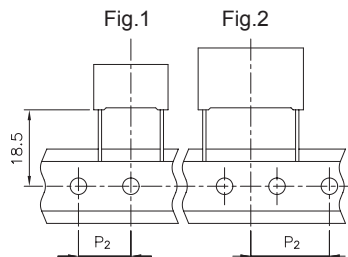
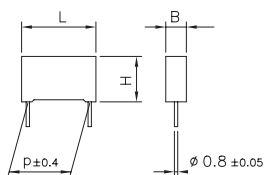


Loose

Taped

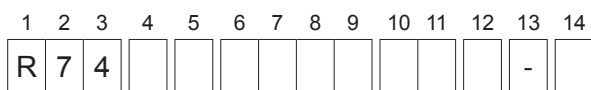


Ød ±0.05	p = 10	15 ≤ p ≤ 27.5	p = 37.5
	0.6	0.8	1.0

All dimensions are in mm.

PRODUCT CODE SYSTEM

The part number, comprising 14 digits, is formed as follows:



- Digit 1 to 3 Series code.
- Digit 4 a.c. rated voltage:
L = 250V N = 400V 5 = 500V
7 = 700V 9 = 900V
- Digit 5 Pitch: F=10.0mm; I =15.0mm; N=22.5mm;
R=27.5mm W=37.5mm
- Digit 6 to 9 Digits 7 - 8 - 9 indicate the first three digits of Capacitance value and the 6th digit indicates the number of zeros that must be added to obtain the Rated Capacitance in pF.
- Digit 10 to 11 Mechanical version and/or packaging (table 1)
- Digit 12 Identifies the dimensions and electrical characteristics.
- Digit 13 Internal use.
- Digit 14 Capacitance tolerance:
J=5%; K=10%

**METALLIZED POLYPROPYLENE FILM CAPACITOR
A.C. APPLICATIONS**

Typical applications: electronic lighting (i.e. car headlamp and ballast), pulse applications with high A.C. voltage and high current.

PRODUCT CODE: R74

Pitch (mm)	Box thickness (B) (mm)	Maximum dimensions (mm)		
		B max	H max	L max
10.0	All	B +0.2	H +0.1	L +0.2
15.0	<7.5	B +0.2	H +0.1	L +0.3
15.0	≥7.5	B +0.2	H +0.1	L +0.5
22.5	All	B +0.2	H +0.1	L +0.3
27.5	All	B +0.2	H +0.1	L +0.3
37.5	All	B +0.3	H +0.1	L +0.3

GENERAL TECHNICAL DATA

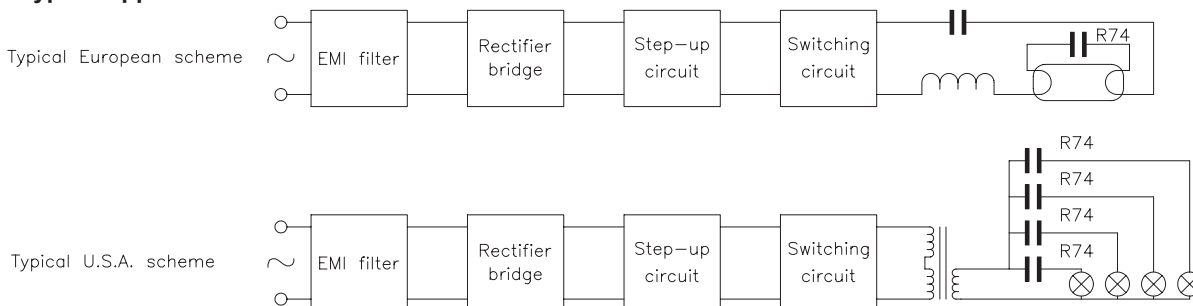
- Dielectric:** polypropylene film.
- Plates:** aluminium layer deposited by evaporation under vacuum.
- Winding:** non-inductive type.
- Leads:** tinned wire.
- Protection:** plastic case, thermosetting resin filled. Box material is solvent resistant and flame retardant according to UL94 V0.
- Marking:** manufacturer's logo, series (R74), dielectric code (MKP), capacitance, tolerance, A.C. rated voltage, manufacturing date code.
- Climatic category:** 55/105/56 IEC 60068-1
- Operating temperature range:** -55 to +105°C
- Related documents:** IEC 60384-16; IEC 60384-17

Table 1 (for more detailed information, please refer to page 14)

Standard packaging style	Lead length (mm)	Taping style			Ordering code (Digit 10 to 11)
		P ₂ (mm)	Fig. (No.)	Pitch (mm)	
AMMO-PACK		12.70	1	10.0/15.0	DQ
AMMO-PACK		19.05	2	22.5	DQ
AMMO-PACK	Kinked execution from p=15 mm to p=7.5 mm				KN
AMMO-PACK					KL
REEL Ø 355mm		12.70	1	10.0/15.0	GY
REEL Ø 500mm		12.70	1	10.0/15.0	CK
REEL Ø 500mm		19.05	2	22.5/27.5	CK
Loose, short leads	4 ⁺²				AA
Loose, long leads (p=10mm)	17 ^{+1/2}				JM
Loose, long leads (p≥15mm)	30 ⁺⁵				40
	25 ^{+2/-1}				50

Note: Ammo-pack is the preferred packaging for taped version.

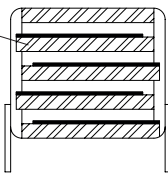
Typical application: LAMP CAPACITOR IN ELECTRONIC BALLAST



**METALLIZED POLYPROPYLENE FILM CAPACITOR
A.C. APPLICATIONS**

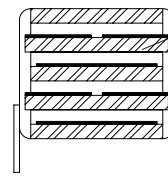
PRODUCT CODE: **R74**

single side metallized polypropylene film



**1 section
(250 Vac)**

single sided metallized polypropylene film



**2 sections
(400Vac)**

Rated Cap.	250Vac* (1 section) Std dimensions				Max dv/dt (V/μs)	Max K ₀ (V ² /μs)	Part Number
	B	H	L	p			
0.010 μF	4.0	9.0	13.0	10.0	300	38 E4	R74LF2100--0--
0.012 μF	4.0	9.0	13.0	10.0	300	38 E4	R74LF2120--0--
0.015 μF	5.0	11.0	13.0	10.0	300	38 E4	R74LF2150--0--
0.018 μF	5.0	11.0	13.0	10.0	300	38 E4	R74LF2180--0--
0.022 μF	6.0	12.0	13.0	10.0	300	38 E4	R74LF2220--0--
0.027 μF	6.0	12.0	13.0	10.0	300	38 E4	R74LF2270--0--
0.015 μF	5.0	11.0	18.0	15.0	250	31 E4	R74LI 2150--0--
0.018 μF	5.0	11.0	18.0	15.0	250	31 E4	R74LI 2180--0--
0.022 μF	5.0	11.0	18.0	15.0	250	31 E4	R74LI 2220--0--
0.027 μF	5.0	11.0	18.0	15.0	250	31 E4	R74LI 2270--0--
0.033 μF	5.0	11.0	18.0	15.0	250	31 E4	R74LI 2330--0--
0.039 μF	6.0	12.0	18.0	15.0	250	31 E4	R74LI 2390--0--
0.047 μF	6.0	12.0	18.0	15.0	250	31 E4	R74LI 2470--0--
0.056 μF	7.5	13.5	18.0	15.0	250	31 E4	R74LI 2560--0--
0.068 μF	7.5	13.5	18.0	15.0	250	31 E4	R74LI 2680--0--
0.068 μF	9.0	12.5	18.0	15.0	250	31 E4	R74LI 2680--6--
0.082 μF	8.5	14.5	18.0	15.0	250	31 E4	R74LI 2820--0--
0.082 μF	13.0	12.0	18.0	15.0	250	31 E4	R74LI 2820--6--
0.10 μF	8.5	14.5	18.0	15.0	250	31 E4	R74LI 3100--0--
0.10 μF	13.0	12.0	18.0	15.0	250	31 E4	R74LI 3100--6--
0.12 μF	10.0	16.0	18.0	15.0	250	31 E4	R74LI 3120--0--
0.15 μF	11.0	19.0	18.0	15.0	250	31 E4	R74LI 3150--0--

Mechanical version and packaging (Table1) _____
Internal use _____
Tolerance: J (±5%); K (±10%) _____

All dimensions are in mm.

