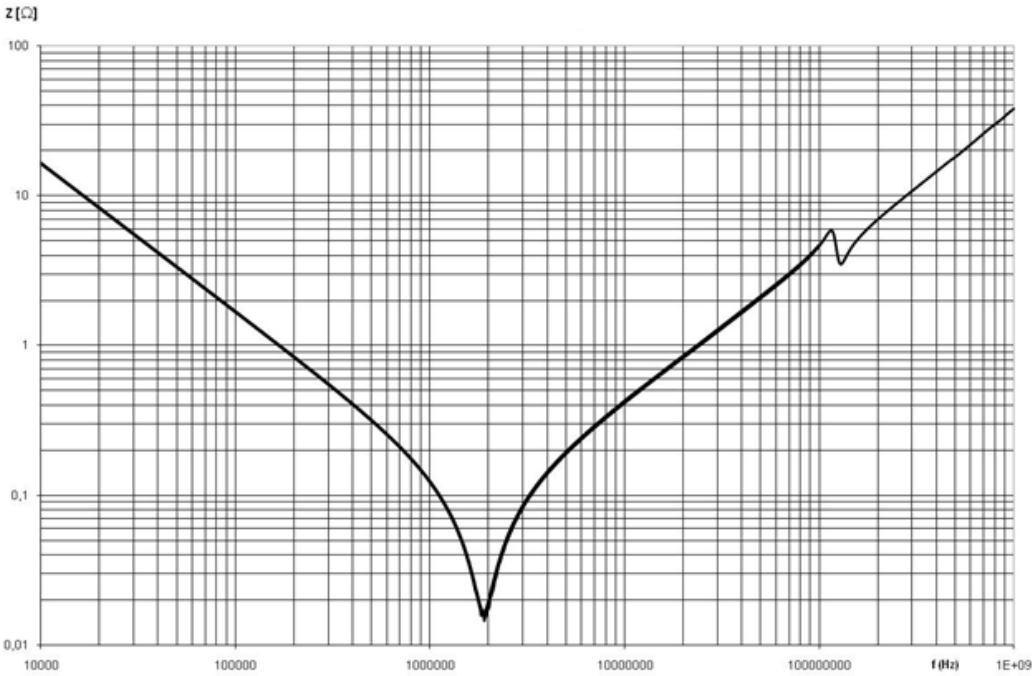
Impedance Graphs



Impedance Graphs cont'd

Impedance vs. Frequency

Example: Combination of 1 µF and 1 nF



Impedance vs. Frequency

Example: Combination of 1 µF and 4.7 nF

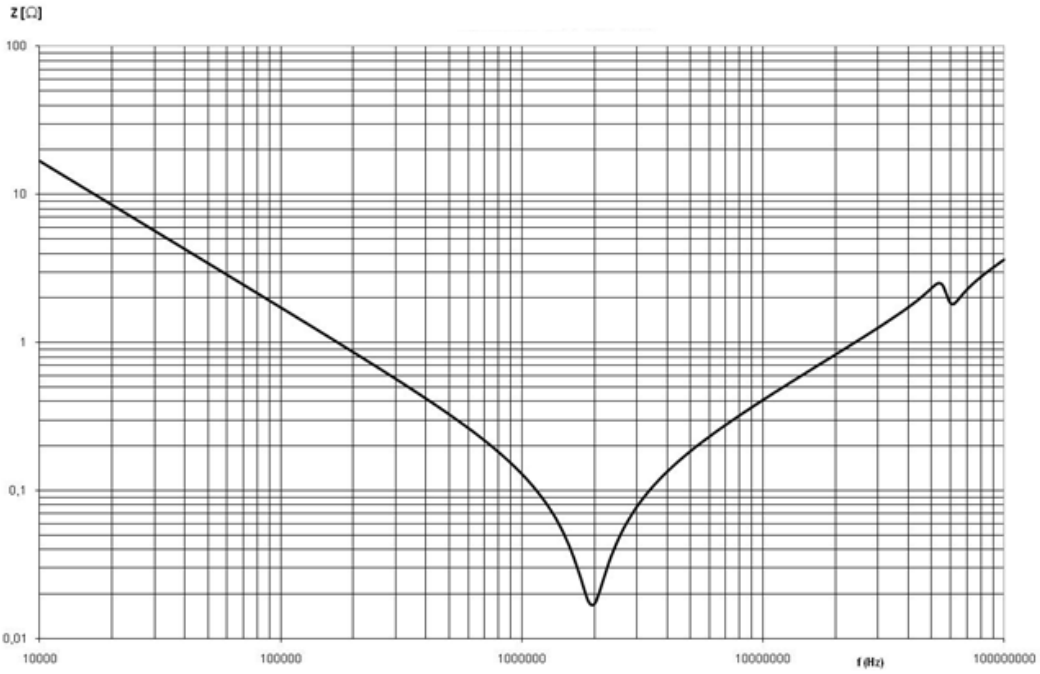


Table 1 – Ratings & Part Number Reference

Cap Value (µF)	VDC	Max Dimensions in mm			Lead Spacing (p)	Ceramic Cap (µF)	New KEMET Part Number	Legacy Part Number
		B	H	L				
0.10	63	4.6	9.6	7.4	5.0	0.00001	5DDC3100(1)U5(2)	F5DDC3100(1)U5(2)
0.10	63	4.6	9.6	7.4	5.0	0.000022	5DDC3100(1)V5(2)	F5DDC3100(1)V5(2)
0.10	63	4.6	9.6	7.4	5.0	0.000047	5DDC3100(1)W5(2)	F5DDC3100(1)W5(2)
0.10	63	4.6	9.6	7.4	5.0	0.000068	5DDC3100(1)X5(2)	F5DDC3100(1)X5(2)
0.10	63	4.6	9.6	7.4	5.0	0.0001	5DDC3100(1)E5(2)	F5DDC3100(1)E5(2)
0.10	63	4.6	9.6	7.4	5.0	0.00022	5DDC3100(1)G5(2)	F5DDC3100(1)G5(2)
0.10	63	4.6	9.6	7.4	5.0	0.00047	5DDC3100(1)A5(2)	F5DDC3100(1)A5(2)
0.10	63	4.6	9.6	7.4	5.0	0.00068	5DDC3100(1)H5(2)	F5DDC3100(1)H5(2)
0.10	63	4.6	9.6	7.4	5.0	0.001	5DDC3100(1)C5(2)	F5DDC3100(1)C5(2)
0.10	63	4.6	9.6	7.4	5.0	0.0022	5DDC3100(1)F5(2)	F5DDC3100(1)F5(2)
0.10	63	4.6	9.6	7.4	5.0	0.0047	5DDC3100(1)B5(2)	F5DDC3100(1)B5(2)
0.10	63	4.6	9.6	7.4	5.0	0.0068	5DDC3100(1)N5(2)	F5DDC3100(1)N5(2)
0.10	63	4.6	9.6	7.4	5.0	0.01	5DDC3100(1)D5(2)	F5DDC3100(1)D5(2)
0.10	63	4.6	9.6	7.4	5.0	0.047	5DDC3100(1)R5(2)	F5DDC3100(1)R5(2)
0.10	63	4.6	9.6	7.4	5.0	0.068	5DDC3100(1)T5(2)	F5DDC3100(1)T5(2)
0.10	63	4.6	9.6	7.4	5.0	0.1	5DDC3100(1)S5(2)	F5DDC3100(1)S5(2)
0.22	63	4.6	9.6	7.4	5.0	0.00001	5DDC3220(1)U5(2)	F5DDC3220(1)U5(2)
0.22	63	4.6	9.6	7.4	5.0	0.000022	5DDC3220(1)V5(2)	F5DDC3220(1)V5(2)
0.22	63	4.6	9.6	7.4	5.0	0.000047	5DDC3220(1)W5(2)	F5DDC3220(1)W5(2)
0.22	63	4.6	9.6	7.4	5.0	0.000068	5DDC3220(1)X5(2)	F5DDC3220(1)X5(2)
0.22	63	4.6	9.6	7.4	5.0	0.0001	5DDC3220(1)E5(2)	F5DDC3220(1)E5(2)
0.22	63	4.6	9.6	7.4	5.0	0.00022	5DDC3220(1)G5(2)	F5DDC3220(1)G5(2)
0.22	63	4.6	9.6	7.4	5.0	0.00047	5DDC3220(1)A5(2)	F5DDC3220(1)A5(2)
0.22	63	4.6	9.6	7.4	5.0	0.00068	5DDC3220(1)H5(2)	F5DDC3220(1)H5(2)
0.22	63	4.6	9.6	7.4	5.0	0.001	5DDC3220(1)C5(2)	F5DDC3220(1)C5(2)
0.22	63	4.6	9.6	7.4	5.0	0.0022	5DDC3220(1)F5(2)	F5DDC3220(1)F5(2)
0.22	63	4.6	9.6	7.4	5.0	0.0047	5DDC3220(1)B5(2)	F5DDC3220(1)B5(2)
0.22	63	4.6	9.6	7.4	5.0	0.0068	5DDC3220(1)N5(2)	F5DDC3220(1)N5(2)
0.22	63	4.6	9.6	7.4	5.0	0.01	5DDC3220(1)D5(2)	F5DDC3220(1)D5(2)
0.22	63	4.6	9.6	7.4	5.0	0.047	5DDC3220(1)R5(2)	F5DDC3220(1)R5(2)
0.22	63	4.6	9.6	7.4	5.0	0.068	5DDC3220(1)T5(2)	F5DDC3220(1)T5(2)
0.22	63	4.6	9.6	7.4	5.0	0.1	5DDC3220(1)S5(2)	F5DDC3220(1)S5(2)
0.33	63	4.6	9.6	7.4	5.0	0.00001	5DDC3330(1)U5(2)	F5DDC3330(1)U5(2)
0.33	63	4.6	9.6	7.4	5.0	0.000022	5DDC3330(1)V5(2)	F5DDC3330(1)V5(2)
0.33	63	4.6	9.6	7.4	5.0	0.000047	5DDC3330(1)W5(2)	F5DDC3330(1)W5(2)
0.33	63	4.6	9.6	7.4	5.0	0.000068	5DDC3330(1)X5(2)	F5DDC3330(1)X5(2)
0.33	63	4.6	9.6	7.4	5.0	0.0001	5DDC3330(1)E5(2)	F5DDC3330(1)E5(2)
0.33	63	4.6	9.6	7.4	5.0	0.00022	5DDC3330(1)G5(2)	F5DDC3330(1)G5(2)
0.33	63	4.6	9.6	7.4	5.0	0.00047	5DDC3330(1)A5(2)	F5DDC3330(1)A5(2)
0.33	63	4.6	9.6	7.4	5.0	0.00068	5DDC3330(1)H5(2)	F5DDC3330(1)H5(2)
0.33	63	4.6	9.6	7.4	5.0	0.001	5DDC3330(1)C5(2)	F5DDC3330(1)C5(2)
0.33	63	4.6	9.6	7.4	5.0	0.0022	5DDC3330(1)F5(2)	F5DDC3330(1)F5(2)
0.33	63	4.6	9.6	7.4	5.0	0.0047	5DDC3330(1)B5(2)	F5DDC3330(1)B5(2)
0.33	63	4.6	9.6	7.4	5.0	0.0068	5DDC3330(1)N5(2)	F5DDC3330(1)N5(2)
0.33	63	4.6	9.6	7.4	5.0	0.01	5DDC3330(1)D5(2)	F5DDC3330(1)D5(2)
0.33	63	4.6	9.6	7.4	5.0	0.047	5DDC3330(1)R5(2)	F5DDC3330(1)R5(2)
0.33	63	4.6	9.6	7.4	5.0	0.068	5DDC3330(1)T5(2)	F5DDC3330(1)T5(2)
0.33	63	4.6	9.6	7.4	5.0	0.1	5DDC3330(1)S5(2)	F5DDC3330(1)S5(2)
0.47	63	4.6	9.6	7.4	5.0	0.00001	5DDC3470(1)U5(2)	F5DDC3470(1)U5(2)
0.47	63	4.6	9.6	7.4	5.0	0.000022	5DDC3470(1)V5(2)	F5DDC3470(1)V5(2)
0.47	63	4.6	9.6	7.4	5.0	0.000047	5DDC3470(1)W5(2)	F5DDC3470(1)W5(2)
0.47	63	4.6	9.6	7.4	5.0	0.000068	5DDC3470(1)X5(2)	F5DDC3470(1)X5(2)
0.47	63	4.6	9.6	7.4	5.0	0.0001	5DDC3470(1)E5(2)	F5DDC3470(1)E5(2)
0.47	63	4.6	9.6	7.4	5.0	0.00022	5DDC3470(1)G5(2)	F5DDC3470(1)G5(2)
0.47	63	4.6	9.6	7.4	5.0	0.00047	5DDC3470(1)A5(2)	F5DDC3470(1)A5(2)
0.47	63	4.6	9.6	7.4	5.0	0.00068	5DDC3470(1)H5(2)	F5DDC3470(1)H5(2)
0.47	63	4.6	9.6	7.4	5.0	0.001	5DDC3470(1)C5(2)	F5DDC3470(1)C5(2)
0.47	63	4.6	9.6	7.4	5.0	0.0022	5DDC3470(1)F5(2)	F5DDC3470(1)F5(2)
0.47	63	4.6	9.6	7.4	5.0	0.0047	5DDC3470(1)B5(2)	F5DDC3470(1)B5(2)
Cap Value (µF)	VDC	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	Ceramic Cap (µF)	New KEMET Part Number	Legacy Part Number

(1) Insert lead and packaging code. See Ordering Options Table for available options.
(2) K = 10%, M = 20%.

Roll Over for Order Info.

