

# SURFACE MOUNT CONDUCTIVE POLYMER ALUMINUM SOLID CAPACITORS

# VB

## High capacitance and Super low ESR

- Features: 105°C, 2000hrs, High capacitance and Super 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



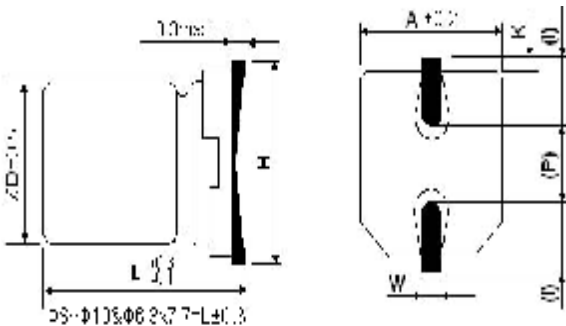
### Specifications

Item	Characteristics	
Category Temperature Range	-55 ~ +105°C	
Rated Voltage Range	2.5 ~ 25VDC	
Rated Capacitance Range	33 ~ 1200μF	
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	2.5 ~ 25V
	tanδ	0.12
Low Temperature Stability Impedance Ratio (MAX) (20°C)	WV	2.5 ~ 25V
	Z(100KHz) Z-25°C / Z+20°C	≤ 1.15
	Z-55°C / Z+20°C	≤ 1.25
Endurance	After applying rated voltage for 2000 hours at 105°C, the capacitor shall meet the following requirement.	
	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
Humidity Test	WV	2.5 ~ 25V
	Life	2000
Resistance to Soldering Heat*	after subjecting 90 to 95% RH for 1000 hours at 60°C. the capacitors shall meet the requirement as Endurance.	
	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

\* 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
6.3	7.7	6.6	7.8 Max	2.6	0.65±0.15	1.8±0.2	0.35	+0.15 -0.2
8	6.7	8.3	9.5 Max	3.4	0.65±0.15	2.2±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	10.0	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							
	2.5V				4V			
	SIZE	RIPPLE	ESR	LC(μA max/2min)	SIZE	RIPPLE	ESR	LC(μA max/2min)
220								
270					6.3x5.8	3160	15	300
330	6.3X5.8	3160	15	300	6.3x5.8	3160	15	300
390	6.3x5.8	3160	15	300				
470	6.3X5.8	3160	15	300				
560	6.3x5.8	3500	16	300				
	6.3X7.7	3600	13	300	8X6.7	3220	22	300
	8X6.7	4100	13	300				
820	8X10.4	4210	12	410				

Capacitance (μF)	Rated Voltage							
	6.3V				10V			
	SIZE	RIPPLE	ESR	LC(μA max/2min)	SIZE	RIPPLE	ESR	LC(μA max/2min)
68					5X5.8	1970	30	300
100	6.3X5.8	2500	24	300				
120	6.3x5.8	2500	24	300	6.3x5.8	2600	22	300
150	6.3X5.8	3160	15	300	6.3x7.7	2880	21	300
220	6.3X5.8	3160	15	300	8X6.7	3220	22	540
270					8X6.7	3220	22	540
330	6.3x5.8	3390	17	415	8X10.4	4000	17	660
	6.3X7.7	3470	14	415				
	8X6.7	3950	22	415				
	8X10.4	4210	15					
390	8X6.7	3950	22	491				
	8X10.4	4210	15	491				
470	6.3X7.7	3470	14	592	10x10	5025	12	940
	8X6.7	3220	22	592				
	8X10.4	4210	15	592				
560	8X10.4	4210	15	705				
	10X10	5025	12	705				
820	8X10.4	4210	15	1033				
	10X10	5025	12	1033				
1200	10X10	5025	12	1510				

Capacitance (μF)	Rated Voltage							
	16V				25V			
	SIZE	RIPPLE	ESR	LC(μA max/2min)	SIZE	RIPPLE	ESR	LC(μA max/2min)
33					6.3X7.7	2500	45	300
47					6.3X7.7	2500	45	300
68	6.3x5.8	2440	25	300				
	6.3X7.7	2700	24	300				
100	6.3x5.8	2440	25	300				
	6.3X7.7	2700	24	320				
180	6.3X7.7	3220	22	576				
	8X6.7	3220	25	576				
	8X10.4	3890	18	576				
220	8X10.4	3890	18	704				
270	8X10.4	3890	18	864				
330	10X10	4350	16	1056				
470	10X12.2	6100	10	1504				

☆ SIZE : ψDxL(mm) ☆ tanδ:20°C,120Hz. ☆Ripple Current:(mA/rms),105°C .100KHz ☆ ESR(mΩ).20°C .100KHz