Note: If the working voltage (V) is lower than the rated voltage (V_R), the capacitor may work at higher dv/dt. In this case the maximum value allowed is obtained multiplying the above value (see table dv/dt) with the ratio V_R/V.
The pulse characteristic K₀ depends on the voltage wave-form and in any case it cannot overcome the value given in the above table. The dv/dt test is carried out at 2 times the above values.

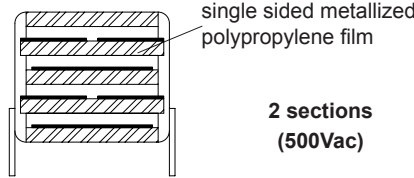
*Not suitable for cross-the-line applications. Please refer to Interference Suppression Capacitors (page 145).

Rated Cap.	400Vac (2 sections) Std dimensions				Max dv/dt (V/μs)	Max K ₀ (V ² /μs)	Part Number
	B	H	L	p			
2200 pF	4.0	9.0	13.0	10.0	2200	570 E4	R74NF 1220--0--
2700 pF	4.0	9.0	13.0	10.0	2200	570 E4	R74NF 1270--0--
3300 pF	4.0	9.0	13.0	10.0	2200	570 E4	R74NF 1330--0--
3900 pF	5.0	11.0	13.0	10.0	2200	570 E4	R74NF 1390--0--
4700 pF	5.0	11.0	13.0	10.0	2200	570 E4	R74NF 1470--0--
5600 pF	5.0	11.0	13.0	10.0	2200	570 E4	R74NF 1560--0--
6800 pF	6.0	12.0	13.0	10.0	2200	570 E4	R74NF 1680--0--
8200 pF	6.0	12.0	13.0	10.0	2200	570 E4	R74NF 1820--0--
6800 pF	5.0	11.0	18.0	15.0	2000	520 E4	R74NI 1680--0--
8200 pF	5.0	11.0	18.0	15.0	2000	520 E4	R74NI 1820--0--
0.010 μF	5.0	11.0	18.0	15.0	2000	520 E4	R74NI 2100--0--
0.012 μF	6.0	12.0	18.0	15.0	2000	520 E4	R74NI 2120--0--
0.015 μF	6.0	12.0	18.0	15.0	2000	520 E4	R74NI 2150--0--
0.018 μF	7.5	13.5	18.0	15.0	2000	520 E4	R74NI 2180--0--
0.022 μF	7.5	13.5	18.0	15.0	2000	520 E4	R74NI 2220--0--
0.022 μF	9.0	12.5	18.0	15.0	2000	520 E4	R74NI 2220--6--
0.027 μF	8.5	14.5	18.0	15.0	2000	520 E4	R74NI 2270--0--
0.027 μF	13.0	12.0	18.0	15.0	2000	520 E4	R74NI 2270--6--
0.033 μF	8.5	14.5	18.0	15.0	2000	520 E4	R74NI 2330--0--
0.033 μF	13.0	12.0	18.0	15.0	2000	520 E4	R74NI 2330--6--
0.039 μF	10.0	16.0	18.0	15.0	2000	520 E4	R74NI 2390--0--
0.039 μF	13.0	12.0	18.0	15.0	2000	520 E4	R74NI 2390--6--
0.047 μF	10.0	16.0	18.0	15.0	2000	520 E4	R74NI 2470--0--
0.056 μF	11.0	19.0	18.0	15.0	2000	520 E4	R74NI 2560--0--
0.039 μF	6.0	15.0	26.5	22.5	800	208 E4	R74NN2390--0--
0.047 μF	7.0	16.0	26.5	22.5	800	208 E4	R74NN2470--0--
0.056 μF	7.0	16.0	26.5	22.5	800	208 E4	R74NN2560--0--
0.068 μF	8.5	17.0	26.5	22.5	800	208 E4	R74NN2680--0--
0.082 μF	10.0	18.5	26.5	22.5	800	208 E4	R74NN2820--0--
0.10 μF	10.0	18.5	26.5	22.5	800	208 E4	R74NN3100--0--
0.12 μF	11.0	20.0	26.5	22.5	800	208 E4	R74NN3120--0--
0.15 μF	13.0	22.0	26.5	22.5	800	208 E4	R74NN3150--0--
0.15 μF	9.0	17.0	32.0	27.5	380	70 E4	R74NR3150--0--
0.18 μF	9.0	17.0	32.0	27.5	380	70 E4	R74NR3180--0--
0.22 μF	11.0	20.0	32.0	27.5	380	70 E4	R74NR3220--0--
0.27 μF	11.0	20.0	32.0	27.5	380	70 E4	R74NR3270--0--
0.33 μF	13.0	22.0	32.0	27.5	380	70 E4	R74NR3330--0--
0.39 μF	13.0	22.0	32.0	27.5	380	70 E4	R74NR3390--0--
0.47 μF	14.0	28.0	32.0	27.5	380	70 E4	R74NR3470--0--
0.56 μF	14.0	28.0	32.0	27.5	380	70 E4	R74NR3560--0--
0.68 μF	14.0	28.0	32.0	27.5	380	70 E4	R74NR3680--0--
0.82 μF	18.0	33.0	32.0	27.5	380	70 E4	R74NR3820--0--
1.0 μF	18.0	33.0	32.0	27.5	380	70 E4	R74NR4100--0--
0.47 μF	11.0	22.0	41.5	37.5	180	40 E4	R74NW3470--0--
0.56 μF	11.0	22.0	41.5	37.5	180	40 E4	R74NW3560--0--
0.68 μF	13.0	24.0	41.5	37.5	180	40 E4	R74NW3680--0--
0.82 μF	16.0	28.5	41.5	37.5	180	40 E4	R74NW3820--0--
1.0 μF	16.0	28.5	41.5	37.5	180	40 E4	R74NW4100--0--
1.2 μF	19.0	32.0	41.5	37.5	180	40 E4	R74NW4120--0--
1.5 μF	19.0	32.0	41.5	37.5	180	40 E4	R74NW4150--0--
1.8 μF	20.0	40.0	41.5	37.5	180	40 E4	R74NW4180--0--
2.2 μF	24.0	44.0	41.5	37.5	180	40 E4	R74NW4220--0--
2.7 μF	24.0	44.0	41.5	37.5	180	40 E4	R74NW4270--0--
3.3 μF	30.0	45.0	41.5	37.5	180	40 E4	R74NW4330--0--

Mechanical version and packaging (Table1) _____
Internal use _____
Tolerance: J (±5%); K (±10%) _____