Table 1 – Ratings & Part Number Reference cont'd

Cap Value (µF)	VDC	Max Dimensions in mm			Lead Spacing (p)	Ceramic Cap (µF)	New KEMET Part Number	Legacy Part Number
		B	H	L				
0.47	63	4.6	9.6	7.4	5.0	0.0068	5DDC3470(1)N5(2)	F5DDC3470(1)N5(2)
0.47	63	4.6	9.6	7.4	5.0	0.01	5DDC3470(1)D5(2)	F5DDC3470(1)D5(2)
0.47	63	4.6	9.6	7.4	5.0	0.047	5DDC3470(1)R5(2)	F5DDC3470(1)R5(2)
0.47	63	4.6	9.6	7.4	5.0	0.068	5DDC3470(1)T5(2)	F5DDC3470(1)T5(2)
0.47	63	4.6	9.6	7.4	5.0	0.1	5DDC3470(1)S5(2)	F5DDC3470(1)S5(2)
0.56	63	5.1	10.1	7.5	5.0	0.00001	5DDC3560(1)U6(2)	F5DDC3560(1)U6(2)
0.56	63	5.1	10.1	7.5	5.0	0.000022	5DDC3560(1)V6(2)	F5DDC3560(1)V6(2)
0.56	63	5.1	10.1	7.5	5.0	0.000047	5DDC3560(1)W6(2)	F5DDC3560(1)W6(2)
0.56	63	5.1	10.1	7.5	5.0	0.000068	5DDC3560(1)X6(2)	F5DDC3560(1)X6(2)
0.56	63	5.1	10.1	7.5	5.0	0.0001	5DDC3560(1)E6(2)	F5DDC3560(1)E6(2)
0.56	63	5.1	10.1	7.5	5.0	0.00022	5DDC3560(1)G6(2)	F5DDC3560(1)G6(2)
0.56	63	5.1	10.1	7.5	5.0	0.00047	5DDC3560(1)A6(2)	F5DDC3560(1)A6(2)
0.56	63	5.1	10.1	7.5	5.0	0.00068	5DDC3560(1)H6(2)	F5DDC3560(1)H6(2)
0.56	63	5.1	10.1	7.5	5.0	0.001	5DDC3560(1)C6(2)	F5DDC3560(1)C6(2)
0.56	63	5.1	10.1	7.5	5.0	0.0022	5DDC3560(1)F6(2)	F5DDC3560(1)F6(2)
0.56	63	5.1	10.1	7.5	5.0	0.0047	5DDC3560(1)B6(2)	F5DDC3560(1)B6(2)
0.56	63	5.1	10.1	7.5	5.0	0.0068	5DDC3560(1)N6(2)	F5DDC3560(1)N6(2)
0.56	63	5.1	10.1	7.5	5.0	0.01	5DDC3560(1)D6(2)	F5DDC3560(1)D6(2)
0.56	63	5.1	10.1	7.5	5.0	0.047	5DDC3560(1)R6(2)	F5DDC3560(1)R6(2)
0.56	63	5.1	10.1	7.5	5.0	0.068	5DDC3560(1)T6(2)	F5DDC3560(1)T6(2)
0.56	63	5.1	10.1	7.5	5.0	0.1	5DDC3560(1)S6(2)	F5DDC3560(1)S6(2)
0.68	63	5.1	10.1	7.5	5.0	0.00001	5DDC3680(1)U6(2)	F5DDC3680(1)U6(2)
0.68	63	5.1	10.1	7.5	5.0	0.000022	5DDC3680(1)V6(2)	F5DDC3680(1)V6(2)
0.68	63	5.1	10.1	7.5	5.0	0.000047	5DDC3680(1)W6(2)	F5DDC3680(1)W6(2)
0.68	63	5.1	10.1	7.5	5.0	0.000068	5DDC3680(1)X6(2)	F5DDC3680(1)X6(2)
0.68	63	5.1	10.1	7.5	5.0	0.0001	5DDC3680(1)E6(2)	F5DDC3680(1)E6(2)
0.68	63	5.1	10.1	7.5	5.0	0.00022	5DDC3680(1)G6(2)	F5DDC3680(1)G6(2)
0.68	63	5.1	10.1	7.5	5.0	0.00047	5DDC3680(1)A6(2)	F5DDC3680(1)A6(2)
0.68	63	5.1	10.1	7.5	5.0	0.00068	5DDC3680(1)H6(2)	F5DDC3680(1)H6(2)
0.68	63	5.1	10.1	7.5	5.0	0.001	5DDC3680(1)C6(2)	F5DDC3680(1)C6(2)
0.68	63	5.1	10.1	7.5	5.0	0.0022	5DDC3680(1)F6(2)	F5DDC3680(1)F6(2)
0.68	63	5.1	10.1	7.5	5.0	0.0047	5DDC3680(1)B6(2)	F5DDC3680(1)B6(2)
0.68	63	5.1	10.1	7.5	5.0	0.0068	5DDC3680(1)N6(2)	F5DDC3680(1)N6(2)
0.68	63	5.1	10.1	7.5	5.0	0.01	5DDC3680(1)D6(2)	F5DDC3680(1)D6(2)
0.68	63	5.1	10.1	7.5	5.0	0.047	5DDC3680(1)R6(2)	F5DDC3680(1)R6(2)
0.68	63	5.1	10.1	7.5	5.0	0.068	5DDC3680(1)T6(2)	F5DDC3680(1)T6(2)
0.68	63	5.1	10.1	7.5	5.0	0.1	5DDC3680(1)S6(2)	F5DDC3680(1)S6(2)
1.00	63	5.1	10.1	7.5	5.0	0.00001	5DDC4100(1)U6(2)	F5DDC4100(1)U6(2)
1.00	63	5.1	10.1	7.5	5.0	0.000022	5DDC4100(1)V6(2)	F5DDC4100(1)V6(2)
1.00	63	5.1	10.1	7.5	5.0	0.000047	5DDC4100(1)W6(2)	F5DDC4100(1)W6(2)
1.00	63	5.1	10.1	7.5	5.0	0.000068	5DDC4100(1)X6(2)	F5DDC4100(1)X6(2)
1.00	63	5.1	10.1	7.5	5.0	0.0001	5DDC4100(1)E6(2)	F5DDC4100(1)E6(2)
1.00	63	5.1	10.1	7.5	5.0	0.00022	5DDC4100(1)G6(2)	F5DDC4100(1)G6(2)
1.00	63	5.1	10.1	7.5	5.0	0.00047	5DDC4100(1)A6(2)	F5DDC4100(1)A6(2)
1.00	63	5.1	10.1	7.5	5.0	0.00068	5DDC4100(1)H6(2)	F5DDC4100(1)H6(2)
1.00	63	5.1	10.1	7.5	5.0	0.001	5DDC4100(1)C6(2)	F5DDC4100(1)C6(2)
1.00	63	5.1	10.1	7.5	5.0	0.0022	5DDC4100(1)F6(2)	F5DDC4100(1)F6(2)
1.00	63	5.1	10.1	7.5	5.0	0.0047	5DDC4100(1)B6(2)	F5DDC4100(1)B6(2)
1.00	63	5.1	10.1	7.5	5.0	0.0068	5DDC4100(1)N6(2)	F5DDC4100(1)N6(2)
1.00	63	5.1	10.1	7.5	5.0	0.01	5DDC4100(1)D6(2)	F5DDC4100(1)D6(2)
1.00	63	5.1	10.1	7.5	5.0	0.047	5DDC4100(1)R6(2)	F5DDC4100(1)R6(2)
1.00	63	5.1	10.1	7.5	5.0	0.068	5DDC4100(1)T6(2)	F5DDC4100(1)T6(2)
1.00	63	5.1	10.1	7.5	5.0	0.1	5DDC4100(1)S6(2)	F5DDC4100(1)S6(2)
1.50	63	5.1	10.1	7.5	5.0	0.00001	5DDC4150(1)U6(2)	F5DDC4150(1)U6(2)
1.50	63	5.1	10.1	7.5	5.0	0.000022	5DDC4150(1)V6(2)	F5DDC4150(1)V6(2)
1.50	63	5.1	10.1	7.5	5.0	0.000047	5DDC4150(1)W6(2)	F5DDC4150(1)W6(2)
1.50	63	5.1	10.1	7.5	5.0	0.000068	5DDC4150(1)X6(2)	F5DDC4150(1)X6(2)
1.50	63	5.1	10.1	7.5	5.0	0.0001	5DDC4150(1)E6(2)	F5DDC4150(1)E6(2)
1.50	63	5.1	10.1	7.5	5.0	0.00022	5DDC4150(1)G6(2)	F5DDC4150(1)G6(2)
Cap Value (µF)	VDC	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	Ceramic Cap (µF)	New KEMET Part Number	Legacy Part Number

(1) Insert lead and packaging code. See Ordering Options Table for available options.
(2) K = 10%, M = 20%.

Table 1 – Ratings & Part Number Reference cont'd

Cap Value (µF)	VDC	Max Dimensions in mm			Lead Spacing (p)	Ceramic Cap (µF)	New KEMET Part Number	Legacy Part Number
		B	H	L				
1.50	63	5.1	10.1	7.5	5.0	0.00047	5DDC4150(1)A6(2)	F5DDC4150(1)A6(2)
1.50	63	5.1	10.1	7.5	5.0	0.00068	5DDC4150(1)H6(2)	F5DDC4150(1)H6(2)
1.50	63	5.1	10.1	7.5	5.0	0.001	5DDC4150(1)C6(2)	F5DDC4150(1)C6(2)
1.50	63	5.1	10.1	7.5	5.0	0.0022	5DDC4150(1)F6(2)	F5DDC4150(1)F6(2)
1.50	63	5.1	10.1	7.5	5.0	0.0047	5DDC4150(1)B6(2)	F5DDC4150(1)B6(2)
1.50	63	5.1	10.1	7.5	5.0	0.0068	5DDC4150(1)N6(2)	F5DDC4150(1)N6(2)
1.50	63	5.1	10.1	7.5	5.0	0.01	5DDC4150(1)D6(2)	F5DDC4150(1)D6(2)
1.50	63	5.1	10.1	7.5	5.0	0.047	5DDC4150(1)R6(2)	F5DDC4150(1)R6(2)
1.50	63	5.1	10.1	7.5	5.0	0.068	5DDC4150(1)T6(2)	F5DDC4150(1)T6(2)
1.50	63	5.1	10.1	7.5	5.0	0.1	5DDC4150(1)S6(2)	F5DDC4150(1)S6(2)
1.80	63	6.1	11.1	7.5	5.0	0.1	5DDC4180(1)S7(2)	F5DDC4180(1)S7(2)
1.80	63	6.1	11.1	7.5	5.0	0.000022	5DDC4180(1)V7(2)	F5DDC4180(1)V7(2)
1.80	63	6.1	11.1	7.5	5.0	0.000047	5DDC4180(1)W7(2)	F5DDC4180(1)W7(2)
1.80	63	6.1	11.1	7.5	5.0	0.000068	5DDC4180(1)X7(2)	F5DDC4180(1)X7(2)
1.80	63	6.1	11.1	7.5	5.0	0.0001	5DDC4180(1)E7(2)	F5DDC4180(1)E7(2)
1.80	63	6.1	11.1	7.5	5.0	0.00022	5DDC4180(1)G7(2)	F5DDC4180(1)G7(2)
1.80	63	6.1	11.1	7.5	5.0	0.00047	5DDC4180(1)A7(2)	F5DDC4180(1)A7(2)
1.80	63	6.1	11.1	7.5	5.0	0.00068	5DDC4180(1)H7(2)	F5DDC4180(1)H7(2)
1.80	63	6.1	11.1	7.5	5.0	0.001	5DDC4180(1)C7(2)	F5DDC4180(1)C7(2)
1.80	63	6.1	11.1	7.5	5.0	0.0022	5DDC4180(1)F7(2)	F5DDC4180(1)F7(2)
1.80	63	6.1	11.1	7.5	5.0	0.0047	5DDC4180(1)B7(2)	F5DDC4180(1)B7(2)
1.80	63	6.1	11.1	7.5	5.0	0.0068	5DDC4180(1)N7(2)	F5DDC4180(1)N7(2)
1.80	63	6.1	11.1	7.5	5.0	0.01	5DDC4180(1)D7(2)	F5DDC4180(1)D7(2)
1.80	63	6.1	11.1	7.5	5.0	0.047	5DDC4180(1)R7(2)	F5DDC4180(1)R7(2)
1.80	63	6.1	11.1	7.5	5.0	0.068	5DDC4180(1)T7(2)	F5DDC4180(1)T7(2)
1.80	63	6.1	11.1	7.5	5.0	0.00001	5DDC4180(1)U7(2)	F5DDC4180(1)U7(2)
2.20	63	6.1	11.1	7.5	5.0	0.1	5DDC4220(1)S7(2)	F5DDC4220(1)S7(2)
2.20	63	6.1	11.1	7.5	5.0	0.000022	5DDC4220(1)V7(2)	F5DDC4220(1)V7(2)
2.20	63	6.1	11.1	7.5	5.0	0.000047	5DDC4220(1)W7(2)	F5DDC4220(1)W7(2)
2.20	63	6.1	11.1	7.5	5.0	0.000068	5DDC4220(1)X7(2)	F5DDC4220(1)X7(2)
2.20	63	6.1	11.1	7.5	5.0	0.0001	5DDC4220(1)E7(2)	F5DDC4220(1)E7(2)
2.20	63	6.1	11.1	7.5	5.0	0.00022	5DDC4220(1)G7(2)	F5DDC4220(1)G7(2)
2.20	63	6.1	11.1	7.5	5.0	0.00047	5DDC4220(1)A7(2)	F5DDC4220(1)A7(2)
2.20	63	6.1	11.1	7.5	5.0	0.00068	5DDC4220(1)H7(2)	F5DDC4220(1)H7(2)
2.20	63	6.1	11.1	7.5	5.0	0.001	5DDC4220(1)C7(2)	F5DDC4220(1)C7(2)
2.20	63	6.1	11.1	7.5	5.0	0.0022	5DDC4220(1)F7(2)	F5DDC4220(1)F7(2)
2.20	63	6.1	11.1	7.5	5.0	0.0047	5DDC4220(1)B7(2)	F5DDC4220(1)B7(2)
2.20	63	6.1	11.1	7.5	5.0	0.0068	5DDC4220(1)N7(2)	F5DDC4220(1)N7(2)
2.20	63	6.1	11.1	7.5	5.0	0.01	5DDC4220(1)D7(2)	F5DDC4220(1)D7(2)
2.20	63	6.1	11.1	7.5	5.0	0.047	5DDC4220(1)R7(2)	F5DDC4220(1)R7(2)
2.20	63	6.1	11.1	7.5	5.0	0.068	5DDC4220(1)T7(2)	F5DDC4220(1)T7(2)
2.20	63	6.1	11.1	7.5	5.0	0.00001	5DDC4220(1)U7(2)	F5DDC4220(1)U7(2)
0.10	100	4.6	9.6	7.4	5.0	0.00001	5DEC3100(1)U5(2)	F5DEC3100(1)U5(2)
0.10	100	4.6	9.6	7.4	5.0	0.000022	5DEC3100(1)V5(2)	F5DEC3100(1)V5(2)
0.10	100	4.6	9.6	7.4	5.0	0.000047	5DEC3100(1)W5(2)	F5DEC3100(1)W5(2)
0.10	100	4.6	9.6	7.4	5.0	0.000068	5DEC3100(1)X5(2)	F5DEC3100(1)X5(2)
0.10	100	4.6	9.6	7.4	5.0	0.0001	5DEC3100(1)E5(2)	F5DEC3100(1)E5(2)
0.10	100	4.6	9.6	7.4	5.0	0.00022	5DEC3100(1)G5(2)	F5DEC3100(1)G5(2)
0.10	100	4.6	9.6	7.4	5.0	0.00047	5DEC3100(1)A5(2)	F5DEC3100(1)A5(2)
0.10	100	4.6	9.6	7.4	5.0	0.00068	5DEC3100(1)H5(2)	F5DEC3100(1)H5(2)
0.10	100	4.6	9.6	7.4	5.0	0.001	5DEC3100(1)C5(2)	F5DEC3100(1)C5(2)
0.10	100	4.6	9.6	7.4	5.0	0.0022	5DEC3100(1)F5(2)	F5DEC3100(1)F5(2)
0.10	100	4.6	9.6	7.4	5.0	0.0047	5DEC3100(1)B5(2)	F5DEC3100(1)B5(2)
0.10	100	4.6	9.6	7.4	5.0	0.0068	5DEC3100(1)N5(2)	F5DEC3100(1)N5(2)
0.10	100	4.6	9.6	7.4	5.0	0.01	5DEC3100(1)D5(2)	F5DEC3100(1)D5(2)
0.10	100	4.6	9.6	7.4	5.0	0.047	5DEC3100(1)R5(2)	F5DEC3100(1)R5(2)
0.10	100	4.6	9.6	7.4	5.0	0.068	5DEC3100(1)T5(2)	F5DEC3100(1)T5(2)
0.10	100	4.6	9.6	7.4	5.0	0.1	5DEC3100(1)S5(2)	F5DEC3100(1)S5(2)
0.22	100	4.6	9.6	7.4	5.0	0.00001	5DEC3220(1)U5(2)	F5DEC3220(1)U5(2)
Cap Value (µF)	VDC	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	Ceramic Cap (µF)	New KEMET Part Number	Legacy Part Number

(1) Insert lead and packaging code. See Ordering Options Table for available options.
(2) K = 10%, M = 20%.

