

SURFACE MOUNT CONDUCTIVE POLYMER ALUMINUM SOLID CAPACITORS

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



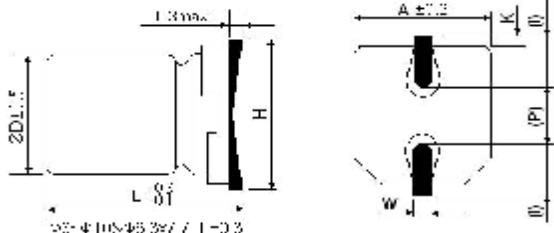
■ Specifications

Item	Characteristics															
Category Temperature Range	-55 ~ +105°C															
Rated Voltage Range	4 ~ 20VDC															
Rated Capacitance Range	22 ~ 470μF															
Capacitance Tolerance	±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) (tanδ) (120Hz ,20°C)	WV tanδ	4 ~ 16V 0.12														
Low Temperature Stability Impedance Ratio (MAX) (20°C)	WV Z(100KHz) Z-25°C / Z+20°C Z-55°C / Z+20°C	4 ~ 16V ≤1.15 ≤1.25														
Endurance	After applying rated voltage for 5000 hours at 105°C , the capacitor shall meet the following requirement. <table border="1"> <tr> <td>Appearance</td> <td>No significant damage</td> </tr> <tr> <td>Capacitance Change</td> <td>Within ±20% of the initial value</td> </tr> <tr> <td>Dissipation Factor</td> <td>Not more than 150% of the initial specified value</td> </tr> <tr> <td>Equivalent Series Resistance</td> <td>Not more than 150% of the initial specified value</td> </tr> <tr> <td>Leakage Current</td> <td>Not more than the initial specified value</td> </tr> </table> <table border="1"> <tr> <td>WV</td> <td>2.5 ~ 16V</td> </tr> <tr> <td>Life</td> <td>5000</td> </tr> </table>		Appearance	No significant damage	Capacitance Change	Within ±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
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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 *	<table border="1"> <tr> <td>Capacitance Change</td> <td>Within ±10% of the initial value</td> </tr> <tr> <td>Dissipation Factor</td> <td>Not more than 130% of the initial specified value</td> </tr> <tr> <td>Equivalent Series Resistance</td> <td>Not more than 130% of the initial specified value</td> </tr> <tr> <td>Leakage Current</td> <td>Not more than the initial specified value</td> </tr> </table>		Capacitance Change	Within ±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						
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* 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
8	10.4	8.3	10.0 Max	3.4	0.90±0.2	3.1±0.2	0.70±0.20
10	12.2	10.3	12.0 Max	3.5	0.90±0.2	4.6±0.2	0.70±0.20

■ Multiplier for Ripple Current

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

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Dimensions, Rated Ripple Current, Equivalent Series Resistance

Capacitance (μF)	Rated Voltage							
	4V				6.3V			
	SIZE	RIPPLE	ESR	LC(μA max/2min)	SIZE	RIPPLE	ESR	LC(μA 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	300
					8X6.7	3220	22	300
330	6.3X5.8	2800	20	300	6.3X5.8	2800	20	415
470	6.3X7.7	2800	20	376	10X10	4130	20	592

Capacitance (μF)	Rated Voltage							
	10V				16V			
	SIZE	RIPPLE	ESR	LC(μA max/2min)	SIZE	RIPPLE	ESR	LC(μA max/2min)
22					5X5.8	1060	45	300
39					6.3x5.8	2200	30	300
47	6.3X5.8	2300	27	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				
330					10x12.2	3800	14	1056
470	8x10.4	3000	22	940				

Capacitance (μF)	Rated Voltage							
	20V							
	SIZE	RIPPLE	ESR	LC(μA max/2min)				
27	6.3X5.8	2450	40	300				
68								
180	10X10	3200	25	720				
470								

☆ SIZE : $\psi D \times L$ (mm) ☆ tanδ:20°C,120Hz. ☆ Ripple Current:(mA/rms),105°C .100KHz ☆ ESR($\text{m}\Omega$).20°C.100KHz