**METALLIZED POLYPROPYLENE FILM CAPACITOR
A.C. APPLICATIONS**

PRODUCT CODE: R74



Rated Cap.	500Vac (2 sections) Std dimensions				Max dv/dt (V/μs)	Max K ₀ (V ² μs)	Part Number
	B	H	L	p			
1000 pF	4.0	9.0	13.0	10.0	6000	1920 E4	R745F 1100--0--
1200 pF	4.0	9.0	13.0	10.0	6000	1920 E4	R745F 1120--0--
1500 pF	4.0	9.0	13.0	10.0	6000	1920 E4	R745F 1150--0--
1800 pF	4.0	9.0	13.0	10.0	6000	1920 E4	R745F 1180--0--
2200 pF	5.0	11.0	13.0	10.0	6000	1920 E4	R745F 1220--0--
2700 pF	5.0	11.0	13.0	10.0	6000	1920 E4	R745F 1270--0--
3300 pF	6.0	12.0	13.0	10.0	6000	1920 E4	R745F 1330--0--
3900 pF	6.0	12.0	13.0	10.0	6000	1920 E4	R745F 1390--0--
1500 pF	4.0	10.0	18.0	15.0	4500	1440 E4	R745I 1150--3--
1500 pF	5.0	11.0	18.0	15.0	4500	1440 E4	R745I 1150--0--
1800 pF	4.0	10.0	18.0	15.0	4500	1440 E4	R745I 1180--3--
1800 pF	5.0	11.0	18.0	15.0	4500	1440 E4	R745I 1180--0--
2200 pF	4.0	10.0	18.0	15.0	4500	1440 E4	R745I 1220--3--
2200 pF	5.0	11.0	18.0	15.0	4500	1440 E4	R745I 1220--0--
2700 pF	4.0	10.0	18.0	15.0	4500	1440 E4	R745I 1270--3--
2700 pF	5.0	11.0	18.0	15.0	4500	1440 E4	R745I 1270--0--
3300 pF	4.0	10.0	18.0	15.0	4500	1440 E4	R745I 1330--3--
3300 pF	5.0	11.0	18.0	15.0	4500	1440 E4	R745I 1330--0--
3900 pF	4.0	10.0	18.0	15.0	4500	1440 E4	R745I 1390--3--
3900 pF	5.0	11.0	18.0	15.0	4500	1440 E4	R745I 1390--0--
4700 pF	4.0	10.0	18.0	15.0	4500	1440 E4	R745I 1470--3--
4700 pF	5.0	11.0	18.0	15.0	4500	1440 E4	R745I 1470--0--
5600 pF	5.0	11.0	18.0	15.0	4500	1440 E4	R745I 1560--0--
6800 pF	6.0	12.0	18.0	15.0	4500	1440 E4	R745I 1680--0--
8200 pF	6.0	12.0	18.0	15.0	4500	1440 E4	R745I 1820--0--
0.010 μF	6.0	12.0	18.0	15.0	4500	1440 E4	R745I 2100--0--
0.012 μF	7.5	13.5	18.0	15.0	4500	1440 E4	R745I 2120--0--
0.015 μF	7.5	13.5	18.0	15.0	4500	1440 E4	R745I 2150--0--
0.015 μF	13.0	12.0	18.0	15.0	4500	1440 E4	R745I 2150--6--
0.018 μF	8.5	14.5	18.0	15.0	4500	1440 E4	R745I 2180--0--
0.018 μF	13.0	12.0	18.0	15.0	4500	1440 E4	R745I 2180--6--
0.022 μF	10.0	16.0	18.0	15.0	4500	1440 E4	R745I 2220--0--
0.022 μF	13.0	12.0	18.0	15.0	4500	1440 E4	R745I 2220--6--
0.027 μF	10.0	16.0	18.0	15.0	4500	1440 E4	R745I 2270--0--
0.033 μF	11.0	19.0	18.0	15.0	4500	1440 E4	R745I 2330--0--

Rated Cap.	500Vac (2 sections) Std dimensions				Max dv/dt (V/μs)	Max K ₀ (V ² μs)	Part Number
	B	H	L	p			
0.018 μF	6.0	15.0	26.5	22.5	1800	576 E4	R745N2180--0--
0.022 μF	6.0	15.0	26.5	22.5	1800	576 E4	R745N2220--0--
0.027 μF	7.0	16.0	26.5	22.5	1800	576 E4	R745N2270--0--
0.033 μF	7.0	16.0	26.5	22.5	1800	576 E4	R745N2330--0--
0.039 μF	8.5	17.0	26.5	22.5	1800	576 E4	R745N2390--0--
0.047 μF	10.0	18.5	26.5	22.5	1800	576 E4	R745N2470--0--
0.056 μF	10.0	18.5	26.5	22.5	1800	576 E4	R745N2560--0--
0.068 μF	11.0	20.0	26.5	22.5	1800	576 E4	R745N2680--0--
0.082 μF	13.0	22.0	26.5	22.5	1800	576 E4	R745N2820--0--
0.10 μF	13.0	22.0	26.5	22.5	1800	576 E4	R745N3100--0--
0.10 μF	9.0	17.0	32.0	27.5	500	160 E4	R745R3100--0--
0.12 μF	9.0	17.0	32.0	27.5	500	160 E4	R745R3120--0--
0.15 μF	9.0	17.0	32.0	27.5	500	160 E4	R745R3150--0--
0.18 μF	11.0	20.0	32.0	27.5	500	160 E4	R745R3180--0--
0.22 μF	11.0	20.0	32.0	27.5	500	160 E4	R745R3220--0--
0.27 μF	13.0	22.0	32.0	27.5	500	160 E4	R745R3270--0--
0.33 μF	14.0	28.0	32.0	27.5	500	160 E4	R745R3330--0--
0.39 μF	14.0	28.0	32.0	27.5	500	160 E4	R745R3390--0--
0.47 μF	14.0	28.0	32.0	27.5	500	160 E4	R745R3470--0--
0.56 μF	18.0	33.0	32.0	27.5	500	160 E4	R745R3560--0--
0.68 μF	18.0	33.0	32.0	27.5	500	160 E4	R745R3680--0--
0.82 μF	22.0	37.0	32.0	27.5	500	160 E4	R745R3820--0--
1.0 μF	22.0	37.0	32.0	27.5	500	160 E4	R745R4100--0--
0.33 μF	11.0	22.0	41.5	37.5	300	96 E4	R745W3330--0--
0.39 μF	11.0	22.0	41.5	37.5	300	96 E4	R745W3390--0--
0.47 μF	13.0	24.0	41.5	37.5	300	96 E4	R745W3470--0--
0.56 μF	13.0	24.0	41.5	37.5	300	96 E4	R745W3560--0--
0.68 μF	16.0	28.5	41.5	37.5	300	96 E4	R745W3680--0--
0.82 μF	16.0	28.5	41.5	37.5	300	96 E4	R745W3820--0--
1.0 μF	19.0	32.0	41.5	37.5	300	96 E4	R745W4100--0--
1.2 μF	19.0	32.0	41.5	37.5	300	96 E4	R745W4120--0--
1.5 μF	20.0	40.0	41.5	37.5	300	96 E4	R745W4150--0--
1.8 μF	24.0	44.0	41.5	37.5	300	96 E4	R745W4180--0--
2.2 μF	24.0	44.0	41.5	37.5	300	96 E4	R745W4220--0--

Mechanical version and packaging (Table1) _____
 Internal use _____
 Tolerance: J (±5%); K (±10%) _____

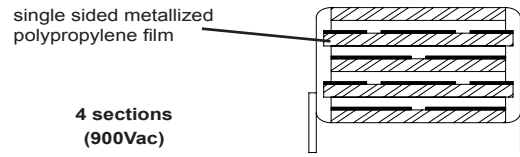
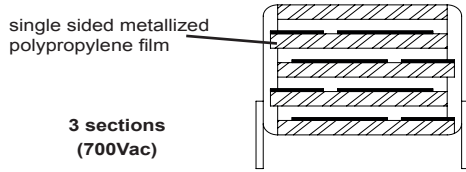
Mechanical version and packaging (Table1) _____
 Internal use _____
 Tolerance: J (±5%); K (±10%) _____

All dimensions are in mm.