Table 1 – Ratings & Part Number Reference cont'd

Cap Value (µF)	VDC	Max Dimensions in mm			Lead Spacing (p)	Ceramic Cap (µF)	New KEMET Part Number	Legacy Part Number
		B	H	L				
0.22	100	4.6	9.6	7.4	5.0	0.000022	5DEC3220(1)V5(2)	F5DEC3220(1)V5(2)
0.22	100	4.6	9.6	7.4	5.0	0.000047	5DEC3220(1)W5(2)	F5DEC3220(1)W5(2)
0.22	100	4.6	9.6	7.4	5.0	0.000068	5DEC3220(1)X5(2)	F5DEC3220(1)X5(2)
0.22	100	4.6	9.6	7.4	5.0	0.0001	5DEC3220(1)E5(2)	F5DEC3220(1)E5(2)
0.22	100	4.6	9.6	7.4	5.0	0.00022	5DEC3220(1)G5(2)	F5DEC3220(1)G5(2)
0.22	100	4.6	9.6	7.4	5.0	0.00047	5DEC3220(1)A5(2)	F5DEC3220(1)A5(2)
0.22	100	4.6	9.6	7.4	5.0	0.00068	5DEC3220(1)H5(2)	F5DEC3220(1)H5(2)
0.22	100	4.6	9.6	7.4	5.0	0.001	5DEC3220(1)C5(2)	F5DEC3220(1)C5(2)
0.22	100	4.6	9.6	7.4	5.0	0.0022	5DEC3220(1)F5(2)	F5DEC3220(1)F5(2)
0.22	100	4.6	9.6	7.4	5.0	0.0047	5DEC3220(1)B5(2)	F5DEC3220(1)B5(2)
0.22	100	4.6	9.6	7.4	5.0	0.0068	5DEC3220(1)N5(2)	F5DEC3220(1)N5(2)
0.22	100	4.6	9.6	7.4	5.0	0.01	5DEC3220(1)D5(2)	F5DEC3220(1)D5(2)
0.22	100	4.6	9.6	7.4	5.0	0.047	5DEC3220(1)R5(2)	F5DEC3220(1)R5(2)
0.22	100	4.6	9.6	7.4	5.0	0.068	5DEC3220(1)T5(2)	F5DEC3220(1)T5(2)
0.22	100	4.6	9.6	7.4	5.0	0.1	5DEC3220(1)S5(2)	F5DEC3220(1)S5(2)
0.33	100	4.6	9.6	7.4	5.0	0.00001	5DEC3330(1)U5(2)	F5DEC3330(1)U5(2)
0.33	100	4.6	9.6	7.4	5.0	0.000022	5DEC3330(1)V5(2)	F5DEC3330(1)V5(2)
0.33	100	4.6	9.6	7.4	5.0	0.000047	5DEC3330(1)W5(2)	F5DEC3330(1)W5(2)
0.33	100	4.6	9.6	7.4	5.0	0.000068	5DEC3330(1)X5(2)	F5DEC3330(1)X5(2)
0.33	100	4.6	9.6	7.4	5.0	0.0001	5DEC3330(1)E5(2)	F5DEC3330(1)E5(2)
0.33	100	4.6	9.6	7.4	5.0	0.00022	5DEC3330(1)G5(2)	F5DEC3330(1)G5(2)
0.33	100	4.6	9.6	7.4	5.0	0.00047	5DEC3330(1)A5(2)	F5DEC3330(1)A5(2)
0.33	100	4.6	9.6	7.4	5.0	0.00068	5DEC3330(1)H5(2)	F5DEC3330(1)H5(2)
0.33	100	4.6	9.6	7.4	5.0	0.001	5DEC3330(1)C5(2)	F5DEC3330(1)C5(2)
0.33	100	4.6	9.6	7.4	5.0	0.0022	5DEC3330(1)F5(2)	F5DEC3330(1)F5(2)
0.33	100	4.6	9.6	7.4	5.0	0.0047	5DEC3330(1)B5(2)	F5DEC3330(1)B5(2)
0.33	100	4.6	9.6	7.4	5.0	0.0068	5DEC3330(1)N5(2)	F5DEC3330(1)N5(2)
0.33	100	4.6	9.6	7.4	5.0	0.01	5DEC3330(1)D5(2)	F5DEC3330(1)D5(2)
0.33	100	4.6	9.6	7.4	5.0	0.047	5DEC3330(1)R5(2)	F5DEC3330(1)R5(2)
0.33	100	4.6	9.6	7.4	5.0	0.068	5DEC3330(1)T5(2)	F5DEC3330(1)T5(2)
0.33	100	4.6	9.6	7.4	5.0	0.1	5DEC3330(1)S5(2)	F5DEC3330(1)S5(2)
0.47	100	4.6	9.6	7.4	5.0	0.00001	5DEC3470(1)U5(2)	F5DEC3470(1)U5(2)
0.47	100	4.6	9.6	7.4	5.0	0.000022	5DEC3470(1)V5(2)	F5DEC3470(1)V5(2)
0.47	100	4.6	9.6	7.4	5.0	0.000047	5DEC3470(1)W5(2)	F5DEC3470(1)W5(2)
0.47	100	4.6	9.6	7.4	5.0	0.000068	5DEC3470(1)X5(2)	F5DEC3470(1)X5(2)
0.47	100	4.6	9.6	7.4	5.0	0.0001	5DEC3470(1)E5(2)	F5DEC3470(1)E5(2)
0.47	100	4.6	9.6	7.4	5.0	0.00022	5DEC3470(1)G5(2)	F5DEC3470(1)G5(2)
0.47	100	4.6	9.6	7.4	5.0	0.00047	5DEC3470(1)A5(2)	F5DEC3470(1)A5(2)
0.47	100	4.6	9.6	7.4	5.0	0.00068	5DEC3470(1)H5(2)	F5DEC3470(1)H5(2)
0.47	100	4.6	9.6	7.4	5.0	0.001	5DEC3470(1)C5(2)	F5DEC3470(1)C5(2)
0.47	100	4.6	9.6	7.4	5.0	0.0022	5DEC3470(1)F5(2)	F5DEC3470(1)F5(2)
0.47	100	4.6	9.6	7.4	5.0	0.0047	5DEC3470(1)B5(2)	F5DEC3470(1)B5(2)
0.47	100	4.6	9.6	7.4	5.0	0.0068	5DEC3470(1)N5(2)	F5DEC3470(1)N5(2)
0.47	100	4.6	9.6	7.4	5.0	0.01	5DEC3470(1)D5(2)	F5DEC3470(1)D5(2)
0.47	100	4.6	9.6	7.4	5.0	0.047	5DEC3470(1)R5(2)	F5DEC3470(1)R5(2)
0.47	100	4.6	9.6	7.4	5.0	0.068	5DEC3470(1)T5(2)	F5DEC3470(1)T5(2)
0.47	100	4.6	9.6	7.4	5.0	0.1	5DEC3470(1)S5(2)	F5DEC3470(1)S5(2)
0.56	100	5.1	10.1	7.5	5.0	0.00001	5DEC3560(1)U6(2)	F5DEC3560(1)U6(2)
0.56	100	5.1	10.1	7.5	5.0	0.000022	5DEC3560(1)V6(2)	F5DEC3560(1)V6(2)
0.56	100	5.1	10.1	7.5	5.0	0.000047	5DEC3560(1)W6(2)	F5DEC3560(1)W6(2)
0.56	100	5.1	10.1	7.5	5.0	0.000068	5DEC3560(1)X6(2)	F5DEC3560(1)X6(2)
0.56	100	5.1	10.1	7.5	5.0	0.0001	5DEC3560(1)E6(2)	F5DEC3560(1)E6(2)
0.56	100	5.1	10.1	7.5	5.0	0.00022	5DEC3560(1)G6(2)	F5DEC3560(1)G6(2)
0.56	100	5.1	10.1	7.5	5.0	0.00047	5DEC3560(1)A6(2)	F5DEC3560(1)A6(2)
0.56	100	5.1	10.1	7.5	5.0	0.00068	5DEC3560(1)H6(2)	F5DEC3560(1)H6(2)
0.56	100	5.1	10.1	7.5	5.0	0.001	5DEC3560(1)C6(2)	F5DEC3560(1)C6(2)
0.56	100	5.1	10.1	7.5	5.0	0.0022	5DEC3560(1)F6(2)	F5DEC3560(1)F6(2)
0.56	100	5.1	10.1	7.5	5.0	0.0047	5DEC3560(1)B6(2)	F5DEC3560(1)B6(2)
0.56	100	5.1	10.1	7.5	5.0	0.0068	5DEC3560(1)N6(2)	F5DEC3560(1)N6(2)
Cap Value (µF)	VDC	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	Ceramic Cap (µF)	New KEMET Part Number	Legacy Part Number

(1) Insert lead and packaging code. See Ordering Options Table for available options.
(2) K = 10%, M = 20%.

Roll Over for Order Info.

Table 1 – Ratings & Part Number Reference cont'd

Cap Value (µF)	VDC	Max Dimensions in mm			Lead Spacing (p)	Ceramic Cap (µF)	New KEMET Part Number	Legacy Part Number
		B	H	L				
0.56	100	5.1	10.1	7.5	5.0	0.01	5DEC3560(1)D6(2)	F5DEC3560(1)D6(2)
0.56	100	5.1	10.1	7.5	5.0	0.047	5DEC3560(1)R6(2)	F5DEC3560(1)R6(2)
0.56	100	5.1	10.1	7.5	5.0	0.068	5DEC3560(1)T6(2)	F5DEC3560(1)T6(2)
0.56	100	5.1	10.1	7.5	5.0	0.1	5DEC3560(1)S6(2)	F5DEC3560(1)S6(2)
0.68	100	5.1	10.1	7.5	5.0	0.00001	5DEC3680(1)U6(2)	F5DEC3680(1)U6(2)
0.68	100	5.1	10.1	7.5	5.0	0.000022	5DEC3680(1)V6(2)	F5DEC3680(1)V6(2)
0.68	100	5.1	10.1	7.5	5.0	0.000047	5DEC3680(1)W6(2)	F5DEC3680(1)W6(2)
0.68	100	5.1	10.1	7.5	5.0	0.000068	5DEC3680(1)X6(2)	F5DEC3680(1)X6(2)
0.68	100	5.1	10.1	7.5	5.0	0.0001	5DEC3680(1)E6(2)	F5DEC3680(1)E6(2)
0.68	100	5.1	10.1	7.5	5.0	0.00022	5DEC3680(1)G6(2)	F5DEC3680(1)G6(2)
0.68	100	5.1	10.1	7.5	5.0	0.00047	5DEC3680(1)A6(2)	F5DEC3680(1)A6(2)
0.68	100	5.1	10.1	7.5	5.0	0.00068	5DEC3680(1)H6(2)	F5DEC3680(1)H6(2)
0.68	100	5.1	10.1	7.5	5.0	0.001	5DEC3680(1)C6(2)	F5DEC3680(1)C6(2)
0.68	100	5.1	10.1	7.5	5.0	0.0022	5DEC3680(1)F6(2)	F5DEC3680(1)F6(2)
0.68	100	5.1	10.1	7.5	5.0	0.0047	5DEC3680(1)B6(2)	F5DEC3680(1)B6(2)
0.68	100	5.1	10.1	7.5	5.0	0.0068	5DEC3680(1)N6(2)	F5DEC3680(1)N6(2)
0.68	100	5.1	10.1	7.5	5.0	0.01	5DEC3680(1)D6(2)	F5DEC3680(1)D6(2)
0.68	100	5.1	10.1	7.5	5.0	0.047	5DEC3680(1)R6(2)	F5DEC3680(1)R6(2)
0.68	100	5.1	10.1	7.5	5.0	0.068	5DEC3680(1)T6(2)	F5DEC3680(1)T6(2)
0.68	100	5.1	10.1	7.5	5.0	0.1	5DEC3680(1)S6(2)	F5DEC3680(1)S6(2)
1.00	100	5.1	10.1	7.5	5.0	0.00001	5DEC4100(1)U6(2)	F5DEC4100(1)U6(2)
1.00	100	5.1	10.1	7.5	5.0	0.000022	5DEC4100(1)V6(2)	F5DEC4100(1)V6(2)
1.00	100	5.1	10.1	7.5	5.0	0.000047	5DEC4100(1)W6(2)	F5DEC4100(1)W6(2)
1.00	100	5.1	10.1	7.5	5.0	0.000068	5DEC4100(1)X6(2)	F5DEC4100(1)X6(2)
1.00	100	5.1	10.1	7.5	5.0	0.0001	5DEC4100(1)E6(2)	F5DEC4100(1)E6(2)
1.00	100	5.1	10.1	7.5	5.0	0.00022	5DEC4100(1)G6(2)	F5DEC4100(1)G6(2)
1.00	100	5.1	10.1	7.5	5.0	0.00047	5DEC4100(1)A6(2)	F5DEC4100(1)A6(2)
1.00	100	5.1	10.1	7.5	5.0	0.00068	5DEC4100(1)H6(2)	F5DEC4100(1)H6(2)
1.00	100	5.1	10.1	7.5	5.0	0.001	5DEC4100(1)C6(2)	F5DEC4100(1)C6(2)
1.00	100	5.1	10.1	7.5	5.0	0.0022	5DEC4100(1)F6(2)	F5DEC4100(1)F6(2)
1.00	100	5.1	10.1	7.5	5.0	0.0047	5DEC4100(1)B6(2)	F5DEC4100(1)B6(2)
1.00	100	5.1	10.1	7.5	5.0	0.0068	5DEC4100(1)N6(2)	F5DEC4100(1)N6(2)
1.00	100	5.1	10.1	7.5	5.0	0.01	5DEC4100(1)D6(2)	F5DEC4100(1)D6(2)
1.00	100	5.1	10.1	7.5	5.0	0.047	5DEC4100(1)R6(2)	F5DEC4100(1)R6(2)
1.00	100	5.1	10.1	7.5	5.0	0.068	5DEC4100(1)T6(2)	F5DEC4100(1)T6(2)
1.00	100	5.1	10.1	7.5	5.0	0.1	5DEC4100(1)S6(2)	F5DEC4100(1)S6(2)
1.50	100	5.1	10.1	7.5	5.0	0.00001	5DEC4150(1)U6(2)	F5DEC4150(1)U6(2)
1.50	100	5.1	10.1	7.5	5.0	0.000022	5DEC4150(1)V6(2)	F5DEC4150(1)V6(2)
1.50	100	5.1	10.1	7.5	5.0	0.000047	5DEC4150(1)W6(2)	F5DEC4150(1)W6(2)
1.50	100	5.1	10.1	7.5	5.0	0.000068	5DEC4150(1)X6(2)	F5DEC4150(1)X6(2)
1.50	100	5.1	10.1	7.5	5.0	0.0001	5DEC4150(1)E6(2)	F5DEC4150(1)E6(2)
1.50	100	5.1	10.1	7.5	5.0	0.00022	5DEC4150(1)G6(2)	F5DEC4150(1)G6(2)
1.50	100	5.1	10.1	7.5	5.0	0.00047	5DEC4150(1)A6(2)	F5DEC4150(1)A6(2)
1.50	100	5.1	10.1	7.5	5.0	0.00068	5DEC4150(1)H6(2)	F5DEC4150(1)H6(2)
1.50	100	5.1	10.1	7.5	5.0	0.001	5DEC4150(1)C6(2)	F5DEC4150(1)C6(2)
1.50	100	5.1	10.1	7.5	5.0	0.0022	5DEC4150(1)F6(2)	F5DEC4150(1)F6(2)
1.50	100	5.1	10.1	7.5	5.0	0.0047	5DEC4150(1)B6(2)	F5DEC4150(1)B6(2)
1.50	100	5.1	10.1	7.5	5.0	0.0068	5DEC4150(1)N6(2)	F5DEC4150(1)N6(2)
1.50	100	5.1	10.1	7.5	5.0	0.01	5DEC4150(1)D6(2)	F5DEC4150(1)D6(2)
1.50	100	5.1	10.1	7.5	5.0	0.047	5DEC4150(1)R6(2)	F5DEC4150(1)R6(2)
1.50	100	5.1	10.1	7.5	5.0	0.068	5DEC4150(1)T6(2)	F5DEC4150(1)T6(2)
1.50	100	5.1	10.1	7.5	5.0	0.1	5DEC4150(1)S6(2)	F5DEC4150(1)S6(2)
1.80	100	6.1	11.1	7.5	5.0	0.1	5DEC4180(1)S7(2)	F5DEC4180(1)S7(2)
1.80	100	6.1	11.1	7.5	5.0	0.000022	5DEC4180(1)V7(2)	F5DEC4180(1)V7(2)
1.80	100	6.1	11.1	7.5	5.0	0.000047	5DEC4180(1)W7(2)	F5DEC4180(1)W7(2)
1.80	100	6.1	11.1	7.5	5.0	0.000068	5DEC4180(1)X7(2)	F5DEC4180(1)X7(2)
1.80	100	6.1	11.1	7.5	5.0	0.0001	5DEC4180(1)E7(2)	F5DEC4180(1)E7(2)
1.80	100	6.1	11.1	7.5	5.0	0.00022	5DEC4180(1)G7(2)	F5DEC4180(1)G7(2)
1.80	100	6.1	11.1	7.5	5.0	0.00047	5DEC4180(1)A7(2)	F5DEC4180(1)A7(2)
Cap Value (µF)	VDC	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	Ceramic Cap (µF)	New KEMET Part Number	Legacy Part Number

