

CONDUCTIVE POLYMER ALUMINUM SOLID CAPACITORS

CH

Long life & Ultra low ESR
Series

- Features: 105°C, 5000hrs, 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

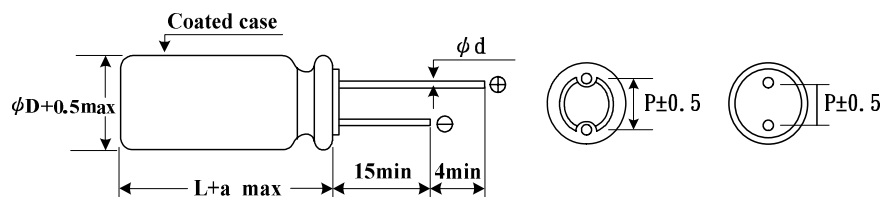


Specifications

Item	Characteristics	
Category Temperature Range	-55 ~ +105°C	
Rated Voltage Range	2.5 ~ 16VDC	
Rated Capacitance Range	270 ~ 820 μ F	
Capacitance Tolerance	$\pm 20\%$ at 120Hz, 20°C	
Surge Voltage	Rated voltage (V) x 1.15	
Leakage Current (MAX) (20°C)	$I \leq 0.2 \text{ CV}$ or $300\mu\text{A}$ whichever is greater (After rated voltage applied for 2 minutes) I = Leakage Current (μA) C = Nominal Capacitance (μF) V = Rated Voltage (V)	
Dissipation Factor (MAX) ($\tan \delta$) (120Hz, 20°C)	WV	2.5 ~ 16V
	$\tan \delta$	0.12
	WV	2.5 ~ 16V
	$Z(100\text{KHz})$	≤ 1.15
Low Temperature Stability Impedance Ratio (MAX) (20°C)	$Z-25^\circ\text{C} / Z+20^\circ\text{C}$	≤ 1.15
	$Z-55^\circ\text{C} / Z+20^\circ\text{C}$	≤ 1.25
	WV	2.5 ~ 16V
	Life	5000
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
Humidity Test	after subjecting 90 to 95% RH for 1000 hours at 60°C, the capacitors shall meet the requirement as Endurance.	
Surge Voltage Test	After subjecting to 1,000 cycles each consisting of charge with the surge voltage specified at normal temperature for 30 seconds through a protective resistor and discharge for 5 minutes 30 seconds, the capacitors shall meet the requirement as Endurance.	
Failure Rate (MAX)	1% per 1,000 hours (confidence level 60% at 105°C)	

Diagram of Dimensions

Marking : case with red printing



Size code	$\phi D \times L$	P	ϕd	a
C09	5X9	2.0	0.5	1.0
E01	6.3X5.4	2.5	0.45	1.0
E08	6.3X8	2.5	0.6	1.0
G1B	8X11.5	3.5	0.6	1.0
H1C	10X12.5	5.0	0.6	1.0

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 (uF)	Rated Voltage								
	2.5V			4V			6.3V		
	SIZE	RIPPLE	ESR	SIZE	RIPPLE	ESR	SIZE	RIPPLE	ESR
470							6.3x8	3500	7
560	5X9	4350	7						
	6.3X5.4	3000	16						
	6.3x8	3500	7	6.3x8	3500	7	6.3x8	3500	7
820	6.3x8	3500	7						
1200							8x11.5	3500	7
1500							10x12.5	3500	7
1800							10x12.5	3500	7

Capacitance (uF)	Rated Voltage								
	10V			16V					
	SIZE	RIPPLE	ESR	SIZE	RIPPLE	ESR			
100				6.3X8	2490	12			
270				8X8	3500	10			
				8x11.5	3500	10			
330	8x11.5	3500	10						
470				8x11.5	3500	10			
820				10x12.5	4000	11			

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