Note: If the working voltage (V) is lower than the rated voltage (V_R), the capacitor may work at higher dv/dt. In this case the maximum value allowed is obtained multiplying the above value (see table dv/dt) with the ratio V_R/V. The pulse characteristic K₀ depends on the voltage wave-form and in any case it cannot overcome the value given in the above table. The dv/dt test is carried out at 2 times the above values.

**METALLIZED POLYPROPYLENE FILM CAPACITOR
A.C. APPLICATIONS**

PRODUCT CODE: R74



Rated Cap.	700Vac (3 sections) Std dimensions				Max dv/dt (V/μs)	Max K ₀ (V ² /μs)	Part Number
	B	H	L	ρ			
470 pF	4.0	10.0	18.0	15.0	9500	3800 E4	R7471 0470--3--
680 pF	4.0	10.0	18.0	15.0	9500	3800 E4	R7471 0680--3--
820 pF	4.0	10.0	18.0	15.0	9500	3800 E4	R7471 0820--3--
1000 pF	4.0	10.0	18.0	15.0	9500	3800 E4	R7471 1100--3--
1000 pF	5.0	11.0	18.0	15.0	9500	3800 E4	R7471 1100--0--
1200 pF	4.0	10.0	18.0	15.0	9500	3800 E4	R7471 1120--3--
1200 pF	5.0	11.0	18.0	15.0	9500	3800 E4	R7471 1120--0--
1500 pF	4.0	10.0	18.0	15.0	9500	3800 E4	R7471 1150--3--
1500 pF	5.0	11.0	18.0	15.0	9500	3800 E4	R7471 1150--0--
1800 pF	4.0	10.0	18.0	15.0	9500	3800 E4	R7471 1180--3--
1800 pF	5.0	11.0	18.0	15.0	9500	3800 E4	R7471 1180--0--
2200 pF	4.0	10.0	18.0	15.0	9500	3800 E4	R7471 1220--3--
2200 pF	5.0	11.0	18.0	15.0	9500	3800 E4	R7471 1220--0--
2700 pF	5.0	11.0	18.0	15.0	9500	3800 E4	R7471 1270--0--
3300 pF	5.0	11.0	18.0	15.0	9500	3800 E4	R7471 1330--0--
3900 pF	6.0	12.0	18.0	15.0	9500	3800 E4	R7471 1390--0--
4700 pF	6.0	12.0	18.0	15.0	9500	3800 E4	R7471 1470--0--
5600 pF	6.0	12.0	18.0	15.0	9500	3800 E4	R7471 1560--0--
6800 pF	7.5	13.5	18.0	15.0	9500	3800 E4	R7471 1680--0--
8200 pF	7.5	13.5	18.0	15.0	9500	3800 E4	R7471 1820--0--
8200 pF	9.0	12.5	18.0	15.0	9500	3800 E4	R7471 1820--6--
0.010 μF	8.5	14.5	18.0	15.0	9500	3800 E4	R7471 2100--0--
0.010 μF	13.0	12.0	18.0	15.0	9500	3800 E4	R7471 2100--6--
0.012 μF	10.0	16.0	18.0	15.0	9500	3800 E4	R7471 2120--0--
0.012 μF	13.0	12.0	18.0	15.0	9500	3800 E4	R7471 2120--6--
0.015 μF	10.0	16.0	18.0	15.0	9500	3800 E4	R7471 2150--0--
0.018 μF	11.0	19.0	18.0	15.0	9500	3800 E4	R7471 2180--0--
8200 pF	6.0	15.0	26.5	22.5	4500	1800 E4	R747N1820--0--
0.010 μF	6.0	15.0	26.5	22.5	4500	1800 E4	R747N2100--0--
0.012 μF	6.0	15.0	26.5	22.5	4500	1800 E4	R747N2120--0--
0.015 μF	6.0	15.0	26.5	22.5	4500	1800 E4	R747N2150--0--
0.018 μF	7.0	16.0	26.5	22.5	4500	1800 E4	R747N2180--0--
0.022 μF	8.5	17.0	26.5	22.5	4500	1800 E4	R747N2220--0--
0.027 μF	8.5	17.0	26.5	22.5	4500	1800 E4	R747N2270--0--
0.033 μF	10.0	18.5	26.5	22.5	4500	1800 E4	R747N2330--0--
0.039 μF	10.0	18.5	26.5	22.5	4500	1800 E4	R747N2390--0--
0.047 μF	11.0	20.0	26.5	22.5	4500	1800 E4	R747N2470--0--
0.056 μF	13.0	22.0	26.5	22.5	4500	1800 E4	R747N2560--0--
0.068 μF	13.0	22.0	26.5	22.5	4500	1800 E4	R747N2680--0--
0.039 μF	9.0	17.0	32.0	27.5	700	280 E4	R747R2390--0--
0.047 μF	9.0	17.0	32.0	27.5	700	280 E4	R747R2470--0--
0.056 μF	9.0	17.0	32.0	27.5	700	280 E4	R747R2560--0--
0.068 μF	11.0	20.0	32.0	27.5	700	280 E4	R747R2680--0--
0.082 μF	11.0	20.0	32.0	27.5	700	280 E4	R747R2820--0--
0.10 μF	13.0	22.0	32.0	27.5	700	280 E4	R747R3100--0--
0.12 μF	13.0	22.0	32.0	27.5	700	280 E4	R747R3120--0--
0.15 μF	14.0	28.0	32.0	27.5	700	280 E4	R747R3150--0--
0.18 μF	14.0	28.0	32.0	27.5	700	280 E4	R747R3180--0--
0.22 μF	18.0	33.0	32.0	27.5	700	280 E4	R747R3220--0--
0.27 μF	18.0	33.0	32.0	27.5	700	280 E4	R747R3270--0--
0.33 μF	22.0	37.0	32.0	27.5	700	280 E4	R747R3330--0--
0.15 μF	11.0	22.0	41.5	37.5	400	160 E4	R747W3150--0--
0.18 μF	13.0	24.0	41.5	37.5	400	160 E4	R747W3180--0--
0.22 μF	13.0	24.0	41.5	37.5	400	160 E4	R747W3220--0--
0.27 μF	16.0	28.5	41.5	37.5	400	160 E4	R747W3270--0--
0.33 μF	16.0	28.5	41.5	37.5	400	160 E4	R747W3330--0--
0.39 μF	19.0	32.0	41.5	37.5	400	160 E4	R747W3390--0--
0.47 μF	19.0	32.0	41.5	37.5	400	160 E4	R747W3470--0--
0.56 μF	20.0	40.0	41.5	37.5	400	160 E4	R747W3560--0--
0.68 μF	24.0	44.0	41.5	37.5	400	160 E4	R747W3680--0--
0.82 μF	24.0	44.0	41.5	37.5	400	160 E4	R747W3820--0--
1.0 μF	30.0	45.0	41.5	37.5	400	160 E4	R747W4100--0--