(1) Insert lead and packaging code. See Ordering Options Table for available options.
(2) K = 10%, M = 20%.

Roll Over for Order Info.

Table 1 – Ratings & Part Number Reference cont'd

Cap Value (µF)	VDC	Max Dimensions in mm			Lead Spacing (p)	Ceramic Cap (µF)	New KEMET Part Number	Legacy Part Number
		B	H	L				
1.80	100	6.1	11.1	7.5	5.0	0.00068	5DEC4180(1)H7(2)	F5DEC4180(1)H7(2)
1.80	100	6.1	11.1	7.5	5.0	0.001	5DEC4180(1)C7(2)	F5DEC4180(1)C7(2)
1.80	100	6.1	11.1	7.5	5.0	0.0022	5DEC4180(1)F7(2)	F5DEC4180(1)F7(2)
1.80	100	6.1	11.1	7.5	5.0	0.0047	5DEC4180(1)B7(2)	F5DEC4180(1)B7(2)
1.80	100	6.1	11.1	7.5	5.0	0.0068	5DEC4180(1)N7(2)	F5DEC4180(1)N7(2)
1.80	100	6.1	11.1	7.5	5.0	0.01	5DEC4180(1)D7(2)	F5DEC4180(1)D7(2)
1.80	100	6.1	11.1	7.5	5.0	0.047	5DEC4180(1)R7(2)	F5DEC4180(1)R7(2)
1.80	100	6.1	11.1	7.5	5.0	0.068	5DEC4180(1)T7(2)	F5DEC4180(1)T7(2)
1.80	100	6.1	11.1	7.5	5.0	0.00001	5DEC4180(1)U7(2)	F5DEC4180(1)U7(2)
2.20	100	6.1	11.1	7.5	5.0	0.1	5DEC4220(1)S7(2)	F5DEC4220(1)S7(2)
2.20	100	6.1	11.1	7.5	5.0	0.000022	5DEC4220(1)V7(2)	F5DEC4220(1)V7(2)
2.20	100	6.1	11.1	7.5	5.0	0.000047	5DEC4220(1)W7(2)	F5DEC4220(1)W7(2)
2.20	100	6.1	11.1	7.5	5.0	0.000068	5DEC4220(1)X7(2)	F5DEC4220(1)X7(2)
2.20	100	6.1	11.1	7.5	5.0	0.0001	5DEC4220(1)E7(2)	F5DEC4220(1)E7(2)
2.20	100	6.1	11.1	7.5	5.0	0.00022	5DEC4220(1)G7(2)	F5DEC4220(1)G7(2)
2.20	100	6.1	11.1	7.5	5.0	0.00047	5DEC4220(1)A7(2)	F5DEC4220(1)A7(2)
2.20	100	6.1	11.1	7.5	5.0	0.00068	5DEC4220(1)H7(2)	F5DEC4220(1)H7(2)
2.20	100	6.1	11.1	7.5	5.0	0.001	5DEC4220(1)C7(2)	F5DEC4220(1)C7(2)
2.20	100	6.1	11.1	7.5	5.0	0.0022	5DEC4220(1)F7(2)	F5DEC4220(1)F7(2)
2.20	100	6.1	11.1	7.5	5.0	0.0047	5DEC4220(1)B7(2)	F5DEC4220(1)B7(2)
2.20	100	6.1	11.1	7.5	5.0	0.0068	5DEC4220(1)N7(2)	F5DEC4220(1)N7(2)
2.20	100	6.1	11.1	7.5	5.0	0.01	5DEC4220(1)D7(2)	F5DEC4220(1)D7(2)
2.20	100	6.1	11.1	7.5	5.0	0.047	5DEC4220(1)R7(2)	F5DEC4220(1)R7(2)
2.20	100	6.1	11.1	7.5	5.0	0.068	5DEC4220(1)T7(2)	F5DEC4220(1)T7(2)
2.20	100	6.1	11.1	7.5	5.0	0.00001	5DEC4220(1)U7(2)	F5DEC4220(1)U7(2)
0.10	63	5.2	11.1	13.4	10.0	0.00001	5DDF3100(1)U2(2)	F5DDF3100(1)U2(2)
0.10	63	5.2	11.1	13.4	10.0	0.000022	5DDF3100(1)V2(2)	F5DDF3100(1)V2(2)
0.10	63	5.2	11.1	13.4	10.0	0.000047	5DDF3100(1)W2(2)	F5DDF3100(1)W2(2)
0.10	63	5.2	11.1	13.4	10.0	0.000068	5DDF3100(1)X2(2)	F5DDF3100(1)X2(2)
0.10	63	5.2	11.1	13.4	10.0	0.0001	5DDF3100(1)E2(2)	F5DDF3100(1)E2(2)
0.10	63	5.2	11.1	13.4	10.0	0.00022	5DDF3100(1)G2(2)	F5DDF3100(1)G2(2)
0.10	63	5.2	11.1	13.4	10.0	0.00047	5DDF3100(1)A2(2)	F5DDF3100(1)A2(2)
0.10	63	5.2	11.1	13.4	10.0	0.00068	5DDF3100(1)H2(2)	F5DDF3100(1)H2(2)
0.10	63	5.2	11.1	13.4	10.0	0.001	5DDF3100(1)C2(2)	F5DDF3100(1)C2(2)
0.10	63	5.2	11.1	13.4	10.0	0.0022	5DDF3100(1)F2(2)	F5DDF3100(1)F2(2)
0.10	63	5.2	11.1	13.4	10.0	0.0047	5DDF3100(1)B2(2)	F5DDF3100(1)B2(2)
0.10	63	5.2	11.1	13.4	10.0	0.0068	5DDF3100(1)N2(2)	F5DDF3100(1)N2(2)
0.10	63	5.2	11.1	13.4	10.0	0.01	5DDF3100(1)D2(2)	F5DDF3100(1)D2(2)
0.10	63	5.2	11.1	13.4	10.0	0.047	5DDF3100(1)R2(2)	F5DDF3100(1)R2(2)
0.10	63	5.2	11.1	13.4	10.0	0.068	5DDF3100(1)T2(2)	F5DDF3100(1)T2(2)
0.10	63	5.2	11.1	13.4	10.0	0.1	5DDF3100(1)S2(2)	F5DDF3100(1)S2(2)
0.22	63	5.2	11.1	13.4	10.0	0.00001	5DDF3220(1)U2(2)	F5DDF3220(1)U2(2)
0.22	63	5.2	11.1	13.4	10.0	0.000022	5DDF3220(1)V2(2)	F5DDF3220(1)V2(2)
0.22	63	5.2	11.1	13.4	10.0	0.000047	5DDF3220(1)W2(2)	F5DDF3220(1)W2(2)
0.22	63	5.2	11.1	13.4	10.0	0.000068	5DDF3220(1)X2(2)	F5DDF3220(1)X2(2)
0.22	63	5.2	11.1	13.4	10.0	0.0001	5DDF3220(1)E2(2)	F5DDF3220(1)E2(2)
0.22	63	5.2	11.1	13.4	10.0	0.00022	5DDF3220(1)G2(2)	F5DDF3220(1)G2(2)
0.22	63	5.2	11.1	13.4	10.0	0.00047	5DDF3220(1)A2(2)	F5DDF3220(1)A2(2)
0.22	63	5.2	11.1	13.4	10.0	0.00068	5DDF3220(1)H2(2)	F5DDF3220(1)H2(2)
0.22	63	5.2	11.1	13.4	10.0	0.001	5DDF3220(1)C2(2)	F5DDF3220(1)C2(2)
0.22	63	5.2	11.1	13.4	10.0	0.0022	5DDF3220(1)F2(2)	F5DDF3220(1)F2(2)
0.22	63	5.2	11.1	13.4	10.0	0.0047	5DDF3220(1)B2(2)	F5DDF3220(1)B2(2)
0.22	63	5.2	11.1	13.4	10.0	0.0068	5DDF3220(1)N2(2)	F5DDF3220(1)N2(2)
0.22	63	5.2	11.1	13.4	10.0	0.01	5DDF3220(1)D2(2)	F5DDF3220(1)D2(2)
0.22	63	5.2	11.1	13.4	10.0	0.047	5DDF3220(1)R2(2)	F5DDF3220(1)R2(2)
0.22	63	5.2	11.1	13.4	10.0	0.068	5DDF3220(1)T2(2)	F5DDF3220(1)T2(2)
0.22	63	5.2	11.1	13.4	10.0	0.1	5DDF3220(1)S2(2)	F5DDF3220(1)S2(2)
0.33	63	5.2	11.1	13.4	10.0	0.00001	5DDF3330(1)U2(2)	F5DDF3330(1)U2(2)
0.33	63	5.2	11.1	13.4	10.0	0.000022	5DDF3330(1)V2(2)	F5DDF3330(1)V2(2)
Cap Value (µF)	VDC	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	Ceramic Cap (µF)	New KEMET Part Number	Legacy Part Number

(1) Insert lead and packaging code. See Ordering Options Table for available options.
(2) K = 10%, M = 20%.

Roll Over for Order Info.

