

UBR Series

+125°C, High Temperature, Low ESR

Features

- High Temperature
- Low ESR
- RoHS Compliant



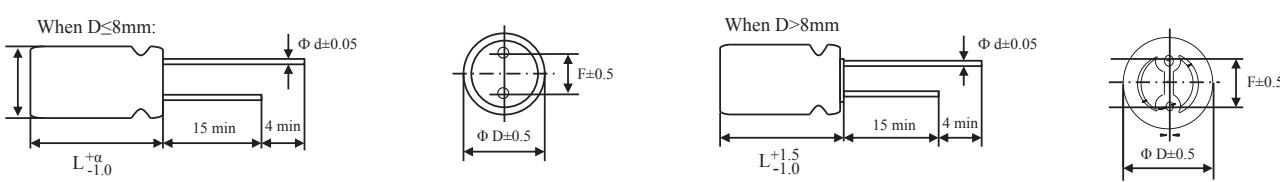
Applications

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

Specifications

Item	Performance Characteristics				
Operating Temperature Range	-55 to +125°C				
Rated Working Voltage Range	2.5VDC to 100VDC				
Surge Voltage, SV	SV=WVx1.15VDC (Normal temperature)				
Nominal Capacitance Range	10 to 1200μF (120Hz, +20°C)				
Capacitance Tolerance	±20% (120Hz, +20°C)				
$\tan \delta$	0.12 (120Hz, +20°C)				
Leakage Current, Lc	$I \leq 0.2CV$ or 280 (μ A) 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)			$Z/Z_{20^\circ\text{C}} \leq 1.25$	
	At +125°C 100kHz (High temperature)			$Z/Z_{20^\circ\text{C}} \leq 1.25$	
Frequency Coefficient for Allowable Ripple Current	Frequency	120Hz $\leq f < 1\text{kHz}$	1kHz $\leq f < 10\text{kHz}$	10kHz $\leq f < 100\text{kHz}$	100kHz $\leq f < 500\text{kHz}$
	Coefficient	0.05	0.30	0.70	1.00
Endurance	Test conditions +125°C, 1,000 hours Rated voltage applied	$\Delta C/C$		Within ±20% of the initial measured value	
		$\tan \delta$		$\leq 200\%$ of the initial specified value	
		ESR		$\leq 200\%$ of the initial specified value	
		Lc		\leq The Initial specified value	
Damp Heat Test (Steady State)	Test conditions +60°C, 90% to 95% RH 1,000 hours No applied voltage	$\Delta C/C$		Within ±20% of the initial measured value	
		$\tan \delta$		$\leq 150\%$ of the initial specified value	
		ESR		$\leq 150\%$ of the initial specified value	
		Lc		\leq 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.	$\Delta C/C$		Within ±20% of the initial measured value	
		$\tan \delta$		$\leq 150\%$ of the initial specified value	
		ESR		$\leq 150\%$ of the initial specified value	
		Lc		\leq The initial specified value	
Others	JIS-C-5101-4				

Dimensions



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Size List



RV: Rated Voltage

RV μF	Code	2.5 (0E)	4 (0G)	6.3 (0J)	10 (1V)	16 (1C)	20 (1D)	25 (1E)	35 (1V)	63 (1J)	100 (2A)
10	827								E08 ^⑥	E11 ^⑥	E11 ^⑥
47	476								F08		
100	107					E11			F1A ^⑥		
180	187							F1A			
220	227					F08		F1A	G1B		
270	277					F1A ^⑥		F1A			
470	477					G1B ^⑥					
560	567			F08			G1B ^⑥				
820	827	E08		E85 ^⑥ , E11 ^⑥ , F08 ^⑥	F1A ^⑥						
1200	128	F1A	G1B								

(Unit: mm)

Size Code	E08	E85	E11	F08	F1A	G1B
ΦDxL	6.3 x 8	6.3 x 8.5	6.3 x 11	8 x 8	8 x 11.5	10 x 12.5
F±0.5	2.5	2.5	2.5	3.5	3.5	5.0
Φd	0.6	0.6	0.6	0.6	0.6	0.6
α	1.0	1.0	1.5	1.0	1.5	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 (mA rms/ 125°C, 100kHz)	Rated Ripple (mA rms/ 105°C, 100kHz)	DF (%max)	Leakage Current (μA/2 mins)
2.5	820	6.3 x 8	E08	UBR827M0EE08	12	1680	5600	12	410
2.5	1200	8 x 11.5	F1A	UBR128M0EF1A	10	1830	6100	12	600
4	1200	10 x 12.5	G1B	UBR128M0GG1B	10	1830	6100	12	960
6.3	560	8 x 8	F08	UBR567M0JF08	12	1710	5700	12	706
6.3	820	6.3 x 8.5	E85	UBR827M0JE85	12	1180	3950	12	1033
6.3	820	6.3 x 11	E11	UBR827M0JE11	10	1560	5200	12	1033
6.3	820	8 x 8	F08	UBR827M0JF08	12	1500	5000	12	1033
10	820	8 x 11.5	F1A	UBR827M1AF1A	12	1530	5100	12	1640
16	100	6.3 x 11	E11	UBR107M1CE11	24	846	2820	12	320
16	220	8 x 8	F08	UBR227M1CF08	13	1290	4300	12	704
16	270	8 x 11.5	F1A	UBR227M1CF1A	13	1500	5000	12	864
16	470	10 x 12.5	G1B	UBR477M1CG1B	10	1800	6000	12	1504
20	560	10 x 12.5	G1B	UBR567M1DG1B	30	1000	3350	12	2240
25	180	8 x 11.5	F1A	UBR187M1EF1A	35	825	2750	12	900
25	220	8 x 11.5	F1A	UBR227M1EF1A	40	600	2000	12	1100
25	270	8 x 11.5	F1A	UBR227M1EF1A	40	600	2000	12	1350
35	10	6.3 x 8	E08	UBR106M1VE08	90	450	1500	12	280
35	47	8 x 8	F08	UBR476M1VF08	90	360	1200	12	329
35	100	8 x 11.5	F1A	UBR107M1VF1A	70	540	1800	12	700
35	220	10 x 12.5	G1B	UBR227M1VG1B	55	735	2450	12	1540
63	10	6.3 x 11	E11	UBR106M1JE11	90	490	1650	12	280
100	10	6.3 x 11	E11	UBR106M2AE11	90	490	1650	12	280

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.