Rated Cap.	900Vac (4 sections) Std dimensions				Max dv/dt (V/μs)	Max K ₀ (V ² /μs)	Part Number
	B	H	L	ρ			
1000 pF	6.0	15.0	26.5	22.5	2500	1100 E4	R749N1100--0--
1200 pF	6.0	15.0	26.5	22.5	2500	1100 E4	R749N1120--0--
1500 pF	6.0	15.0	26.5	22.5	2500	1100 E4	R749N1150--0--
1800 pF	6.0	15.0	26.5	22.5	2500	1100 E4	R749N1180--0--
2200 pF	6.0	15.0	26.5	22.5	2500	1100 E4	R749N1220--0--
2700 pF	6.0	15.0	26.5	22.5	2500	1100 E4	R749N1270--0--
3300 pF	6.0	15.0	26.5	22.5	2500	1100 E4	R749N1330--0--
3900 pF	6.0	15.0	26.5	22.5	2500	1100 E4	R749N1390--0--
4700 pF	6.0	15.0	26.5	22.5	2500	1100 E4	R749N1470--0--
5600 pF	6.0	15.0	26.5	22.5	2500	1100 E4	R749N1560--0--
6800 pF	6.0	15.0	26.5	22.5	2500	1100 E4	R749N1680--0--
8200 pF	7.0	16.0	26.5	22.5	2500	1100 E4	R749N1820--0--
0.010 μF	7.0	16.0	26.5	22.5	2500	1100 E4	R749N2100--0--
0.012 μF	8.5	17.0	26.5	22.5	2500	1100 E4	R749N2120--0--
0.015 μF	10.0	18.5	26.5	22.5	2500	1100 E4	R749N2150--0--
0.018 μF	10.0	18.5	26.5	22.5	2500	1100 E4	R749N2180--0--
0.022 μF	11.0	20.0	26.5	22.5	2500	1100 E4	R749N2220--0--
0.027 μF	13.0	22.0	26.5	22.5	2500	1100 E4	R749N2270--0--
0.033 μF	13.0	22.0	26.5	22.5	2500	1100 E4	R749N2330--0--
0.022 μF	9.0	17.0	32.0	27.5	1500	660 E4	R749R2220--0--
0.027 μF	9.0	17.0	32.0	27.5	1500	660 E4	R749R2270--0--
0.033 μF	11.0	20.0	32.0	27.5	1500	660 E4	R749R2330--0--
0.039 μF	11.0	20.0	32.0	27.5	1500	660 E4	R749R2390--0--
0.047 μF	13.0	22.0	32.0	27.5	1500	660 E4	R749R2470--0--
0.056 μF	13.0	22.0	32.0	27.5	1500	660 E4	R749R2560--0--
0.068 μF	14.0	28.0	32.0	27.5	1500	660 E4	R749R2680--0--
0.082 μF	14.0	28.0	32.0	27.5	1500	660 E4	R749R2820--0--
0.10 μF	18.0	33.0	32.0	27.5	1500	660 E4	R749R3100--0--
0.12 μF	18.0	33.0	32.0	27.5	1500	660 E4	R749R3120--0--
0.15 μF	18.0	33.0	32.0	27.5	1500	660 E4	R749R3150--0--
0.068 μF	11.0	22.0	41.5	37.5	900	400 E4	R749W2680--0--
0.082 μF	11.0	22.0	41.5	37.5	900	400 E4	R749W2820--0--
0.10 μF	13.0	24.0	41.5	37.5	900	400 E4	R749W3100--0--
0.12 μF	13.0	24.0	41.5	37.5	900	400 E4	R749W3120--0--
0.15 μF	16.0	28.5	41.5	37.5	900	400 E4	R749W3150--0--
0.18 μF	16.0	28.5	41.5	37.5	900	400 E4	R749W3180--0--
0.22 μF	19.0	32.0	41.5	37.5	900	400 E4	R749W3220--0--
0.27 μF	20.0	40.0	41.5	37.5	900	400 E4	R749W3270--0--
0.33 μF	20.0	40.0	41.5	37.5	900	400 E4	R749W3330--0--
0.39 μF	24.0	44.0	41.5	37.5	900	400 E4	R749W3390--0--
0.47 μF	24.0	44.0	41.5	37.5	900	400 E4	R749W3470--0--

Mechanical version and packaging (Table1) _____
Internal use _____
Tolerance: J (±5%); K (±10%) _____

All dimensions are in mm.

Note: If the working voltage (V) is lower than the rated voltage (V_R), the capacitor may work at higher dv/dt. In this case the maximum value allowed is obtained multiplying the above value (see table dv/dt) with the ratio V_R/V.
The pulse characteristic K₀ depends on the voltage wave-form and in any case it cannot overcome the value given in the above table.
The dv/dt test is carried out at 2 times the above values.

Mechanical version and packaging (Table1) _____
Internal use _____
Tolerance: J (±5%); K (±10%) _____

**METALLIZED POLYPROPYLENE FILM CAPACITOR
A.C. APPLICATIONS**

PRODUCT CODE: R74

ELECTRICAL CHARACTERISTICS

Rated voltage (V_R):

250Vac (630Vdc) - 400Vac (1300Vdc)
500Vac (1600Vdc) - 700Vac (2000Vdc)
900Vac (2200Vdc)

Rated temperature (T_R): +85°C

Temperature derated voltage:

for temperatures between +85°C and +105°C a decreasing factor of 1.25% per degree °C on the rated voltage V_R (a.c. and d.c.) has to be applied.

Capacitance range:

470pF to 3.3 μF

Capacitance values:

E12 series (IEC 60063 Norm).

Capacitance tolerances (measured at 1 kHz):

±5% (J); ±10% (K).

Total self inductance: (L)

(Lead length (2 mm))

Pitch (mm)	10	15	22.5	27.5	37.5
L (nH) ≈	9	10	18	18	20

Dissipation factor (DF):

tgδ 10⁻⁴ at +25°C ±5°C

	1kHz	10kHz	100kHz
C ≤ 2.2nF	≤ 1.0	≤ 2.0	≤ 3.0
2.2nF < C ≤ 0.027μF	≤ 1.0	≤ 2.0	≤ 8.0
0.027μF < C ≤ 0.1μF	≤ 4.0	≤ 6.0	≤ 25.0
0.1μF < C ≤ 1μF	≤ 5.0	≤ 8.0	
C > 1μF	≤ 6.0		

Insulation resistance:

Test conditions

Temperature: +25°C±5°C
Voltage charge time: 1 min
Voltage charge: 100Vdc

Performance

≥1x10⁵ MΩ for C≤0.33μF
≥30000s for C>0.33μF

Test voltage between terminations:

1.6xV_R applied for 2 s at 25°C±5°C

TEST METHOD AND PERFORMANCE

Damp heat, steady state:

Test conditions

Temperature: +40°C±2°C
Relative humidity (RH): 93% ±2%
Test duration: 56 days

Performance

Capacitance change |ΔC/C|: ≤2%
DF change (Δtgδ): ≤10x10⁻⁴ at 1kHz
Insulation resistance: ≥50% of initial limit.

Endurance:

Test conditions

Temperature: +85°C±2°C
Test duration: 2000 h
Voltage applied: 1.25xV_R (a.c.) at 50Hz

Performance

Capacitance change |ΔC/C|: ≤5%
DF change (Δtgδ): ≤15x10⁻⁴ at 10kHz
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 s ±1 s

Performance

Capacitance change |ΔC/C|: ≤1%
DF change (Δtgδ): ≤10x10⁻⁴ at 10kHz
Insulation resistance: ≥initial limit.