Table 1 – Ratings & Part Number Reference cont'd

Cap Value (µF)	VDC	Max Dimensions in mm			Lead Spacing (p)	Ceramic Cap (µF)	New KEMET Part Number	Legacy Part Number
		B	H	L				
0.33	63	5.2	11.1	13.4	10.0	0.000047	5DDF3330(1)W2(2)	F5DDF3330(1)W2(2)
0.33	63	5.2	11.1	13.4	10.0	0.000068	5DDF3330(1)X2(2)	F5DDF3330(1)X2(2)
0.33	63	5.2	11.1	13.4	10.0	0.0001	5DDF3330(1)E2(2)	F5DDF3330(1)E2(2)
0.33	63	5.2	11.1	13.4	10.0	0.00022	5DDF3330(1)G2(2)	F5DDF3330(1)G2(2)
0.33	63	5.2	11.1	13.4	10.0	0.00047	5DDF3330(1)A2(2)	F5DDF3330(1)A2(2)
0.33	63	5.2	11.1	13.4	10.0	0.00068	5DDF3330(1)H2(2)	F5DDF3330(1)H2(2)
0.33	63	5.2	11.1	13.4	10.0	0.001	5DDF3330(1)C2(2)	F5DDF3330(1)C2(2)
0.33	63	5.2	11.1	13.4	10.0	0.0022	5DDF3330(1)F2(2)	F5DDF3330(1)F2(2)
0.33	63	5.2	11.1	13.4	10.0	0.0047	5DDF3330(1)B2(2)	F5DDF3330(1)B2(2)
0.33	63	5.2	11.1	13.4	10.0	0.0068	5DDF3330(1)N2(2)	F5DDF3330(1)N2(2)
0.33	63	5.2	11.1	13.4	10.0	0.01	5DDF3330(1)D2(2)	F5DDF3330(1)D2(2)
0.33	63	5.2	11.1	13.4	10.0	0.047	5DDF3330(1)R2(2)	F5DDF3330(1)R2(2)
0.33	63	5.2	11.1	13.4	10.0	0.068	5DDF3330(1)T2(2)	F5DDF3330(1)T2(2)
0.33	63	5.2	11.1	13.4	10.0	0.1	5DDF3330(1)S2(2)	F5DDF3330(1)S2(2)
0.47	63	5.2	11.1	13.4	10.0	0.00001	5DDF3470(1)U2(2)	F5DDF3470(1)U2(2)
0.47	63	5.2	11.1	13.4	10.0	0.000022	5DDF3470(1)V2(2)	F5DDF3470(1)V2(2)
0.47	63	5.2	11.1	13.4	10.0	0.000047	5DDF3470(1)W2(2)	F5DDF3470(1)W2(2)
0.47	63	5.2	11.1	13.4	10.0	0.000068	5DDF3470(1)X2(2)	F5DDF3470(1)X2(2)
0.47	63	5.2	11.1	13.4	10.0	0.0001	5DDF3470(1)E2(2)	F5DDF3470(1)E2(2)
0.47	63	5.2	11.1	13.4	10.0	0.00022	5DDF3470(1)G2(2)	F5DDF3470(1)G2(2)
0.47	63	5.2	11.1	13.4	10.0	0.00047	5DDF3470(1)A2(2)	F5DDF3470(1)A2(2)
0.47	63	5.2	11.1	13.4	10.0	0.00068	5DDF3470(1)H2(2)	F5DDF3470(1)H2(2)
0.47	63	5.2	11.1	13.4	10.0	0.001	5DDF3470(1)C2(2)	F5DDF3470(1)C2(2)
0.47	63	5.2	11.1	13.4	10.0	0.0022	5DDF3470(1)F2(2)	F5DDF3470(1)F2(2)
0.47	63	5.2	11.1	13.4	10.0	0.0047	5DDF3470(1)B2(2)	F5DDF3470(1)B2(2)
0.47	63	5.2	11.1	13.4	10.0	0.0068	5DDF3470(1)N2(2)	F5DDF3470(1)N2(2)
0.47	63	5.2	11.1	13.4	10.0	0.01	5DDF3470(1)D2(2)	F5DDF3470(1)D2(2)
0.47	63	5.2	11.1	13.4	10.0	0.047	5DDF3470(1)R2(2)	F5DDF3470(1)R2(2)
0.47	63	5.2	11.1	13.4	10.0	0.068	5DDF3470(1)T2(2)	F5DDF3470(1)T2(2)
0.47	63	5.2	11.1	13.4	10.0	0.1	5DDF3470(1)S2(2)	F5DDF3470(1)S2(2)
0.56	63	5.2	11.1	13.4	10.0	0.00001	5DDF3560(1)U2(2)	F5DDF3560(1)U2(2)
0.56	63	5.2	11.1	13.4	10.0	0.000022	5DDF3560(1)V2(2)	F5DDF3560(1)V2(2)
0.56	63	5.2	11.1	13.4	10.0	0.000047	5DDF3560(1)W2(2)	F5DDF3560(1)W2(2)
0.56	63	5.2	11.1	13.4	10.0	0.000068	5DDF3560(1)X2(2)	F5DDF3560(1)X2(2)
0.56	63	5.2	11.1	13.4	10.0	0.0001	5DDF3560(1)E2(2)	F5DDF3560(1)E2(2)
0.56	63	5.2	11.1	13.4	10.0	0.00022	5DDF3560(1)G2(2)	F5DDF3560(1)G2(2)
0.56	63	5.2	11.1	13.4	10.0	0.00047	5DDF3560(1)A2(2)	F5DDF3560(1)A2(2)
0.56	63	5.2	11.1	13.4	10.0	0.00068	5DDF3560(1)H2(2)	F5DDF3560(1)H2(2)
0.56	63	5.2	11.1	13.4	10.0	0.001	5DDF3560(1)C2(2)	F5DDF3560(1)C2(2)
0.56	63	5.2	11.1	13.4	10.0	0.0022	5DDF3560(1)F2(2)	F5DDF3560(1)F2(2)
0.56	63	5.2	11.1	13.4	10.0	0.0047	5DDF3560(1)B2(2)	F5DDF3560(1)B2(2)
0.56	63	5.2	11.1	13.4	10.0	0.0068	5DDF3560(1)N2(2)	F5DDF3560(1)N2(2)
0.56	63	5.2	11.1	13.4	10.0	0.01	5DDF3560(1)D2(2)	F5DDF3560(1)D2(2)
0.56	63	5.2	11.1	13.4	10.0	0.047	5DDF3560(1)R2(2)	F5DDF3560(1)R2(2)
0.56	63	5.2	11.1	13.4	10.0	0.068	5DDF3560(1)T2(2)	F5DDF3560(1)T2(2)
0.56	63	5.2	11.1	13.4	10.0	0.1	5DDF3560(1)S2(2)	F5DDF3560(1)S2(2)
1.00	63	5.2	11.1	13.4	10.0	0.00001	5DDF4100(1)U2(2)	F5DDF4100(1)U2(2)
1.00	63	5.2	11.1	13.4	10.0	0.000022	5DDF4100(1)V2(2)	F5DDF4100(1)V2(2)
1.00	63	5.2	11.1	13.4	10.0	0.000047	5DDF4100(1)W2(2)	F5DDF4100(1)W2(2)
1.00	63	5.2	11.1	13.4	10.0	0.000068	5DDF4100(1)X2(2)	F5DDF4100(1)X2(2)
1.00	63	5.2	11.1	13.4	10.0	0.0001	5DDF4100(1)E2(2)	F5DDF4100(1)E2(2)
1.00	63	5.2	11.1	13.4	10.0	0.00022	5DDF4100(1)G2(2)	F5DDF4100(1)G2(2)
1.00	63	5.2	11.1	13.4	10.0	0.00047	5DDF4100(1)A2(2)	F5DDF4100(1)A2(2)
1.00	63	5.2	11.1	13.4	10.0	0.00068	5DDF4100(1)H2(2)	F5DDF4100(1)H2(2)
1.00	63	5.2	11.1	13.4	10.0	0.001	5DDF4100(1)C2(2)	F5DDF4100(1)C2(2)
1.00	63	5.2	11.1	13.4	10.0	0.0022	5DDF4100(1)F2(2)	F5DDF4100(1)F2(2)
1.00	63	5.2	11.1	13.4	10.0	0.0047	5DDF4100(1)B2(2)	F5DDF4100(1)B2(2)
1.00	63	5.2	11.1	13.4	10.0	0.0068	5DDF4100(1)N2(2)	F5DDF4100(1)N2(2)
1.00	63	5.2	11.1	13.4	10.0	0.01	5DDF4100(1)D2(2)	F5DDF4100(1)D2(2)
Cap Value (µF)	VDC	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	Ceramic Cap (µF)	New KEMET Part Number	Legacy Part Number

(1) Insert lead and packaging code. See Ordering Options Table for available options.
(2) K = 10%, M = 20%.

Roll Over for Order Info.

Table 1 – Ratings & Part Number Reference cont'd

Cap Value (µF)	VDC	Max Dimensions in mm			Lead Spacing (p)	Ceramic Cap (µF)	New KEMET Part Number	Legacy Part Number
		B	H	L				
1.00	63	5.2	11.1	13.4	10.0	0.047	5DDF4100(1)R2(2)	F5DDF4100(1)R2(2)
1.00	63	5.2	11.1	13.4	10.0	0.068	5DDF4100(1)T2(2)	F5DDF4100(1)T2(2)
1.00	63	5.2	11.1	13.4	10.0	0.1	5DDF4100(1)S2(2)	F5DDF4100(1)S2(2)
1.20	63	6.2	12.1	13.4	10.0	0.00001	5DDF4120(1)U3(2)	F5DDF4120(1)U3(2)
1.20	63	6.2	12.1	13.4	10.0	0.000022	5DDF4120(1)V3(2)	F5DDF4120(1)V3(2)
1.20	63	6.2	12.1	13.4	10.0	0.000047	5DDF4120(1)W3(2)	F5DDF4120(1)W3(2)
1.20	63	6.2	12.1	13.4	10.0	0.000068	5DDF4120(1)X3(2)	F5DDF4120(1)X3(2)
1.20	63	6.2	12.1	13.4	10.0	0.0001	5DDF4120(1)E3(2)	F5DDF4120(1)E3(2)
1.20	63	6.2	12.1	13.4	10.0	0.00022	5DDF4120(1)G3(2)	F5DDF4120(1)G3(2)
1.20	63	6.2	12.1	13.4	10.0	0.00047	5DDF4120(1)A3(2)	F5DDF4120(1)A3(2)
1.20	63	6.2	12.1	13.4	10.0	0.00068	5DDF4120(1)H3(2)	F5DDF4120(1)H3(2)
1.20	63	6.2	12.1	13.4	10.0	0.001	5DDF4120(1)C3(2)	F5DDF4120(1)C3(2)
1.20	63	6.2	12.1	13.4	10.0	0.0022	5DDF4120(1)F3(2)	F5DDF4120(1)F3(2)
1.20	63	6.2	12.1	13.4	10.0	0.0047	5DDF4120(1)B3(2)	F5DDF4120(1)B3(2)
1.20	63	6.2	12.1	13.4	10.0	0.0068	5DDF4120(1)N3(2)	F5DDF4120(1)N3(2)
1.20	63	6.2	12.1	13.4	10.0	0.01	5DDF4120(1)D3(2)	F5DDF4120(1)D3(2)
1.20	63	6.2	12.1	13.4	10.0	0.047	5DDF4120(1)R3(2)	F5DDF4120(1)R3(2)
1.20	63	6.2	12.1	13.4	10.0	0.068	5DDF4120(1)T3(2)	F5DDF4120(1)T3(2)
1.20	63	6.2	12.1	13.4	10.0	0.1	5DDF4120(1)S3(2)	F5DDF4120(1)S3(2)
1.50	63	6.2	12.1	13.4	10.0	0.00001	5DDF4150(1)U3(2)	F5DDF4150(1)U3(2)
1.50	63	6.2	12.1	13.4	10.0	0.000022	5DDF4150(1)V3(2)	F5DDF4150(1)V3(2)
1.50	63	6.2	12.1	13.4	10.0	0.000047	5DDF4150(1)W3(2)	F5DDF4150(1)W3(2)
1.50	63	6.2	12.1	13.4	10.0	0.000068	5DDF4150(1)X3(2)	F5DDF4150(1)X3(2)
1.50	63	6.2	12.1	13.4	10.0	0.0001	5DDF4150(1)E3(2)	F5DDF4150(1)E3(2)
1.50	63	6.2	12.1	13.4	10.0	0.00022	5DDF4150(1)G3(2)	F5DDF4150(1)G3(2)
1.50	63	6.2	12.1	13.4	10.0	0.00047	5DDF4150(1)A3(2)	F5DDF4150(1)A3(2)
1.50	63	6.2	12.1	13.4	10.0	0.00068	5DDF4150(1)H3(2)	F5DDF4150(1)H3(2)
1.50	63	6.2	12.1	13.4	10.0	0.001	5DDF4150(1)C3(2)	F5DDF4150(1)C3(2)
1.50	63	6.2	12.1	13.4	10.0	0.0022	5DDF4150(1)F3(2)	F5DDF4150(1)F3(2)
1.50	63	6.2	12.1	13.4	10.0	0.0047	5DDF4150(1)B3(2)	F5DDF4150(1)B3(2)
1.50	63	6.2	12.1	13.4	10.0	0.0068	5DDF4150(1)N3(2)	F5DDF4150(1)N3(2)
1.50	63	6.2	12.1	13.4	10.0	0.01	5DDF4150(1)D3(2)	F5DDF4150(1)D3(2)
1.50	63	6.2	12.1	13.4	10.0	0.047	5DDF4150(1)R3(2)	F5DDF4150(1)R3(2)
1.50	63	6.2	12.1	13.4	10.0	0.068	5DDF4150(1)T3(2)	F5DDF4150(1)T3(2)
1.50	63	6.2	12.1	13.4	10.0	0.1	5DDF4150(1)S3(2)	F5DDF4150(1)S3(2)
0.10	100	5.2	11.1	13.4	10.0	0.00001	5DEF3100(1)U2(2)	F5DEF3100(1)U2(2)
0.10	100	5.2	11.1	13.4	10.0	0.000022	5DEF3100(1)V2(2)	F5DEF3100(1)V2(2)
0.10	100	5.2	11.1	13.4	10.0	0.000047	5DEF3100(1)W2(2)	F5DEF3100(1)W2(2)
0.10	100	5.2	11.1	13.4	10.0	0.000068	5DEF3100(1)X2(2)	F5DEF3100(1)X2(2)
0.10	100	5.2	11.1	13.4	10.0	0.0001	5DEF3100(1)E2(2)	F5DEF3100(1)E2(2)
0.10	100	5.2	11.1	13.4	10.0	0.00022	5DEF3100(1)G2(2)	F5DEF3100(1)G2(2)
0.10	100	5.2	11.1	13.4	10.0	0.00047	5DEF3100(1)A2(2)	F5DEF3100(1)A2(2)
0.10	100	5.2	11.1	13.4	10.0	0.00068	5DEF3100(1)H2(2)	F5DEF3100(1)H2(2)
0.10	100	5.2	11.1	13.4	10.0	0.001	5DEF3100(1)C2(2)	F5DEF3100(1)C2(2)
0.10	100	5.2	11.1	13.4	10.0	0.0022	5DEF3100(1)F2(2)	F5DEF3100(1)F2(2)
0.10	100	5.2	11.1	13.4	10.0	0.0047	5DEF3100(1)B2(2)	F5DEF3100(1)B2(2)
0.10	100	5.2	11.1	13.4	10.0	0.0068	5DEF3100(1)N2(2)	F5DEF3100(1)N2(2)
0.10	100	5.2	11.1	13.4	10.0	0.01	5DEF3100(1)D2(2)	F5DEF3100(1)D2(2)
0.10	100	5.2	11.1	13.4	10.0	0.047	5DEF3100(1)R2(2)	F5DEF3100(1)R2(2)
0.10	100	5.2	11.1	13.4	10.0	0.068	5DEF3100(1)T2(2)	F5DEF3100(1)T2(2)
0.10	100	5.2	11.1	13.4	10.0	0.1	5DEF3100(1)S2(2)	F5DEF3100(1)S2(2)
0.22	100	5.2	11.1	13.4	10.0	0.00001	5DEF3220(1)U2(2)	F5DEF3220(1)U2(2)
0.22	100	5.2	11.1	13.4	10.0	0.000022	5DEF3220(1)V2(2)	F5DEF3220(1)V2(2)
0.22	100	5.2	11.1	13.4	10.0	0.000047	5DEF3220(1)W2(2)	F5DEF3220(1)W2(2)
0.22	100	5.2	11.1	13.4	10.0	0.000068	5DEF3220(1)X2(2)	F5DEF3220(1)X2(2)
0.22	100	5.2	11.1	13.4	10.0	0.0001	5DEF3220(1)E2(2)	F5DEF3220(1)E2(2)
0.22	100	5.2	11.1	13.4	10.0	0.00022	5DEF3220(1)G2(2)	F5DEF3220(1)G2(2)
0.22	100	5.2	11.1	13.4	10.0	0.00047	5DEF3220(1)A2(2)	F5DEF3220(1)A2(2)
0.22	100	5.2	11.1	13.4	10.0	0.00068	5DEF3220(1)H2(2)	F5DEF3220(1)H2(2)
Cap Value (µF)	VDC	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	Ceramic Cap (µF)	New KEMET Part Number	Legacy Part Number

(1) Insert lead and packaging code. See Ordering Options Table for available options.
(2) K = 10%, M = 20%.

