

ULG Series

+105°C, High Ripple Current, Low ESR

Features

- High Ripple Current, Low ESR
- Wide Temperature Range
- RoHS Compliant

Applications

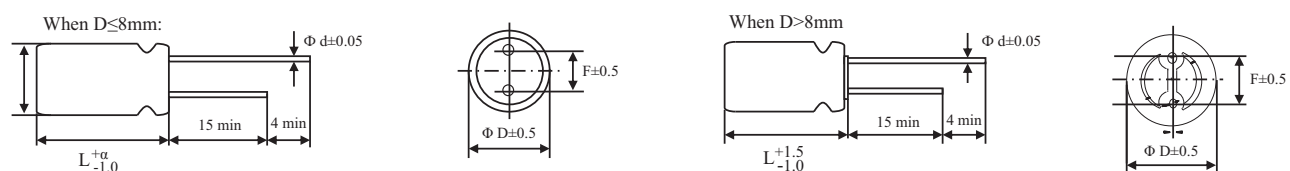
- Suitable for DC-DC Converters, Voltage Regulators, Decoupling Applications for Computer Motherboards, etc.

Specifications



Item	Performance Characteristics				
Operating Temperature Range	-55 to +105°C				
Rated Working Voltage Range	2.5VDC to 35VDC				
Surge Voltage, SV	SV=WVx1.15VDC (Normal temperature)				
Nominal Capacitance Range	22 to 1500μF (120Hz, +20°C)				
Capacitance Tolerance	±20% (120Hz, +20°C)				
tan δ	0.12 (120Hz, +20°C)				
Leakage Current, Lc	I≤0.2CV or 280 (μA) whichever is greater measured, after 2 minutes application of rated working voltage at +20°C				
Temperature Characteristics, Impedance Ratio	At -55°C 100kHz (Low temperature)			Z/Z20°C≤1.25	
	At +105°C 100kHz (High temperature)			Z/Z20°C≤1.25	
Frequency Coefficient for Allowable Ripple Current	Frequency	120Hz≤f<1kHz	1kHz≤f<10kHz	10kHz≤f<100kHz	100kHz≤f<500kHz
	Coefficient	0.05	0.30	0.70	1.00
Endurance	Test conditions +105°C, 2,000 hours Rated voltage applied	ΔC/C	Within ±20% of the initial measured value		
		tan δ	≤150% of the initial specified value		
		ESR	≤150% of the initial specified value		
		Lc	≤The initial specified value		
Damp Heat Test (Steady State)	Test conditions +60°C, 90% to 95% RH 1,000 hours No applied voltage	ΔC/C	Within ±20% of the initial measured value		
		tan δ	≤150% of the initial specified value		
		ESR	≤150% of the initial specified value		
		Lc	≤The initial specified value		
Surge Voltage Test	At normal temperature, charge at surge voltage for 30 sec, and discharge via a 1kΩ protective resistor for 330 sec. Repeat for 1,000 cycles.	ΔC/C	Within ±20% of the initial measured value		
		tan δ	≤150% of the initial specified value		
		ESR	≤150% of the initial specified value		
		Lc	≤The initial specified value		
Others	JIS-C-5101-4				

Dimensions



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Size List

RV: Rated Voltage

(Unit: mm)

RV μF	Code	2.5 (0E)	4 (0G)	6.3 (0J)	10 (1A)	16 (1C)	20 (1D)	25 (1E)	35 (1V)
22	226							E08	F08
33	336						E08	E08, F08	F08
47	476						F08	F08	F08, F1A
56	566							F08	
100	107						F1A	F1A, G1B	F08, F1A, G1B
150	157						G1B	F1A	
180	187					F1A		F1A	
220	227							G1B	G1B
270	277				F1A				
330	337					G1B		G1B	G1B
390	397			F1A				G1B	
470	477				G1B			G1B	
560	567		F1A						
680	687	F1A		G1B					
820	827		G1B						
1500	158	G1B							