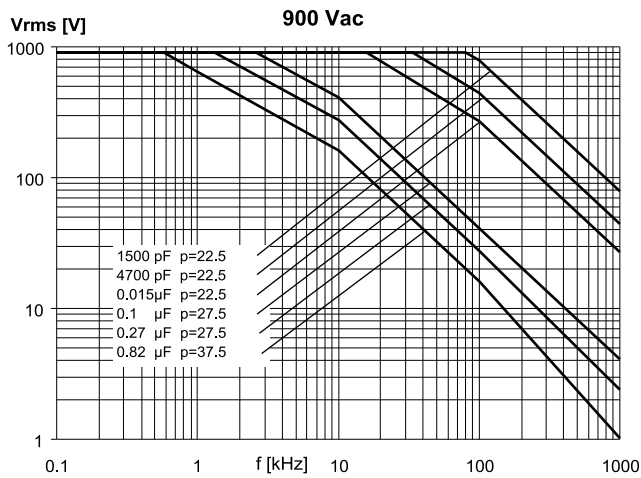
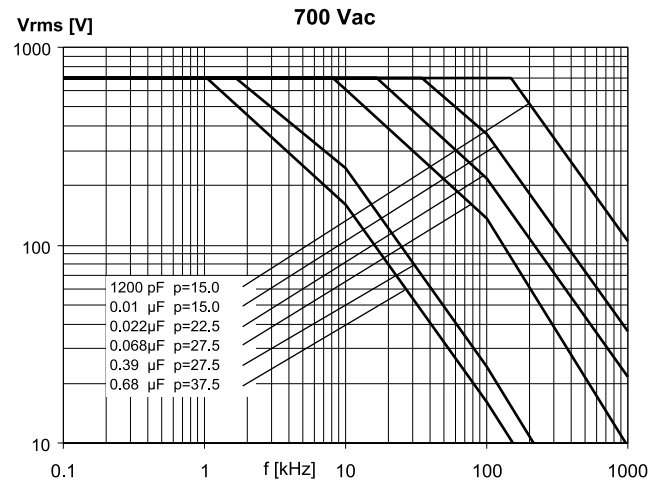
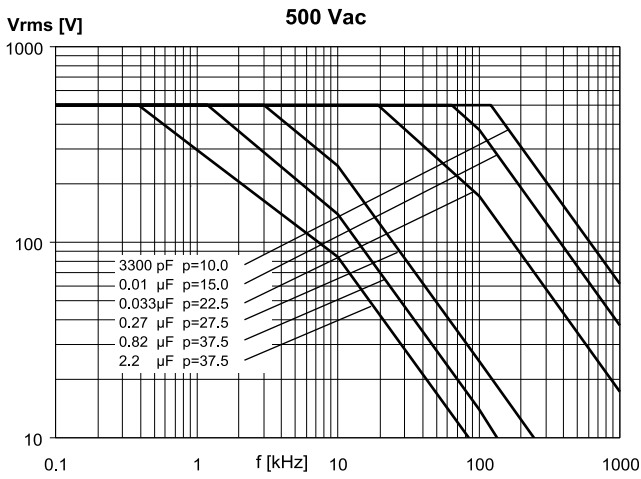
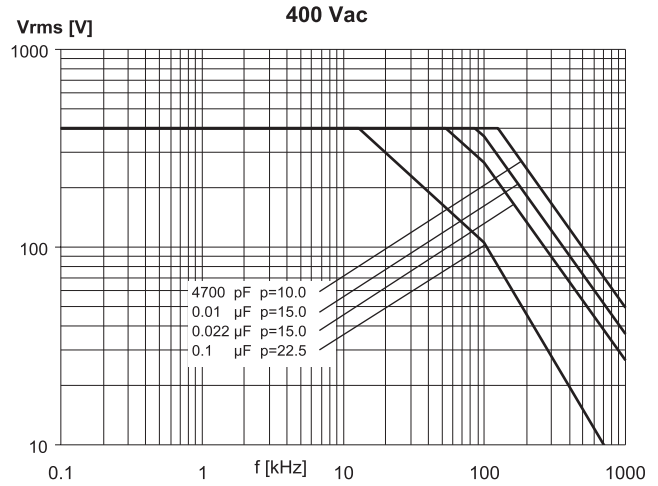
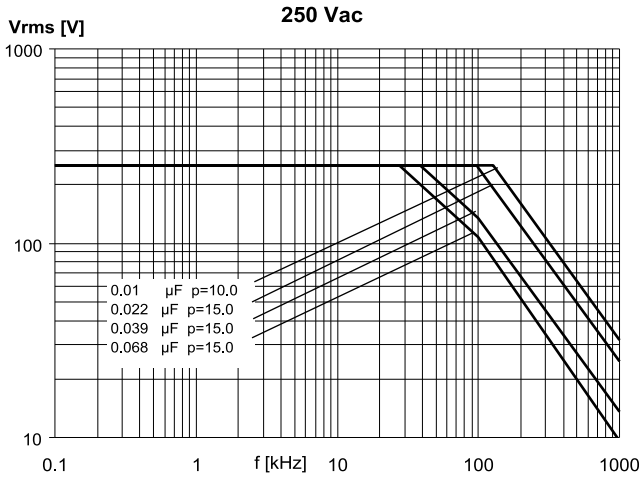
Long term stability (after two years):

Storage: standard environmental conditions (page 12).