Table 1 – Ratings & Part Number Reference cont'd

Cap Value (µF)	VDC	Max Dimensions in mm			Lead Spacing (p)	Ceramic Cap (µF)	New KEMET Part Number	Legacy Part Number
		B	H	L				
0.22	100	5.2	11.1	13.4	10.0	0.001	5DEF3220(1)C2(2)	F5DEF3220(1)C2(2)
0.22	100	5.2	11.1	13.4	10.0	0.0022	5DEF3220(1)F2(2)	F5DEF3220(1)F2(2)
0.22	100	5.2	11.1	13.4	10.0	0.0047	5DEF3220(1)B2(2)	F5DEF3220(1)B2(2)
0.22	100	5.2	11.1	13.4	10.0	0.0068	5DEF3220(1)N2(2)	F5DEF3220(1)N2(2)
0.22	100	5.2	11.1	13.4	10.0	0.01	5DEF3220(1)D2(2)	F5DEF3220(1)D2(2)
0.22	100	5.2	11.1	13.4	10.0	0.047	5DEF3220(1)R2(2)	F5DEF3220(1)R2(2)
0.22	100	5.2	11.1	13.4	10.0	0.068	5DEF3220(1)T2(2)	F5DEF3220(1)T2(2)
0.22	100	5.2	11.1	13.4	10.0	0.1	5DEF3220(1)S2(2)	F5DEF3220(1)S2(2)
0.33	100	5.2	11.1	13.4	10.0	0.00001	5DEF3330(1)U2(2)	F5DEF3330(1)U2(2)
0.33	100	5.2	11.1	13.4	10.0	0.000022	5DEF3330(1)V2(2)	F5DEF3330(1)V2(2)
0.33	100	5.2	11.1	13.4	10.0	0.000047	5DEF3330(1)W2(2)	F5DEF3330(1)W2(2)
0.33	100	5.2	11.1	13.4	10.0	0.000068	5DEF3330(1)X2(2)	F5DEF3330(1)X2(2)
0.33	100	5.2	11.1	13.4	10.0	0.0001	5DEF3330(1)E2(2)	F5DEF3330(1)E2(2)
0.33	100	5.2	11.1	13.4	10.0	0.00022	5DEF3330(1)G2(2)	F5DEF3330(1)G2(2)
0.33	100	5.2	11.1	13.4	10.0	0.00047	5DEF3330(1)A2(2)	F5DEF3330(1)A2(2)
0.33	100	5.2	11.1	13.4	10.0	0.00068	5DEF3330(1)H2(2)	F5DEF3330(1)H2(2)
0.33	100	5.2	11.1	13.4	10.0	0.001	5DEF3330(1)C2(2)	F5DEF3330(1)C2(2)
0.33	100	5.2	11.1	13.4	10.0	0.0022	5DEF3330(1)F2(2)	F5DEF3330(1)F2(2)
0.33	100	5.2	11.1	13.4	10.0	0.0047	5DEF3330(1)B2(2)	F5DEF3330(1)B2(2)
0.33	100	5.2	11.1	13.4	10.0	0.0068	5DEF3330(1)N2(2)	F5DEF3330(1)N2(2)
0.33	100	5.2	11.1	13.4	10.0	0.01	5DEF3330(1)D2(2)	F5DEF3330(1)D2(2)
0.33	100	5.2	11.1	13.4	10.0	0.047	5DEF3330(1)R2(2)	F5DEF3330(1)R2(2)
0.33	100	5.2	11.1	13.4	10.0	0.068	5DEF3330(1)T2(2)	F5DEF3330(1)T2(2)
0.33	100	5.2	11.1	13.4	10.0	0.1	5DEF3330(1)S2(2)	F5DEF3330(1)S2(2)
0.47	100	5.2	11.1	13.4	10.0	0.00001	5DEF3470(1)U2(2)	F5DEF3470(1)U2(2)
0.47	100	5.2	11.1	13.4	10.0	0.000022	5DEF3470(1)V2(2)	F5DEF3470(1)V2(2)
0.47	100	5.2	11.1	13.4	10.0	0.000047	5DEF3470(1)W2(2)	F5DEF3470(1)W2(2)
0.47	100	5.2	11.1	13.4	10.0	0.000068	5DEF3470(1)X2(2)	F5DEF3470(1)X2(2)
0.47	100	5.2	11.1	13.4	10.0	0.0001	5DEF3470(1)E2(2)	F5DEF3470(1)E2(2)
0.47	100	5.2	11.1	13.4	10.0	0.00022	5DEF3470(1)G2(2)	F5DEF3470(1)G2(2)
0.47	100	5.2	11.1	13.4	10.0	0.00047	5DEF3470(1)A2(2)	F5DEF3470(1)A2(2)
0.47	100	5.2	11.1	13.4	10.0	0.00068	5DEF3470(1)H2(2)	F5DEF3470(1)H2(2)
0.47	100	5.2	11.1	13.4	10.0	0.001	5DEF3470(1)C2(2)	F5DEF3470(1)C2(2)
0.47	100	5.2	11.1	13.4	10.0	0.0022	5DEF3470(1)F2(2)	F5DEF3470(1)F2(2)
0.47	100	5.2	11.1	13.4	10.0	0.0047	5DEF3470(1)B2(2)	F5DEF3470(1)B2(2)
0.47	100	5.2	11.1	13.4	10.0	0.0068	5DEF3470(1)N2(2)	F5DEF3470(1)N2(2)
0.47	100	5.2	11.1	13.4	10.0	0.01	5DEF3470(1)D2(2)	F5DEF3470(1)D2(2)
0.47	100	5.2	11.1	13.4	10.0	0.047	5DEF3470(1)R2(2)	F5DEF3470(1)R2(2)
0.47	100	5.2	11.1	13.4	10.0	0.068	5DEF3470(1)T2(2)	F5DEF3470(1)T2(2)
0.47	100	5.2	11.1	13.4	10.0	0.1	5DEF3470(1)S2(2)	F5DEF3470(1)S2(2)
0.56	100	5.2	11.1	13.4	10.0	0.00001	5DEF3560(1)U2(2)	F5DEF3560(1)U2(2)
0.56	100	5.2	11.1	13.4	10.0	0.000022	5DEF3560(1)V2(2)	F5DEF3560(1)V2(2)
0.56	100	5.2	11.1	13.4	10.0	0.000047	5DEF3560(1)W2(2)	F5DEF3560(1)W2(2)
0.56	100	5.2	11.1	13.4	10.0	0.000068	5DEF3560(1)X2(2)	F5DEF3560(1)X2(2)
0.56	100	5.2	11.1	13.4	10.0	0.0001	5DEF3560(1)E2(2)	F5DEF3560(1)E2(2)
0.56	100	5.2	11.1	13.4	10.0	0.00022	5DEF3560(1)G2(2)	F5DEF3560(1)G2(2)
0.56	100	5.2	11.1	13.4	10.0	0.00047	5DEF3560(1)A2(2)	F5DEF3560(1)A2(2)
0.56	100	5.2	11.1	13.4	10.0	0.00068	5DEF3560(1)H2(2)	F5DEF3560(1)H2(2)
0.56	100	5.2	11.1	13.4	10.0	0.001	5DEF3560(1)C2(2)	F5DEF3560(1)C2(2)
0.56	100	5.2	11.1	13.4	10.0	0.0022	5DEF3560(1)F2(2)	F5DEF3560(1)F2(2)
0.56	100	5.2	11.1	13.4	10.0	0.0047	5DEF3560(1)B2(2)	F5DEF3560(1)B2(2)
0.56	100	5.2	11.1	13.4	10.0	0.0068	5DEF3560(1)N2(2)	F5DEF3560(1)N2(2)
0.56	100	5.2	11.1	13.4	10.0	0.01	5DEF3560(1)D2(2)	F5DEF3560(1)D2(2)
0.56	100	5.2	11.1	13.4	10.0	0.047	5DEF3560(1)R2(2)	F5DEF3560(1)R2(2)
0.56	100	5.2	11.1	13.4	10.0	0.068	5DEF3560(1)T2(2)	F5DEF3560(1)T2(2)
0.56	100	5.2	11.1	13.4	10.0	0.1	5DEF3560(1)S2(2)	F5DEF3560(1)S2(2)
1.00	100	5.2	11.1	13.4	10.0	0.00001	5DEF4100(1)U2(2)	F5DEF4100(1)U2(2)
1.00	100	5.2	11.1	13.4	10.0	0.000022	5DEF4100(1)V2(2)	F5DEF4100(1)V2(2)
1.00	100	5.2	11.1	13.4	10.0	0.000047	5DEF4100(1)W2(2)	F5DEF4100(1)W2(2)
Cap Value (µF)	VDC	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	Ceramic Cap (µF)	New KEMET Part Number	Legacy Part Number

(1) Insert lead and packaging code. See Ordering Options Table for available options.
(2) K = 10%, M = 20%.

Table 1 – Ratings & Part Number Reference cont'd

Cap Value (µF)	VDC	Max Dimensions in mm			Lead Spacing (p)	Ceramic Cap (µF)	New KEMET Part Number	Legacy Part Number
		B	H	L				
0.47	100	5.2	11.1	13.4	10.0	0.001	5DEF3470(1)C2(2)	F5DEF3470(1)C2(2)
0.47	100	5.2	11.1	13.4	10.0	0.0022	5DEF3470(1)F2(2)	F5DEF3470(1)F2(2)
0.47	100	5.2	11.1	13.4	10.0	0.0047	5DEF3470(1)B2(2)	F5DEF3470(1)B2(2)
0.47	100	5.2	11.1	13.4	10.0	0.0068	5DEF3470(1)N2(2)	F5DEF3470(1)N2(2)
0.47	100	5.2	11.1	13.4	10.0	0.01	5DEF3470(1)D2(2)	F5DEF3470(1)D2(2)
0.47	100	5.2	11.1	13.4	10.0	0.047	5DEF3470(1)R2(2)	F5DEF3470(1)R2(2)
0.47	100	5.2	11.1	13.4	10.0	0.068	5DEF3470(1)T2(2)	F5DEF3470(1)T2(2)
0.47	100	5.2	11.1	13.4	10.0	0.1	5DEF3470(1)S2(2)	F5DEF3470(1)S2(2)
0.56	100	5.2	11.1	13.4	10.0	0.00001	5DEF3560(1)U2(2)	F5DEF3560(1)U2(2)
0.56	100	5.2	11.1	13.4	10.0	0.000022	5DEF3560(1)V2(2)	F5DEF3560(1)V2(2)
0.56	100	5.2	11.1	13.4	10.0	0.000047	5DEF3560(1)W2(2)	F5DEF3560(1)W2(2)
0.56	100	5.2	11.1	13.4	10.0	0.000068	5DEF3560(1)X2(2)	F5DEF3560(1)X2(2)
0.56	100	5.2	11.1	13.4	10.0	0.0001	5DEF3560(1)E2(2)	F5DEF3560(1)E2(2)
0.56	100	5.2	11.1	13.4	10.0	0.00022	5DEF3560(1)G2(2)	F5DEF3560(1)G2(2)
0.56	100	5.2	11.1	13.4	10.0	0.00047	5DEF3560(1)A2(2)	F5DEF3560(1)A2(2)
0.56	100	5.2	11.1	13.4	10.0	0.00068	5DEF3560(1)H2(2)	F5DEF3560(1)H2(2)
0.56	100	5.2	11.1	13.4	10.0	0.001	5DEF3560(1)C2(2)	F5DEF3560(1)C2(2)
0.56	100	5.2	11.1	13.4	10.0	0.0022	5DEF3560(1)F2(2)	F5DEF3560(1)F2(2)
0.56	100	5.2	11.1	13.4	10.0	0.0047	5DEF3560(1)B2(2)	F5DEF3560(1)B2(2)
0.56	100	5.2	11.1	13.4	10.0	0.0068	5DEF3560(1)N2(2)	F5DEF3560(1)N2(2)
0.56	100	5.2	11.1	13.4	10.0	0.01	5DEF3560(1)D2(2)	F5DEF3560(1)D2(2)
0.56	100	5.2	11.1	13.4	10.0	0.047	5DEF3560(1)R2(2)	F5DEF3560(1)R2(2)
0.56	100	5.2	11.1	13.4	10.0	0.068	5DEF3560(1)T2(2)	F5DEF3560(1)T2(2)
0.56	100	5.2	11.1	13.4	10.0	0.1	5DEF3560(1)S2(2)	F5DEF3560(1)S2(2)
1.00	100	5.2	11.1	13.4	10.0	0.00001	5DEF4100(1)U2(2)	F5DEF4100(1)U2(2)
1.00	100	5.2	11.1	13.4	10.0	0.000022	5DEF4100(1)V2(2)	F5DEF4100(1)V2(2)
1.00	100	5.2	11.1	13.4	10.0	0.000047	5DEF4100(1)W2(2)	F5DEF4100(1)W2(2)
1.00	100	5.2	11.1	13.4	10.0	0.000068	5DEF4100(1)X2(2)	F5DEF4100(1)X2(2)
1.00	100	5.2	11.1	13.4	10.0	0.0001	5DEF4100(1)E2(2)	F5DEF4100(1)E2(2)
1.00	100	5.2	11.1	13.4	10.0	0.00022	5DEF4100(1)G2(2)	F5DEF4100(1)G2(2)
1.00	100	5.2	11.1	13.4	10.0	0.00047	5DEF4100(1)A2(2)	F5DEF4100(1)A2(2)
1.00	100	5.2	11.1	13.4	10.0	0.00068	5DEF4100(1)H2(2)	F5DEF4100(1)H2(2)
1.00	100	5.2	11.1	13.4	10.0	0.001	5DEF4100(1)C2(2)	F5DEF4100(1)C2(2)
1.00	100	5.2	11.1	13.4	10.0	0.0022	5DEF4100(1)F2(2)	F5DEF4100(1)F2(2)
1.00	100	5.2	11.1	13.4	10.0	0.0047	5DEF4100(1)B2(2)	F5DEF4100(1)B2(2)
1.00	100	5.2	11.1	13.4	10.0	0.0068	5DEF4100(1)N2(2)	F5DEF4100(1)N2(2)
1.00	100	5.2	11.1	13.4	10.0	0.01	5DEF4100(1)D2(2)	F5DEF4100(1)D2(2)
1.00	100	5.2	11.1	13.4	10.0	0.047	5DEF4100(1)R2(2)	F5DEF4100(1)R2(2)
1.00	100	5.2	11.1	13.4	10.0	0.068	5DEF4100(1)T2(2)	F5DEF4100(1)T2(2)
1.00	100	5.2	11.1	13.4	10.0	0.1	5DEF4100(1)S2(2)	F5DEF4100(1)S2(2)
1.20	100	6.2	12.1	13.4	10.0	0.00001	5DEF4120(1)U3(2)	F5DEF4120(1)U3(2)
1.20	100	6.2	12.1	13.4	10.0	0.000022	5DEF4120(1)V3(2)	F5DEF4120(1)V3(2)
1.20	100	6.2	12.1	13.4	10.0	0.000047	5DEF4120(1)W3(2)	F5DEF4120(1)W3(2)
1.20	100	6.2	12.1	13.4	10.0	0.000068	5DEF4120(1)X3(2)	F5DEF4120(1)X3(2)
1.20	100	6.2	12.1	13.4	10.0	0.0001	5DEF4120(1)E3(2)	F5DEF4120(1)E3(2)
1.20	100	6.2	12.1	13.4	10.0	0.00022	5DEF4120(1)G3(2)	F5DEF4120(1)G3(2)
1.20	100	6.2	12.1	13.4	10.0	0.00047	5DEF4120(1)A3(2)	F5DEF4120(1)A3(2)
1.20	100	6.2	12.1	13.4	10.0	0.00068	5DEF4120(1)H3(2)	F5DEF4120(1)H3(2)
1.20	100	6.2	12.1	13.4	10.0	0.001	5DEF4120(1)C3(2)	F5DEF4120(1)C3(2)
1.20	100	6.2	12.1	13.4	10.0	0.0022	5DEF4120(1)F3(2)	F5DEF4120(1)F3(2)
1.20	100	6.2	12.1	13.4	10.0	0.0047	5DEF4120(1)B3(2)	F5DEF4120(1)B3(2)
1.20	100	6.2	12.1	13.4	10.0	0.0068	5DEF4120(1)N3(2)	F5DEF4120(1)N3(2)
1.20	100	6.2	12.1	13.4	10.0	0.01	5DEF4120(1)D3(2)	F5DEF4120(1)D3(2)
1.20	100	6.2	12.1	13.4	10.0	0.047	5DEF4120(1)R3(2)	F5DEF4120(1)R3(2)
1.20	100	6.2	12.1	13.4	10.0	0.068	5DEF4120(1)T3(2)	F5DEF4120(1)T3(2)
1.20	100	6.2	12.1	13.4	10.0	0.1	5DEF4120(1)S3(2)	F5DEF4120(1)S3(2)
1.50	100	6.2	12.1	13.4	10.0	0.00001	5DEF4150(1)U3(2)	F5DEF4150(1)U3(2)
1.50	100	6.2	12.1	13.4	10.0	0.000022	5DEF4150(1)V3(2)	F5DEF4150(1)V3(2)
1.50	100	6.2	12.1	13.4	10.0	0.000047	5DEF4150(1)W3(2)	F5DEF4150(1)W3(2)
Cap Value (µF)	VDC	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	Ceramic Cap (µF)	New KEMET Part Number	Legacy Part Number

