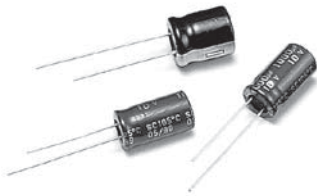


Miniature Aluminum Electrolytic Capacitors

SZ [Ultra Low ESR]

105°C Single-Ended Lead Aluminum Electrolytic Capacitors for High Frequency Applications



DESCRIPTION

Used in switching regulator applications in computers, especially for high frequency.

Low impedance and ESR, high permissible ripple current at high frequency and higher operating temperature (-40°C to +105°C).

High Temperature Load Life at 105°C for 2000 Hours

MULTIPLIER FOR RIPPLE CURRENT

Frequency Coefficient

FREQUENCY (Hz)	120	1K	10K	100K ≤
FACTOR	0.50	0.80	0.90	1.00

Temperature Coefficient

TEMPERATURE (°C)	65	85	105
FACTOR	2.10	1.70	1.00

ELECTRICAL CHARACTERISTICS

Operating Temperature Range : -40 ~ +105°C

Rated Voltage Range : 6.3 ~ 16V

Rated Capacitance Range : 470 ~ 3300µF

Capacitance Tolerance : -20 ~ +20% at 120Hz, 20°C

DC Leakage Current (µA) : I = 0.03 CV Whichever is greater.
(After Rated Voltage Applied for 2 Minutes)

Dissipation Factor

WV (V) :	6.3	10	16
D.F. (%) :	22	19	16

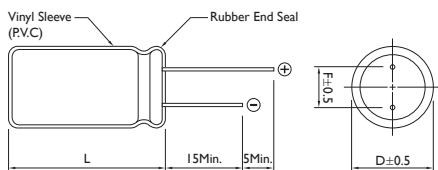
When nominal capacitance is over 1000µF, tan δ shall be added 0.02 to the listed value with increase of every 1000µF.

WV (V) :	Rated Voltage (V)	6.3	10	16
Impedance :	Z - 25°C / Z + 20°C	2	2	2
	Z - 40°C / Z + 20°C	3	3	3

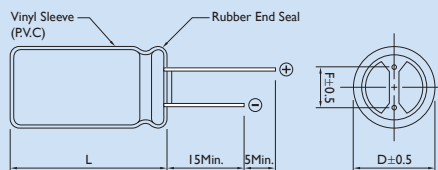
Endurance: After applying rated voltage with ripple current for 2000 hours at 105°C, the capacitors shall meet the following requirements.

- (a) Capacitance Change : Within ±25% of Initial Value
- (b) Dissipation Factor : Not more than 200% of Specified Value
- (c) Leakage Current : Not more than the Specified Value

DIAGRAM OF DIMENSIONS



Rubber Stand-off



L ≤ 16 L + 1.5Max.
L > 16 L + 2Max.
Dø = 8 & 10 L + 2.5Max.
Dø < 20 Dø + 0.5
Dø ≥ 20 Dø + 1

Dimensions: mm

Dø	F	dø
4.0	1.5	0.45
5.0	2.0	0.5
6.3	2.5	
8.0	3.5	0.6
10.0	5.0	
12.0		
13.0		
16.0	7.5	0.8
18.0		
22.0	10.0	

CASE SIZE & PERMISSIBLE RIPPLE CURRENT OF STANDARD PRODUCTS

D x L: mm

CAP. (μF)	RATED VOLTAGE WV (SURGE VOLTAGE WV)								
	6.3 (8)			10 (13)			16 (20)		
	SIZE	RIPPLE	ESR	SIZE	RIPPLE	ESR	SIZE	RIPPLE	ESR
470							8 x 11	1140	36
680				8 x 11	1140	36	8 x 15	1490	28
							10 x 12	1540	26
820	8 x 11	1140	36						
1000				8 x 15	1490	28	8 x 20	1870	21
				10 x 12	1540	26	10 x 15	2000	19
1200	8 x 15	1490	28						
1500	10 x 12	1540	26	8 x 20	1870	21	10 x 19.5	2550	16
				10 x 15	2000	19			
1800	8 x 20	1870	21	10 x 19.5	2550	16	10 x 22	2800	12
	10 x 15	2000	19						
2200	10 x 19.5	2550	16	10 x 22	2800	12			
3300	10 x 22	2800	12						

Note: 1. Ripple Current: (mA/rms) 105°C, 100KHz

2. ESR: 100KHz / 20°C (mΩ Max.)