Performance

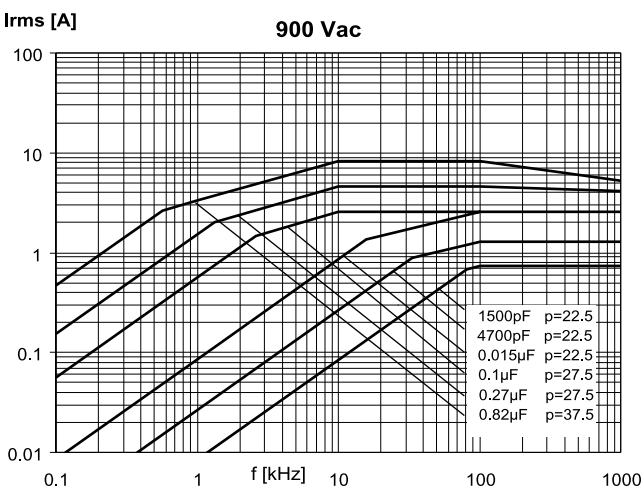
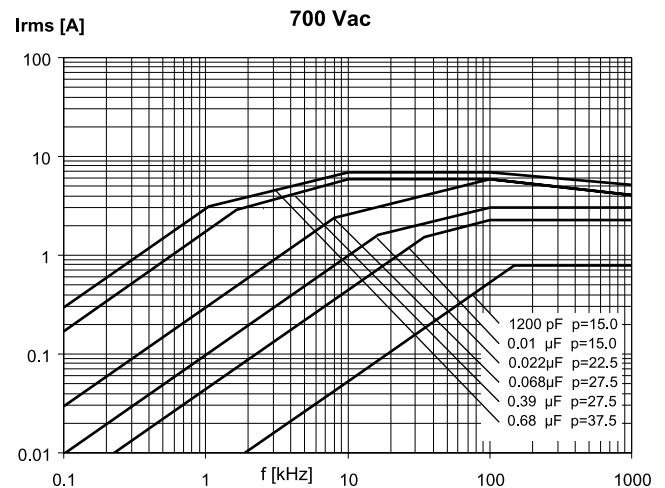
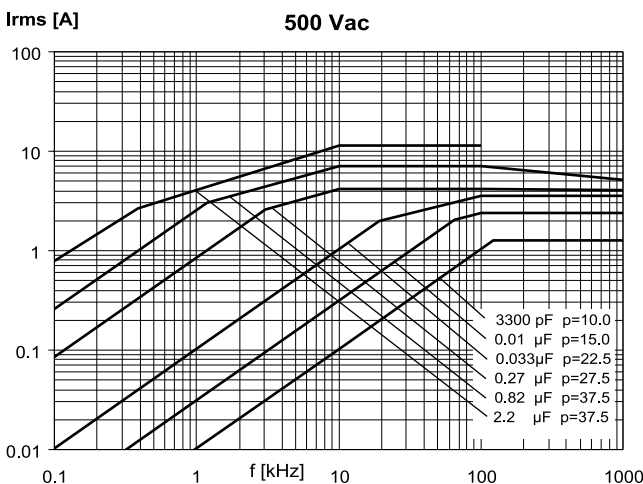
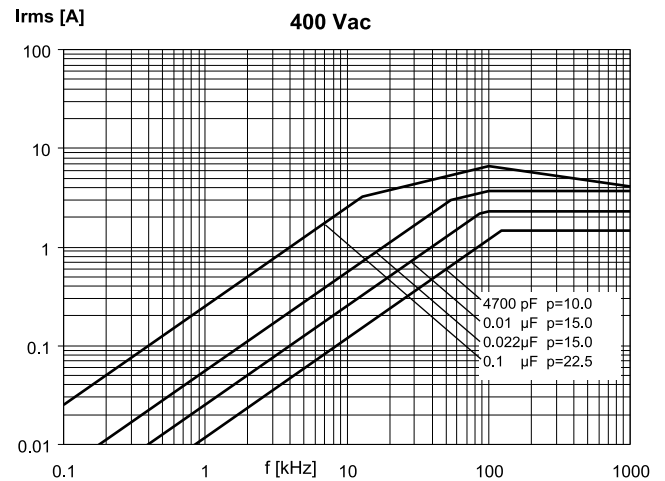
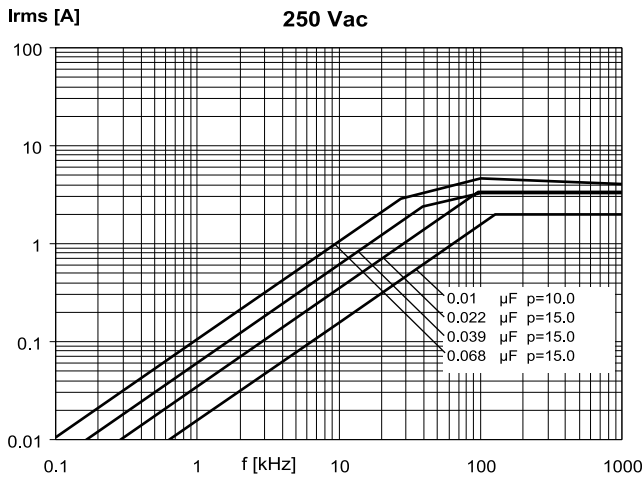
Capacitance change |ΔC/C|: ≤0.5%

MAX. VOLTAGE (Vr.m.s.) VERSUS FREQUENCY (sinusoidal wave-form / Th ≤ 85°C)



Note: p (pitch) in mm.

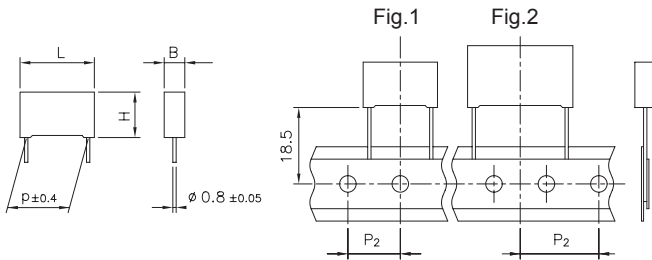
MAX. CURRENT (I_{r.m.s.}) VERSUS FREQUENCY (sinusoidal wave-form / Th ≤ 85°C)



Note: p (pitch) in mm.

Loose

Taped



Ød ±0.05	p = 10	p = 15
	0.6	0.8

All dimensions are in mm.

PRODUCT CODE SYSTEM

The part number, comprising 14 digits, is formed as follows:

1	2	3	4	5	6	7	8	9	10	11	12	13	14
R	7	4	7								R	-	

- Digit 1 to 3 Series code.
- Digit 4 a.c. rated voltage:
6 = 600V
- Digit 5 Pitch: F=10.0mm; I =15.0mm.
- Digit 6 to 9 Digits 7 - 8 - 9 indicate the first three digits of Capacitance value and the 6th digit indicates the number of zeros that must be added to obtain the Rated Capacitance in pF.
- Digit 10 to 11 Mechanical version and/or packaging (table 1)
- Digit 12 Identifies the dimensions and electrical characteristics.
- Digit 13 Internal use.
- Digit 14 Capacitance tolerance:
J=5%; K=10%

METALLIZED POLYPROPYLENE FILM CAPACITOR A.C. APPLICATIONS

Typical applications: electronic lighting (i.e. car headlamp and ballast), pulse applications with high A.C. voltage and high current.

PRODUCT CODE: **R74**

Pitch (mm)	Box thickness (B) (mm)	Maximum dimensions (mm)		
		B max	H max	L max
10.0	All	B +0.2	H +0.1	L +0.2
15.0	<7.5	B +0.2	H +0.1	L +0.3
15.0	≥7.5	B +0.2	H +0.1	L +0.5

GENERAL TECHNICAL DATA

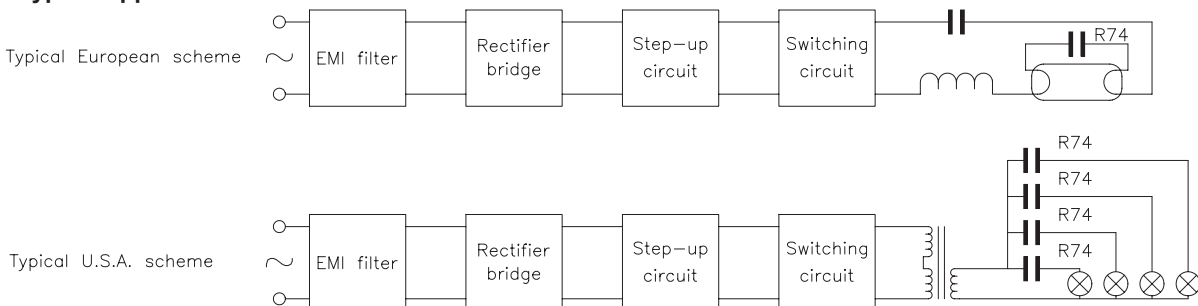
- Dielectric:** polypropylene film.
- Plates:** aluminium layer deposited by evaporation under vacuum.
- Winding:** non-inductive type.
- Leads:** tinned wire.
- Protection:** plastic case, thermosetting resin filled.
Box material is solvent resistant and flame retardant according to UL94 V-0.
- Marking:** manufacturer's logo, series (R74), dielectric code (MKP), capacitance, tolerance, A.C. rated voltage, manufacturing date code.
- Climatic category:** 55/105/56 IEC 60068-1
- Operating temperature range:** -55 to +105°C
- Related documents:** IEC 60384-16; IEC 60384-17

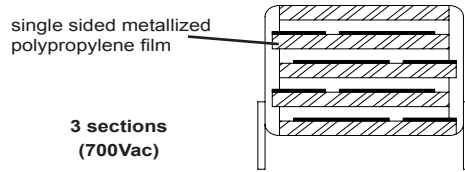
Table 1 (for more detailed information, please refer to page 14)

Standard packaging style	Lead length (mm)	Taping style			Ordering code (Digit 10 to 11)
		P ₂ (mm)	Fig. (No.)	Pitch (mm)	
AMMO-PACK		12.70	1	10.0/15.0	DQ
AMMO-PACK	Kinked execution from p=15 mm to p=7.5 mm				KN
AMMO-PACK					KL
REEL Ø 355mm		12.70	1	10.0/15.0	GY
REEL Ø 500mm		12.70	1	10.0/15.0	CK
Loose, short leads	4 ⁺²				AA
Loose, long leads (p=10mm)	17 ^{-2/+1}				JM
Loose, long leads (p≥15mm)	30 ⁺⁵ 25 ^{-1/+2}				40 50

Note: Ammo-pack is the preferred packaging for taped version.