(1) Insert lead and packaging code. See Ordering Options Table for available options.
(2) K = 10%, M = 20%.

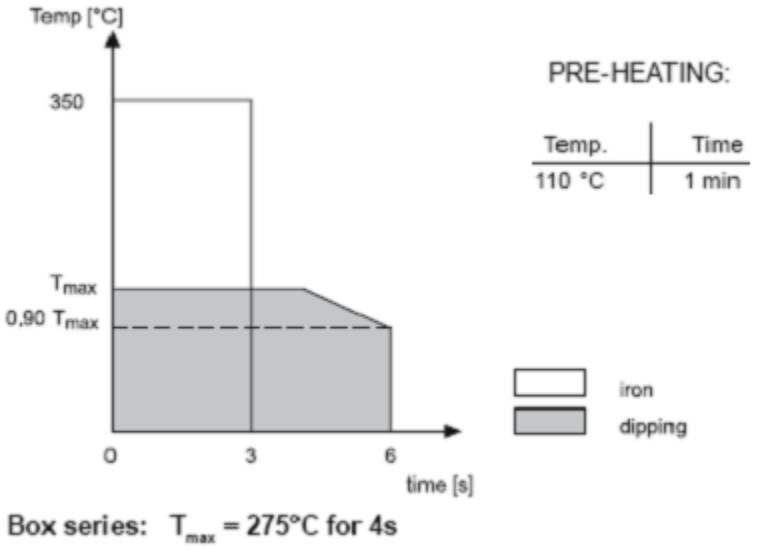
Table 1 – Ratings & Part Number Reference cont'd

Cap Value (µF)	VDC	Max Dimensions in mm			Lead Spacing (p)	Ceramic Cap (µF)	New KEMET Part Number	Legacy Part Number
		B	H	L				
1.50	100	6.2	12.1	13.4	10.0	0.000068	5DEF4150(1)X3(2)	F5DEF4150(1)X3(2)
1.50	100	6.2	12.1	13.4	10.0	0.0001	5DEF4150(1)E3(2)	F5DEF4150(1)E3(2)
1.50	100	6.2	12.1	13.4	10.0	0.00022	5DEF4150(1)G3(2)	F5DEF4150(1)G3(2)
1.50	100	6.2	12.1	13.4	10.0	0.00047	5DEF4150(1)A3(2)	F5DEF4150(1)A3(2)
1.50	100	6.2	12.1	13.4	10.0	0.00068	5DEF4150(1)H3(2)	F5DEF4150(1)H3(2)
1.50	100	6.2	12.1	13.4	10.0	0.001	5DEF4150(1)C3(2)	F5DEF4150(1)C3(2)
1.50	100	6.2	12.1	13.4	10.0	0.0022	5DEF4150(1)F3(2)	F5DEF4150(1)F3(2)
1.50	100	6.2	12.1	13.4	10.0	0.0047	5DEF4150(1)B3(2)	F5DEF4150(1)B3(2)
1.50	100	6.2	12.1	13.4	10.0	0.0068	5DEF4150(1)N3(2)	F5DEF4150(1)N3(2)
1.50	100	6.2	12.1	13.4	10.0	0.01	5DEF4150(1)D3(2)	F5DEF4150(1)D3(2)
1.50	100	6.2	12.1	13.4	10.0	0.047	5DEF4150(1)R3(2)	F5DEF4150(1)R3(2)
1.50	100	6.2	12.1	13.4	10.0	0.068	5DEF4150(1)T3(2)	F5DEF4150(1)T3(2)
1.50	100	6.2	12.1	13.4	10.0	0.1	5DEF4150(1)S3(2)	F5DEF4150(1)S3(2)
Cap Value (µF)	VDC	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	Ceramic Cap (µF)	New KEMET Part Number	Legacy Part Number

(1) Insert lead and packaging code. See Ordering Options Table for available options.
(2) K = 10%, M = 20%.

Maximum Soldering Temperature

- Set the temperature so that inside the element the maximum temperature is below 160°C
- Solder within the following temperature profiles, especially for iron soldering:



General Conditions

- If two solderings are needed, please apply a recovery time until the temperature on the capacitor surface is below 50°C.
- Avoid any passing through adhesive curing oven when fixing surface mount parts in combination with through-hole parts. Insert through-hole parts only after the curing of surface mount parts.
- Avoid reflow soldering by combining the lead type with surface mount parts

Marking

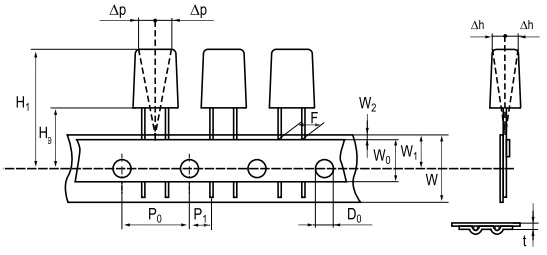
- Film capacitance
- Ceramic capacitance
- Tolerance
- DC rated voltage
- Series (F5D)
- Manufacturing date code

Packaging Quantities

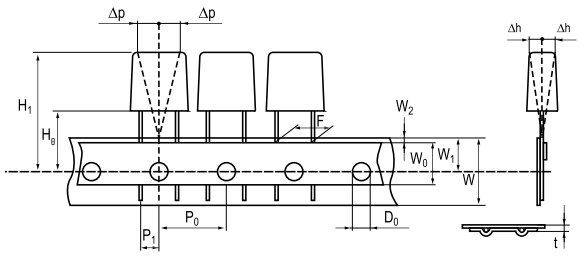
Lead Spacing	Thickness (mm)	Height (mm)	Length (mm)	Bulk Short Leads	Bulk Long Leads	Standard Reel ø 355 mm	Large Reel ø 500 mm	Ammo
5	4.6	9.6	7.4	1500	2000	1400		1900
	5.1	10.1	7.5	1000	1500	1200		1700
	6.1	11.1	7.5	2000	1000	1000		1400
	7.3	13.1	7.5	1500	750	800		1150
10	5.2	11.1	13.4	1300	2000	600	1250	800
	6.2	12.1	13.4	1000	1800	500	1000	680

Lead Taping & Packaging for SMR, PHExxx & PFR (IEC 60286–2)

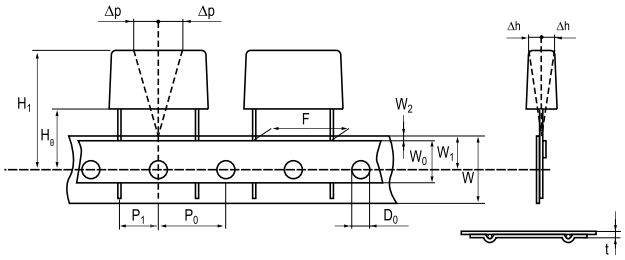
Lead Spacing 5 mm



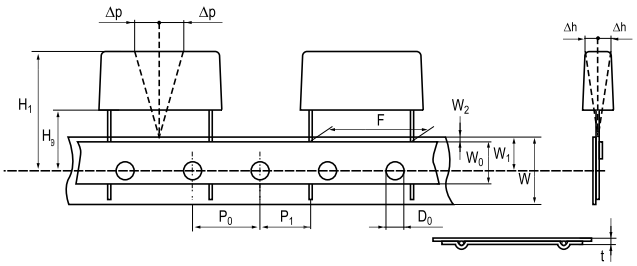
Lead Spacing 7.5 mm



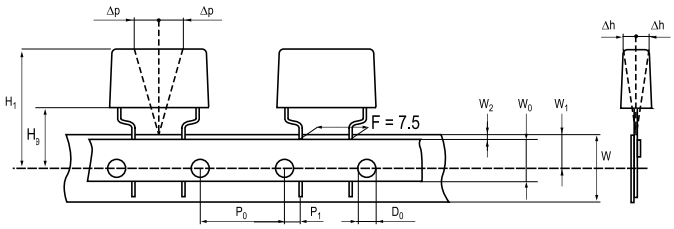
Lead Spacing 10 – 15mm



Lead Spacing 22.5 – 27.5 mm



Formed Leads from 10 and 15 mm to 7.5 mm



Taping Specification

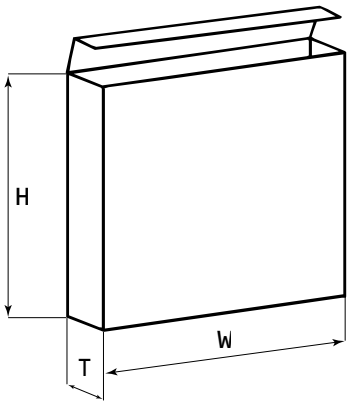
Dimensions in mm										Standard IEC 60286–2
Lead spacing	+6/-0.1	F	5	7.5	Formed 7.5	10	15	22.5	27.5	F
Carrier tape width	+/-0.5	W	18	18	18	18	18	18	18	$18^{+1/-0.5}$
Hold-down tape width	+/-0.3	W_0	9	9	9	12	12	12	12	
Position of sprocket hole	+/-0.5	W_1	9	9	9	9	9	9	9	$9^{+0.75/-0.5}$
Distance between tapes	Maximum	W_2	3	3	3	3	3	3	3	3
Sprocket hole diameter	+/-0.2	D_0	4	4	4	4	4	4	4	4
Feed hole lead spacing	+/-0.3	P_0 (1)	12.7	12.7	12.7(4)	12.7	12.7	12.7	12.7	12.7
Distance lead – feed hole	+/-0.7	P_1	3.85	3.75	3.75	7.7	5.2	5.3	5.3	P[1]
Deviation tape – plane	Maximum	Δp	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
Lateral deviation	Maximum	Δh	2	2	2	2	2	2	2	2
Total thickness	+/-0.2	t	0.7	0.7	0.7	0.7	0.7	0.9^{MAX}	0.9^{MAX}	0.9^{MAX}
Sprocket hole/cap body	Nominal	H_0 (2)	$18.5^{+/-0.5}$	$18.5^{+/-0.5}$	$18.5^{+/-0.5}$	$18.5^{+/-0.5}$	$18.5^{+/-0.5}$	$18.5^{+/-0.5}$	$18.5^{+/-0.5}$	$18^{+2/-0}$
Sprocket hole/top of cap body	Maximum	H_1 (3)	32	31	43	43	43	58	58	58^{MAX}

(1) Maximum cumulative feed hole error, 1 mm per 20 parts.
(2) 16.5 mm available on request.
(3) Depending on case size.
(4) 15 mm available on request.