Size Code	E08	F08	F1A	G1B
ΦDxL	6.3 x 8	8 x 8	8 x 11.5	10 x 12.5
F±0.5	2.5	3.5	3.5	5.0
Φd	0.6	0.6	0.6	0.6
α	1.0		1.5	

Characteristics List

Rated Vol. (V)	Rated Cap. (μF)	Case Size ΦD x L (mm)	Size Code	Part Number	ESR (mΩ, max/ 20°C, 100kHz)	Rated Ripple (mArms/ 105°C, 100kHz)	DF (%max)	Leakage Current (μA/2 mins)
2.5	680	8 x 11.5	F1A	ULG687M0EF1A	10	5230	12	340
2.5	1500	10 x 12.5	G1B	ULG158M0EG1B	8	5500	12	750
4	560	8 x 11.5	F1A	ULG567M0GF1A	10	5230	12	448
4	820	10 x 12.5	G1B	ULG827M0GG1B	8	5500	12	656
6.3	390	8 x 11.5	F1A	ULG397M0JF1A	12	4770	12	491
6.3	680	10 x 12.5	G1B	ULG687M0JG1B	10	5500	12	857
10	270	8 x 11.5	F1A	ULG277M1AF1A	14	4420	12	540
10	470	10 x 12.5	G1B	ULG477M1AG1B	12	5300	12	940
16	180	8 x 11.5	F1A	ULG187M1CF1A	16	4360	12	576
16	330	10 x 12.5	G1B	ULG337M1CG1B	14	5050	12	1056
20	33	6.3 x 8	E08	ULG336M1DE08	45	1880	12	280
20	47	8 x 8	F08	ULG476M1DF08	42	1952	12	280
20	100	8 x 11.5	F1A	ULG107M1DF1A	35	2670	12	400
20	150	10 x 12.5	G1B	ULG157M1DG1B	35	2672	12	600
25	22	6.3 x 8	E08	ULG226M1EE08	55	1700	12	280
25	33	6.3 x 8	E08	ULG336M1EE08	80	1200	12	280
25	33	8 x 8	F08	ULG336M1EF08	50	1870	12	280
25	47	8 x 8	F08	ULG476M1EF08	45	1940	12	280
25	56	8 x 8	F08	ULG566M1EF08	40	2500	12	280
25	100	8 x 11.5	F1A	ULG107M1EF1A	40	2500	12	500
25	100	10 x 12.5	G1B	ULG107M1EG1B	40	4320	12	500
25	150	8 x 11.5	F1A	ULG157M1EF1A	40	2550	12	750
25	180	8 x 11.5	F1A	ULG187M1EF1A	40	2550	12	900
25	220	10 x 12.5	G1B	ULG227M1EG1B	35	3100	12	1100
25	330	10 x 12.5	G1B	ULG337M1EG1B	45	3100	12	1650
25	390	10 x 12.5	G1B	ULG397M1EG1B	35	3100	12	1950
25	470	10 x 12.5	G1B	ULG477M1EG1B	35	3100	12	2350
35	22	8 x 8	F08	ULG226M1VF08	100	1600	12	280
35	33	8 x 8	F08	ULG336M1VF08	90	1700	12	280
35	47	8 x 8	F08	ULG476M1VF08	90	1500	12	329
35	47	8 x 11.5	F1A	ULG476M1VF1A	90	1500	12	329
35	100	8 x 8	F08	ULG107M1VF08	80	1900	12	700
35	100	8 x 11.5	F1A	ULG107M1VF1A	55	2000	12	700
35	100	10 x 12.5	G1B	ULG107M1VG1B	65	1870	12	700
35	220	10 x 12.5	G1B	ULG227M1VG1B	55	2450	12	1540
35	330	10 x 12.5	G1B	ULG337M1VG1B	45	2700	12	2310

Specifications are subject to change without notice. Should a safety or technical concern arise regarding the product, please be sure to contact our sales offices or agents immediately.