

UPG Series

+105°C, High Voltage, Low ESR

Features

- High Voltage, Low ESR
- Wide Temperature Range
- RoHS Compliant

Applications

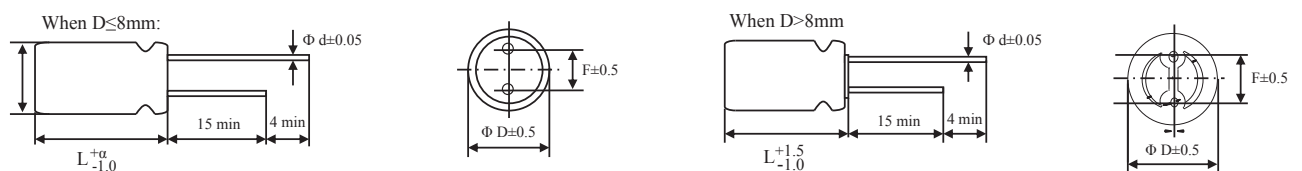
- Suitable for DC-DC Converters, Voltage Regulators, Decoupling Applications for Computer Motherboards, etc.



Specifications

Item	Performance Characteristics				
Operating Temperature Range	-55 to +105°C				
Rated Working Voltage Range	50VDC to 200VDC				
Surge Voltage, SV	SV=WVx1.15VDC (Normal temperature)				
Nominal Capacitance Range	1 to 120μF (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

 New Item | RV: Rated Voltage

μF \ RV	Code	50 (1H)	63 (1J)	80 (1K)	100 (2A)	200 (2D)
1	105					E08
3.3	335			E06 ^(N)		F08
4.7	475					F1A
6.8	685				F1A	G1B
8.2	825					G1B
10	106	D08 ^(N) , E06 ^(N)	E11 ^(N)		E11 ^(N) , F1A	
18	186				G1B	
22	226	F08	F08		G1B ^(N)	
33	336	F08	F08		G1B ^(N)	
47	476	F1A	G1B			
56	566	G1B	G1B			
68	686	G1B				
100	107	G1B				
120	127	G1B				

(Unit: mm)

Size Code	D08	E06	E08	E11	F08	F1A	G1B
$\Phi\text{D} \times \text{L}$	5 x 8	6.3 x 6	6.3 x 8	6.3 x 11	8 x 8	8 x 11.5	10 x 12.5
$F \pm 0.5$	2.0	2.5	2.5	2.5	3.5	3.5	5.0
Φd	0.6	0.45	0.6	0.6	0.6	0.6	0.6
α	1.0	1.0	1.0	1.5	1.0	1.5	1.5

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.

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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)
50	10	5 x 8	D08	UPG106M1HD08	80	790	12	280
50	10	6.3 x 6	E06	UPG106M1HE06	200	547	12	280
50	22	8 x 8	F08	UPG226M1HF08	45	1300	12	280
50	33	8 x 8	F08	UPG336M1HF08	45	1300	12	330
50	47	8 x 11.5	F1A	UPG476M1HF1A	42	1500	12	470
50	56	10 x 12.5	G1B	UPG566M1HG1B	38	2000	12	560
50	68	10 x 12.5	G1B	UPG686M1HG1B	35	2100	12	680
50	100	10 x 12.5	G1B	UPG107M1HG1B	35	2100	12	1000
50	120	10 x 12.5	G1B	UPG127M1HG1B	35	2100	12	1200
63	10	6.3 x 11	E11	UPG106M1JE11	90	850	12	280
63	22	8 x 8	F08	UPG226M1JF08	65	1100	12	280
63	33	8 x 8	F08	UPG336M1JF08	65	1100	12	416
63	47	10 x 12.5	G1B	UPG476M1JG1B	60	1300	12	592
63	56	10 x 12.5	G1B	UPG566M1JG1B	55	1500	12	706
80	3.3	6.3 x 6	E06	UPG335M1KE06	300	350	12	280
100	6.8	8 x 11.5	F1A	UPG685M2AF1A	45	1600	12	280
100	10	6.3 x 11	E11	UPG106M2AE11	90	1650	12	280
100	10	8 x 11.5	F1A	UPG106M2AF1A	42	1800	12	280
100	18	10 x 12.5	G1B	UPG186M2AG1B	38	2200	12	300
100	22	10 x 12.5	G1B	UPG226M2AG1B	38	2200	12	440
100	33	10 x 12.5	G1B	UPG336M2AG1B	65	1550	12	660
200	1	6.3 x 8	E08	UPG105M2DE08	2000	150	12	280
200	3.3	8 x 8	F08	UPG335M2DF08	500	300	12	280
200	4.7	8 x 11.5	F1A	UPG475M2DF1A	400	350	12	280
200	6.8	10 x 12.5	G1B	UPG685M2DG1B	300	500	12	280
200	8.2	10 x 12.5	G1B	UPG825M2DG1B	300	595	12	328

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