Lead Taping & Packaging for SMR, PHExxx & PFR (IEC 60286–2) cont'd

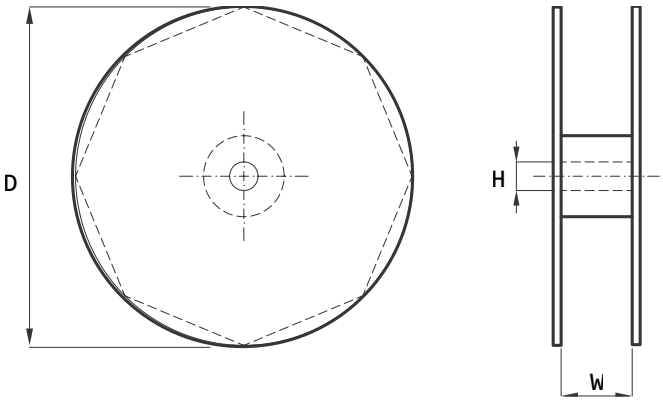
Ammo Specifications

Series	Dimensions (mm)		
	H	W	T
R4x, R4x+R, R7x, RSB	360	340	59
F5A, F5B, F5D			
F6xx, F8xx			
PHExxx, PMExxx, PMRxxx, SMR & PFR	330	330	50



Reel Specifications

Series	Dimensions (mm)		
	D	H	W
R4x, R4x+R, R7x, RSB	355 500	30 25	55 (Max)
F5A, F5B, F5D			
F6xx, F8xx			
PHExxx, PMExxx, PMRxxx, SMR & PFR	360 500	30	46 (Max)

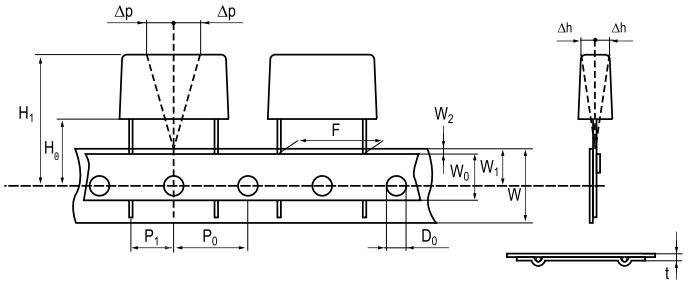


Manufacturing Date Code (IEC–60062)

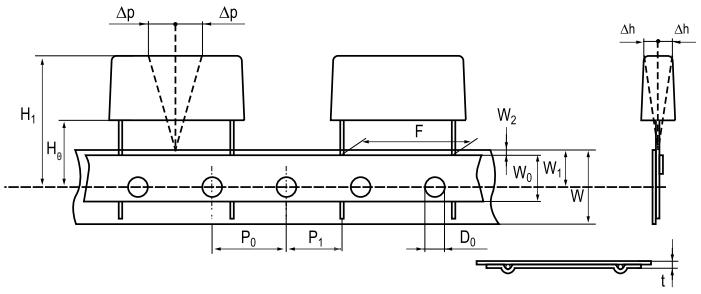
Y = Year, Z = Month			
Year	Code	Month	Code
2000	M	January	1
2001	N	February	2
2002	P	March	3
2003	R	April	4
2004	S	May	5
2005	T	June	6
2006	U	July	7
2007	V	August	8
2008	W	September	9
2009	X	October	O
2010	A	November	N
2011	B	December	D
2012	C		
2013	D		
2014	E		
2015	F		
2016	H		
2017	J		
2018	K		
2019	L		
2020	M		

Lead Taping & Packaging for PMExxx (IEC 60286–2)

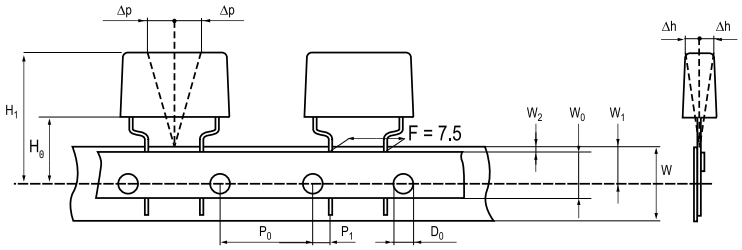
Lead Spacing 10.2 – 15.2 mm



Lead Spacing 20.3 – 22.5 mm



Formed Leads from 10.2 to 7.5 mm



Taping Specification

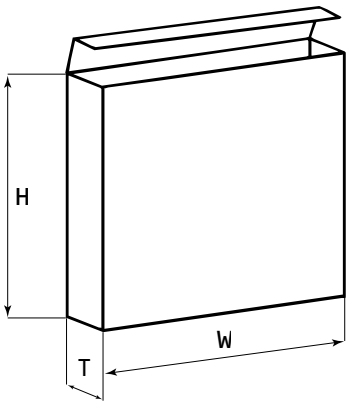
Dimensions in mm								Standard IEC 60286–2
Lead spacing	+6/-0.1	F	Formed 7.5	10.2	15.2	20.3	22.5	F
Carrier tape width	+/-0.5	W	18	18	18	18	18	$18^{+1/-0.5}$
Hold-down tape width	+/-0.3	W_0	9	12	12	12	12	
Position of sprocket hole	+/-0.5	W_1	9	9	9	9	9	$9^{+0.75/-0.5}$
Distance between tapes	Maximum	W_2	3	3	3	3	3	3
Sprocket hole diameter	+/-0.2	D_0	4	4	4	4	4	4
Feed hole lead spacing	+/-0.3	P_0 (1)	12.7(4)	12.7	12.7	12.7	12.7	12.7
Distance lead – feed hole	+/-0.7	P_1	3.75	7.6	5.1	8.9	5.3	P^1
Deviation tape – plane	Maximum	Δp	1.3	1.3	1.3	1.3	1.3	1.3
Lateral deviation	Maximum	Δh	2	2	2	2	2	2
Total thickness	+/-0.2	t	0.7	0.7	0.7	0.7	0.9^{MAX}	0.9^{MAX}
Sprocket hole/cap body	Nominal	H_0 (2)	$18^{+2/-0}$	$18^{+2/-0}$	$18^{+2/-0}$	$18^{+2/-0}$	$18.5^{+/-0.5}$	$18^{+2/-0}$
Sprocket hole/top of cap body	Maximum	H_1 (3)	35	35	35	35	58	58^{MAX}

(1) Maximum cumulative feed hole error, 1 mm per 20 parts.
(2) 16.5 mm available on request.
(3) Depending on case size.
(4) 15 mm available on request.

Lead Taping & Packaging for PMExxx (IEC 60286–2) cont'd

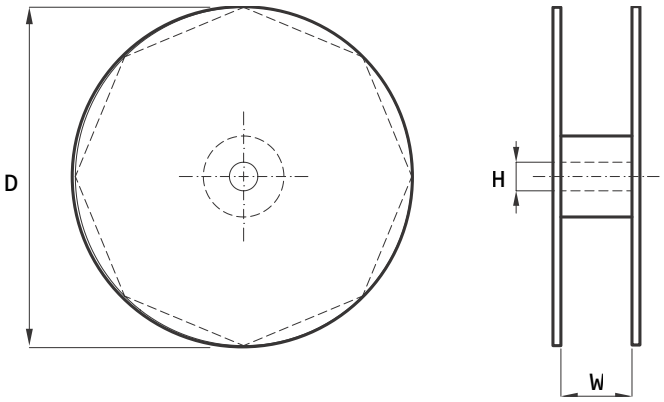
Ammo Specifications

Series	Dimensions (mm)		
	H	W	T
R4x, R4x+R, R7x, RSB	360	340	59
F5A, F5B, F5D			
F6xx, F8xx			
PHExxx, PMExxx, PMRxxx	330	330	50



Reel Specifications

Series	Dimensions (mm)		
	D	H	W
R4x, R4x+R, R7x, RSB	355 500	30 25	55 (Max)
F5A, F5B, F5D			
F6xx, F8xx			
PHExxx, PMExxx, PMRxxx	360 500	30	46 (Max)

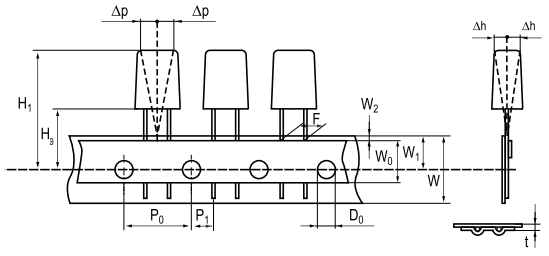


Manufacturing Date Code (IEC–60062)

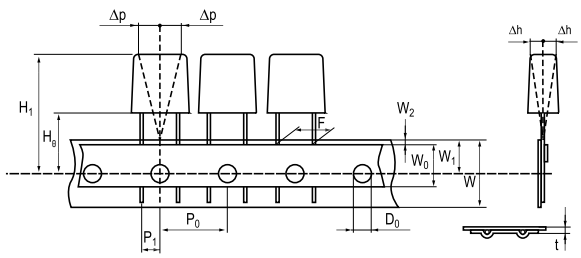
Y = Year, Z = Month			
Year	Code	Month	Code
2000	M	January	1
2001	N	February	2
2002	P	March	3
2003	R	April	4
2004	S	May	5
2005	T	June	6
2006	U	July	7
2007	V	August	8
2008	W	September	9
2009	X	October	O
2010	A	November	N
2011	B	December	D
2012	C		
2013	D		
2014	E		
2015	F		
2016	H		
2017	J		
2018	K		
2019	L		
2020	M		

Lead Taping & Packaging for F6xx, F4xx, R7xx, & F5x (IEC 60286–2)

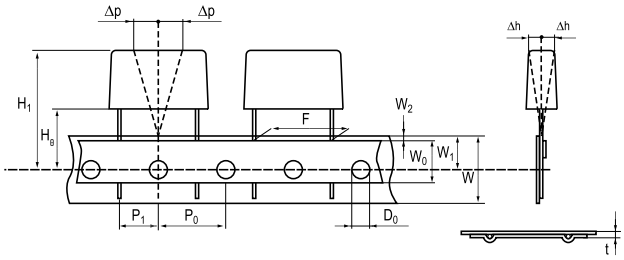
Lead Spacing 5 mm



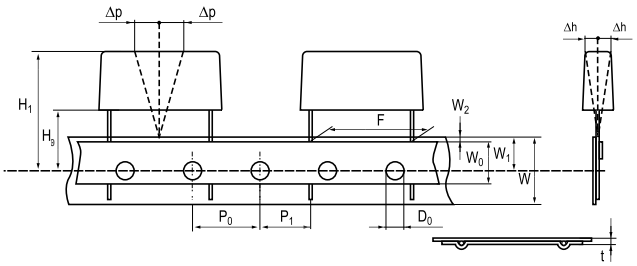
Lead Spacing 7.5 mm



Lead Spacing 10 – 15 mm



Lead Spacing 22.5 – 27.5 mm



Taping Specification

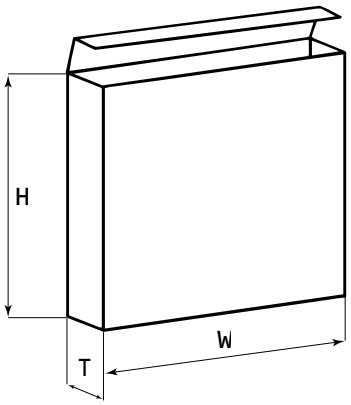
Dimensions in mm									Standard IEC 60286–2
Lead spacing	+6/-0.1	F	5	7.5	10	15	22.5	27.5	F
Carrier tape width	+1/-0.5	W	18	18	18	18	18	18	$18^{+1/-0.5}$
Hold-down tape width	Minimum	W_0	6	6	9	10	10	10	
Position of sprocket hole	+/-0.5	W_1	9	9	9	9	9	9	$9^{+0.75/-0.5}$
Distance between tapes	Maximum	W_2	3	3	3	3	3	3	3
Sprocket hole diameter	+/-0.2	D_0	4	4	4	4	4	4	4
Feed hole lead spacing	+/-0.2(1)	P_0(3)	12.7	12.7	12.7	12.7	12.7	12.7	12.7
Distance lead – feed hole	+/-0.7	P_1	3.85	3.75	7.7	5.2	7.8	5.3	P1
Deviation tape – plane	Maximum	Δp	1.3	1.3	1.3	1.3	1.3	1.3	1.3
Lateral deviation	+/-2	Δh	2	2	2	2	2	2	2
Total thickness	+/-0.2	t	0.7	0.7	0.7	0.7	0.9^{MAX}	0.9^{MAX}	0.9^{MAX}
Sprocket hole/cap body	+/-0.5	H_0(2)	$18.5^{+/-0.5}$	$18.5^{+/-0.5}$	$18.5^{+/-0.5}$	$18.5^{+/-0.5}$	$18.5^{+/-0.5}$	$18.5^{+/-0.5}$	$18^{+2/-0}$

(1) Maximum cumulative feed hole error, 1 mm per 20 parts.
(2) 16.5 mm available on request.
(3) 15 mm available on request (F ≥ 10 mm).

Lead Taping & Packaging for F6xx, F4xx, R7xx, & F5x (IEC 60286–2) cont'd

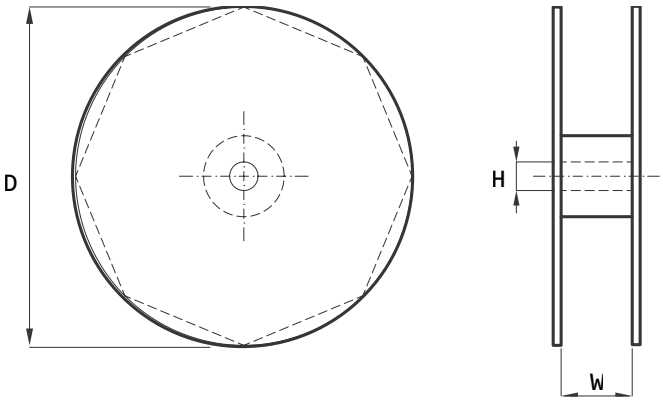
Ammo Specifications

Series	Dimensions (mm)		
	H	W	T
R4x, R4x+R, R7x, RSB	360	340	59
F5A, F5B, F5D			
F6xx, F8xx			
PHExxx, PMExxx, PMRxxx	330	330	50



Reel Specifications

Series	Dimensions (mm)		
	D	H	W
R4x, R4x+R, R7x, RSB	355 500	30 25	55 (Max)
F5A, F5B, F5D			
F6xx, F8xx			
PHExxx, PMExxx, PMRxxx	360 500	30	46 (Max)



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2009	X	October	O
2010	A	November	N
2011	B	December	D
2012	C		
2013	D		
2014	E		
2015	F		
2016	H		
2017	J		
2018	K		
2019	L		
2020	M		

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Tel: 86-21-6447-0707

Taipei, Taiwan
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Tel: 60-4-6430200

Bangalore, India
Tel: 91-806-53-76817

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Other KEMET Resources

Tools	
Resource	Location
Configure A Part: CapEdge	http://capacitoredge.kemet.com
SPICE & FIT Software	http://www.kemet.com/spice
Search Our FAQs: KnowledgeEdge	http://www.kemet.com/keask
Electrolytic LifeCalculator	http://www.kemet.com:8080/elc

Product Information	
Resource	Location
Products	http://www.kemet.com/products
Technical Resources (Including Soldering Techniques)	http://www.kemet.com/technicalpapers
RoHS Statement	http://www.kemet.com/rohs
Quality Documents	http://www.kemet.com/qualitydocuments

Product Request	
Resource	Location
Sample Request	http://www.kemet.com/sample
Engineering Kit Request	http://www.kemet.com/kits

Contact	
Resource	Location
Website	www.kemet.com
Contact Us	http://www.kemet.com/contact
Investor Relations	http://www.kemet.com/ir
Call Us	1-877-MyKEMET

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Statements of suitability for certain applications are based on our knowledge of typical operating conditions for such applications, but are not intended to constitute – and we specifically disclaim – any warranty concerning suitability for a specific customer application or use. This Information is intended for use only by customers who have the requisite experience and capability to determine the correct products for their application. Any technical advice inferred from this Information or otherwise provided by us with reference to the use of our products is given gratis, and we assume no obligation or liability for the advice given or results obtained.

Although we design and manufacture our products to the most stringent quality and safety standards, given the current state of the art, isolated component failures may still occur. Accordingly, customer applications which require a high degree of reliability or safety should employ suitable designs or other safeguards (such as installation of protective circuitry or redundancies) in order to ensure that the failure of an electrical component does not result in a risk of personal injury or property damage.

Although all product-related warnings, cautions and notes must be observed, the customer should not assume that all safety measures are indicated or that other measures may not be required.

Warning: The components F5A, F5B and F5D are a combined passive suppression component. Overloading with high voltage or voltage transients can strongly damage the component with the risk of fire.

Product & Process Design

Sales & Marketing

Supplier

Material Management

KEMET Production System

Quality

Manufacturing

Logistics & Distribution

People: Leadership & Development

One world. One KEMET | The Capacitance Company KEMET CHARGED.

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