



VS

Long life and Ultra low ESR

- Features: 105°C, 5000hrs, Long life and Ultra low ESR
- Recommended Applications: Motherboard, DC/DC Converter, Adapter, SPS, VCR, camcorder, DSC, PDA, HD Drive, MO Drive, DVD Drive, Navigation system, Portable Communication Devices
- Corresponding product to RoHS



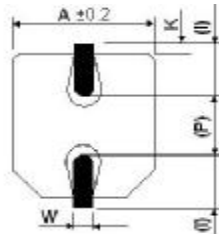
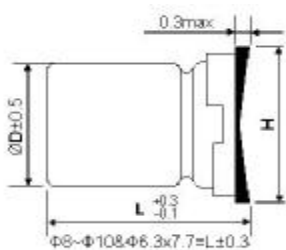
Specifications

Item	Characteristics	
Category Temperature Range	-55 ~ +105°C	
Rated Voltage Range	4 ~ 16VDC	
Rated Capacitance Range	39 ~ 330 μ F	
Capacitance Tolerance	\pm 20% at 120Hz, 20°C	
Surge Voltage	Rated voltage (V) x 1.15	
Leakage Current (MAX) (20°C)	Less than or equal to the value of Table.(After rated voltage applied for 2 minutes at 20°C)	
Dissipation Factor (MAX) (tan δ) (120Hz, 20°C)	WV	4 ~ 16V
	tan δ	0.12
Low Temperature Stability Impedance Ratio (MAX) (20°C)	WV	
	Z(100KHz)	4 ~ 16V
	Z-25°C / Z+20°C	\leq 1.15
	Z-55°C / Z+20°C	\leq 1.25
Endurance	After applying rated voltage for 5000 hours at 105°C, the capacitor shall meet the following requirement.	
	Appearance	No significant damage
	Capacitance Change	Within \pm 20% of the initial value
	Dissipation Factor	Not more than 150% of the initial specified value
	Equivalent Series Resistance	Not more than 150% of the initial specified value
	Leakage Current	Not more than the initial specified value
	WV	2.5 ~ 16V
	Life	5000
Humidity Test	after subjecting 90 to 95% RH for 1000 hours at 60°C. the capacitors shall meet the requirement as Endurance.	
Resistance to Soldering Heat*	Capacitance Change	Within \pm 10% of the initial value
	Dissipation Factor	Not more than 130% of the initial specified value
	Equivalent Series Resistance	Not more than 130% of the initial specified value
	Leakage Current	Not more than the initial specified value

* For any doubt about measured values, measure the leakage current again after the following voltage treatment.

Voltage treatment: Applying DC rated voltage to the capacitors for 2 hours at 105 oC.

Diagram of Dimensions



ΦD	L	A	H	I	W	P	K
6.3	5.8	6.6	7.8 Max	2.6	0.65±0.15	1.8±0.2	0.35
							+0.15 -0.2

Multiplier for Ripple Current

Frequency (Hz)	120 \leq F < 1K	1K \leq F < 10K	10K \leq F < 100K	100K \leq F \leq 500K
Coefficient	0.05	0.3	0.7	1



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■ Dimensions, Rated Ripple Current, Equivalent Series Resistance

Capacitance (μ F)	Rated Voltage							
	4V				6.3V			
	SIZE	RIPPLE	ESR	LC(μ A max/2min)	SIZE	RIPPLE	ESR	LC(μ A max/2min)
100					6.3x5.8	2800	22	300
120					6.3x5.8	2800	22	300
150	6.3x5.8	2570	22	300				
220					6.3x5.8	2800	20	277
330	6.3x5.8	2800	20	264				

Capacitance (μ F)	Rated Voltage							
	10V				16V			
	SIZE	RIPPLE	ESR	LC(μ A max/2min)	SIZE	RIPPLE	ESR	LC(μ A max/2min)
39					6.3x5.8	2200	30	300
56	6.3x5.8	2300	27	300				
68	6.3x5.8	2300	27	300	6.3x5.8	2200	30	300
120	6.3x5.8	2300	27	300				

☆ SIZE : ϕ DxL(mm) ☆ $\tan \delta$: 20°C, 120Hz. ☆ Ripple Current: (mA/rms), 105°C .100KHz ☆ ESR(m Ω), 20°C .100KHz