

CONDUCTIVE POLYMER ALUMINUM SOLID CAPACITORS

CZ

**Small Size & Low ESR
Series**



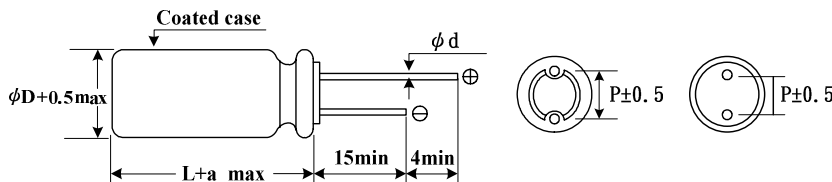
- Features: 105°C, 2000hrs, Low ESR
- Recommended Applications: Used switching regulator applications in computer.
Especially for high frequency.

- Corresponding product to RoHS

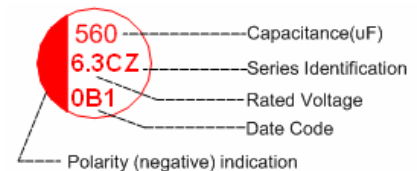
Specifications

Item	Characteristics	
Category Temperature Range	-55 ~ +105°C	
Rated Voltage Range	2.5 ~ 16VDC	
Rated Capacitance Range	10 ~ 2200 μ F	
Capacitance Tolerance	$\pm 20\%$ at 120Hz, 20°C	
Surge Voltage	Rated voltage (V) x 1.15	
Leakage Current (MAX) (20°C)	$I \leq 0.2 CV$ or 300 μ A whichever is greater (After rated voltage applied for 2 minutes)	
	I = Leakage Current (μ A) C = Nominal Capacitance (μ F) V = Rated Voltage (V)	
Dissipation Factor (MAX) ($\tan \delta$) (120Hz, 20°C)	WV	2.5 ~ 16V
	$\tan \delta$	0.12
Low Temperature Stability Impedance Ratio (MAX) (20°C)	WV	2.5 ~ 16V
	Z(100KHz)	
	Z-25°C / Z+20°C	≤ 1.15
Endurance	After applying rated voltage for 2000 hours at 105°C, the capacitor shall meet the following requirement.	
	Appearance	No significant damage
Humidity Test	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
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
B01	4X5.4	1.5	0.45	1.0
E01	6.3X5.4	2.5	0.45	1.0
E08	6.3X8	2.5	0.6	1.0
G08	8X8	3.5	0.6	1.5
G1B	8X11.5	3.5	0.6	1.0
H1A	10X10.5	5.0	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
100							6.3x8	4700	18
220							6.3x5.4	1810	80
330							6.3x8	4700	18
470							6.3x8	4700	18
							8x8	5000	14
560	6.3x8	5000	18	6.3x8	5000	18	6.3x8	4700	18
	8x8	5600	14	8x8	5600	14	8x8	5000	14
680	8x11.5	5600	12						
820	6.3x8	5000	18				8x11.5	5600	12
	8x8	5600	14	8x8	5600	14			
	8x11.5	5600	12	8x11.5	5600	12			
1000	8x8	5600	14	8x8	5600	14	8x8	5000	14
	8x11.5	5600	12	8x11.5	5600	12	8x11.5	5600	12
1200	8x8	5600	14	8x8	5600	14	8x11.5	5600	12
	8x11.5	5600	12	8x11.5	5600	12	10x12.5	5600	10
				10x12.5	5600	10			
1500	8x11.5	5600	12	8x11.5	5600	12	10x12.5	5600	10
1800	10x12.5	5600	10	10x12.5	5600	10	10x12.5	5600	10
2200	10x12.5	5600	10	10x12.5	5600	10			

Capacitance (uF)	Rated Voltage								
	10V			16V					
	SIZE	RIPPLE	ESR	SIZE	RIPPLE	ESR			
10	4x5.4	700	80						
100				6.3x8	2820	35			
150				6.3x8	2820	35			
180				6.3x8	2820	35			
220				6.3x10.5	2820	35			
	6.3x8	2820	30	8x8	4500	20			
270	6.3x8	2820	30	8x8	4500	20			
				8x11.5	5000	12			
				10x10.5	4400	18			
330				8x8	4500	20			
	6.3x8	2820	30	8x11.5	5000	12			
470	8x8	4500	20	8x11.5	5000	12			
	8x11.5	5000	12						
560	8x8	4500	20	10x12.5	5600	14			
	8x11.5	5000	12						
680	8x11.5	5000	12	10x12.5	5600	14			
820	8x11.5	5000	12	10x12.5	5600	14			
1000	10x12.5	5600	10						
1200	10x12.5	5600	10						

☆ SIZE : φ DxL(mm) ☆ tan δ :20℃,120Hz. ☆ Ripple Current:(mA/rms),105℃ .100KHz ☆ ESR(mΩ).20℃.100KHz