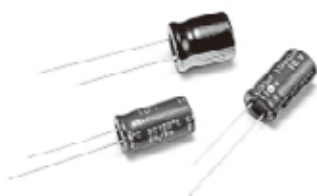


Miniature Size Aluminum Electrolytic Capacitors

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 E.S.R., 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

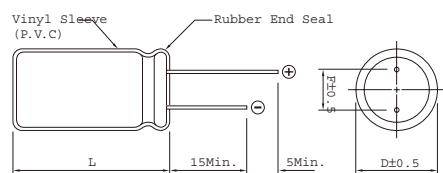
Frequency coefficient

Frequency(Hz)	120	1K	10K	100K ≤
Factor	0.50	0.80	0.90	1.00

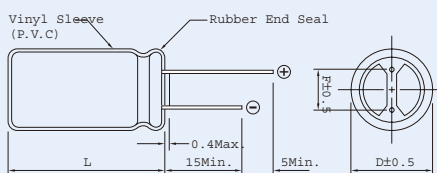
Temperature coefficient

Temperature(°C)	65	85	105
Factor	2.10	1.70	1.00

DIAGRAM OF DIMENSIONS



Rubber Stand-off



$L \leq 16 : L + 1.5\text{max}$
 $L > 16 : L + 2\text{max}$
 $D\phi = 8 \& 10 : L + 2.5$
 $D\phi < 20 : D\phi + 0.5$
 $D\phi \geq 20 : D\phi + 1$

Dimensions : mm

D ϕ	F	d ϕ
4.0	1.5	0.45
5.0	2.0	0.5
6.0	2.5	
8.0	3.5	
10.0	5.0	0.6
12.0		
13.0		
16.0	7.5	0.8
18.0		
22.0	10.0	0.8

ELECTRICAL CHARACTERISTICS

Operating Temperature : -40° ~ +105°C

Working Voltage : 6.3 ~ 16V

Rate Capacitance Range : 470 ~ 3300 μ F

Capacitance Tolerance : -20 ~ +20%

DC Leakage Current (μ A) : I = 0.03 CV Whichever is greater.

(Measurements shall be Made After a 2 Minute Charge at Rated Working Voltage)

Dissipation Factor : at 120 Hz, 25°C

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

For capacitor whose capacitance exceeds 1000 μ F. The value of D.F(%) is increased by 2% for every addition of 1000 μ F.

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

Load Life : 2000 Hours at 105°C Assured with Full Rated Maximum Ripple Current Applied

- (a) Capacitance Change : Within 20% of Initial Value
- (b) Dissipation Factor : Not Exceed 200% of Initial Requirement
- (c) Leakage Current : Not Exceed the Initial Requirement

Shelf Life : 1000 Hours, No Voltage Applied, at 105°C

- (a) Capacitance Change : Within 20% of Initial Value
- (b) Dissipation Factor : Not Exceed 200 % of Initial Requirement
- (c) Leakage Current : Not Exceed 200% of Initial Requirement



RoHS
COMPLIANT



CASE SIZE OF STANDARD PRODUCTS $D\phi \geq 6\text{mm}$ with Safety Vent at Can Bottom

CAP. (μF)	RATED VOLTAGE WV														
	6.3					10					16				
	Size	D.F.	Ripple	L.C.	Impedance	Size	D.F.	Ripple	L.C.	Impedance	Size	D.F.	Ripple	L.C.	Impedance
470											8 x 11	225.6	0.16	1140	33
											8 x 11	225.6	0.16	1140	33
680						8 x 11	204.0	0.19	1140	36	10 x 12	326.4	0.16	1540	26
											8 x 15	326.4	0.16	1490	28
820	8 x 11	155.0	0.22	1140	36										
1000	10 x 12	189.0	0.22	770	26	8 x 15	300.0	0.19	1490	28	8 x 20	480.0	0.16	1870	21
						10 x 12	300.0	0.19	1540	26	10 x 15	480.0	0.16	2000	19
						10 x 12	300.0	0.19	1540	26	10 x 15	480.0	0.16	2000	19
1200	8 x 15	226.8	0.22	1490	28										
1300	8 x 20	245.7	0.22	1870	19										
1500	8 x 20	283.5	0.22	1540	26	8 x 20	450.0	0.19	1870	21	10 x 19.5	720.0	0.16	2550	13
	10 x 12	283.5	0.22	1870	26	10 x 15	450.0	0.19	2000	19					
	10 x 12	283.5	0.22	1870	26	10 x 15	450.0	0.19	2000	19					
	10 x 12	283.5	0.22	1870	26										
1800	8 x 20	340.2	0.22	1870	21	10 x 19.5	540.0	0.19	2550	13	10 x 22	864.0	0.16	2800	12
	10 x 15	340.2	0.22	2000	19						10 x 22	864.0	0.16	2800	12
2200	10 x 19.5	415.8	0.22	2550	13	10 x 22	660.0	0.19	2800	12					
	10 x 19.5	415.8	0.22	2550	13										
	10 x 19.5	415.8	0.22	2550	13										
3300	10 x 22	623.7	0.22	2800	12										

Note : * 1. D x L : mm

* 2. Ripple Current : (A r.m.s 105°C / 120Hz)

* 3. D.F.; Dissipation Factor ($\tan \delta$), L.C.; Leakage Current (μA)