Typical application: LAMP CAPACITOR IN ELECTRONIC BALLAST





Rated Cap.	600Vac (3 sections) Std dimensions				Max dv/dt (V/μs)	Max K ₀ (V ² /μs)	Part Number
	B	H	L	p			
470 pF	4.0	9.0	13.0	10.0	10000	4000 E4	R746F0470--0--
680 pF	4.0	9.0	13.0	10.0	10000	4000 E4	R746F0680--0--
820 pF	4.0	9.0	13.0	10.0	10000	4000 E4	R746F0820--0--
1000 pF	4.0	9.0	13.0	10.0	10000	4000 E4	R746F1100--0--
1200 pF	4.0	9.0	13.0	10.0	10000	4000 E4	R746F1120--0--
1500 pF	4.0	9.0	13.0	10.0	10000	4000 E4	R746F1150--0--
1800 pF	4.0	9.0	13.0	10.0	10000	4000 E4	R746F1180--0--
2200 pF	5.0	11.0	13.0	10.0	10000	4000 E4	R746F1220--0--
2700 pF	5.0	11.0	13.0	10.0	10000	4000 E4	R746F1270--0--
3300 pF	6.0	12.0	13.0	10.0	10000	4000 E4	R746F1330--0--
3900 pF	6.0	12.0	13.0	10.0	10000	4000 E4	R746F1390--0--
2300 pF	4.0	10.0	18.0	15.0	9500	3800 E4	R746I1230--0--
2700 pF	4.0	10.0	18.0	15.0	9500	3800 E4	R746I1270--0--
3900 pF	5.0	11.0	18.0	15.0	9500	3800 E4	R746I1390--0--
4700 pF	5.0	11.0	18.0	15.0	9500	3800 E4	R746I1470--0--
6800 pF	6.0	12.0	18.0	15.0	9500	3800 E4	R746I1680--0--
0.012 μF	8.5	14.5	18.0	15.0	9500	3800 E4	R746I2120--0--
0.015 μF	8.5	14.5	18.0	15.0	9500	3800 E4	R746I2150--0--
0.018 μF	10.0	16.0	18.0	15.0	9500	3800 E4	R746I2180--0--

Mechanical version and packaging (Table1) _____
 Internal use _____
 Tolerance: J (±5%); K (±10%) _____

All dimensions are in mm.

Note: If the working voltage (V) is lower than the rated voltage (V_R), the capacitor may work at higher dv/dt.
 In this case the maximum value allowed is obtained multiplying the above value (see table dv/dt) with the ratio V_R/V.
 The pulse characteristic K₀ depends on the voltage wave-form and in any case it cannot overcome the value given in the above table.
 The dv/dt test is carried out at 2 times the above values.

**METALLIZED POLYPROPYLENE FILM CAPACITOR
A.C. APPLICATIONS**

PRODUCT CODE: R74

ELECTRICAL CHARACTERISTICS**Rated voltage (V_R):**

600Vac (2000Vdc)

Rated temperature (T_R): +85°C**Temperature derated voltage:**

for temperatures between +85°C and +105°C a decreasing factor of 1.25% per degree °C on the rated voltage V_R (a.c. and d.c.) has to be applied.

Capacitance range:

470pF to 0.018μF

Capacitance values:

E12 series (IEC 60063 Norm).

Capacitance tolerances (measured at 1 kHz):

±5% (J); ±10% (K).

Total self inductance: (L)

(Lead length (2 mm))

Pitch (mm)	10	15
L (nH) ≈	9	10

Dissipation factor (DF):tgδ 10⁻⁴ at +25°C ±5°C

	1kHz	100kHz
All	≤ 15	≤ 15

Insulation resistance:**Test conditions**

Temperature: +25°C±5°C
Voltage charge time: 1 min
Voltage charge: 100Vdc

Performance≥1x10⁵ MΩ**Test voltage between terminations:**1.6x V_R applied for 2 s at 25°C±5°C**TEST METHOD AND PERFORMANCE****Damp heat, steady state:****Test conditions**

Temperature: +40°C±2°C
Relative humidity (RH): 93% ±2%
Test duration: 56 days

Performance

Capacitance change |ΔC/C|: ≤2%
DF change (Δtgδ): ≤10x10⁻⁴ at 1kHz
Insulation resistance: ≥50% of initial limit.

Endurance:**Test conditions**

Temperature: +85°C±2°C
Test duration: 2000 h
Voltage applied: V_R (a.c.) at 50Hz

Performance

Capacitance change |ΔC/C|: ≤10%
DF change (Δtgδ): ≤15x10⁻⁴ at 10kHz
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 s±1 s

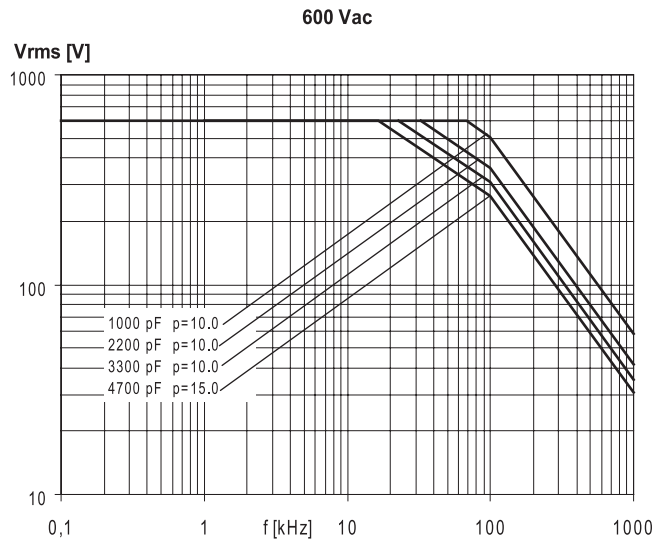
Performance

Capacitance change |ΔC/C|: ≤1%
DF change (Δtgδ): ≤10x10⁻⁴ at 10kHz
Insulation resistance: ≥initial limit.

Long term stability (after two years):**Storage:** standard environmental conditions (page 12).**Performance**

Capacitance change |ΔC/C|: ≤1%

MAX. VOLTAGE ($V_{r.m.s.}$) VERSUS FREQUENCY (sinusoidal wave-form / $T_h \leq 85^\circ\text{C}$)



MAX. CURRENT ($I_{r.m.s.}$) VERSUS FREQUENCY (sinusoidal wave-form / $T_h \leq 85^\circ\text{C}$)

