Miniature Size Aluminum Electrolytic Capacitors

SK [For General]

85°C Single-Ended Lead Aluminum Electrolytic Capacitors

DESCRIPTION

Lower-cost capacitors expressly intended for high density printed circuit board.

Very High Volumetric Efficiency

Ideally suited for general-purpose applications, de-coupling, by pass, and filtering circuit in entertainment electronics.

Feature High CV Product with Moderate Cost

Multiplier for Ripple Current

Frequency coefficient

Frequency (Hz)	120	300	1K	10K-100K
6.3~100V Below~68μF	1.00	1.20	1.30	1.50
6.3~100V 100~680μF	1.00	1.10	1.15	1.20
6.3~110V 1000~22000μF	1.00	1.05	1.10	1.15
160~450V Below~220μF	1.00	1.25	1.40	1.40
160~450V 220μF Above	1.00	1.10	1.13	1.13

Temperature coefficient

Temperature(°C)	50	70	85
Factor	1.30	1.15	1.00

ELECTRICAL CHARACTERISTICS

Operating Temperature : -40° ~ +85°C / -25° ~ +85°C

Working Voltage : 6.3 ~ 100V / 160 ~ 450V

Rate Capacitance Range : 0.1 ~ 22000μF / 0.47 ~ 330μF

Capacitance Tolerance : -20 ~ +20%

DC Leakage Current (μA) : 0.01 CV or 3 μA / 0.03 CV +10 Whichever is greater.
(After 2 Minutes Application of DC Working Voltage at 25°C)

Dissipation Factor : at 120Hz, 25°C

WV (V) :	6.3	10	16	25	35	50	63	100	160 ~ 250	350 ~ 450
D.F (%) :	24	20	16	14	12	10	9	8	18	20

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

Load Life : 2000 Hours at 85°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

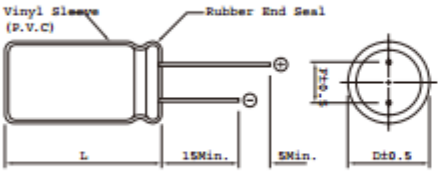
Shelf Life : 1000 Hours, No Voltage Applied at 85°C
(a) Capacitance Change : Within 20% of Initial Value
(b) Dissipation Factor : Not Exceed 200% of Initial Requirement
(c) Leakage Current : Not Exceed 200% of Initial Requirement

Pb-free

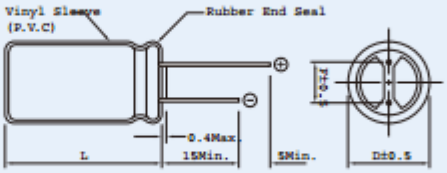
RoHS COMPLIANT

Dimensions : mm

DIAGRAM OF DIMENSIONS



Rubber Stand-off



L ≤16 : L+1.5max
L >16 : L+2max
Dø =8&10 : L+2.5

Dø <20 : Dø+0.5
Dø ≥20 : Dø+1

Dø	F	dø4.0 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

CAP. (µF)	RATED VOLTAGE WV													
	6.3		10		16		25		35		50		63	
	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
0.1											5 x 11	1		
0.22											5 x 11	2		
0.33											5 x 11	3		
0.47											5 x 11	5	5 x 11	5
0.68														
1.0											5 x 11	10	5 x 11	10
2.2											5 x 11	20	5 x 11	29
3.3											5 x 11	25	5 x 11	30
4.7							5 x 11	25	5 x 11	30	5 x 11	30	5 x 11	35
6.8														
10					5 x 11	40	5 x 11	40	5 x 11	45	5 x 11	45	5 x 11	50
15														
22			5 x 11	50	5 x 11	55	5 x 11	60	5 x 11	60	5 x 11	70	5 x 11 6.3 x 11	85 115
33	5 x 11	55	5 x 11	65	5 x 11	70	5 x 11	70	5 x 11	80	6.3 x 11	110	6.3 x 11 8 x 11	100 140
47	5 x 11	70	5 x 11	75	5 x 11	80	5 x 11	90	5 x 11 6.3 x 11	100 110	6.3 x 11 8 x 11	120 150	8 x 11	150
68														
100	5 x 11 6.3 x 11	100 154	5 x 11	110	5 x 11 6.3 x 11	140 140	6.3 x 11	150	6.3 x 11 8 x 11	185 190	8 x 11 10 x 12	200 250	10 x12	260
220	5 x 11 6.3 x 11	170 170	5 x 11 6.3 x 11	190 190	6.3 x 11 8 x 11	200 240	8 x 11 10 x 12	260 320	10 x 12	330	10 x 12	380	10 x 15 10 x 19.5	410 460
330	6.3 x 11 8 x 11	210 300	8 x 11	330	8 x 11	300	10 x 12	380	10 x 12 10 x 15	420 450	10 x 15 10 x 19.5	490 540	10 x 19.5 13 x 20	540 650
470	8 x 11	300	6.3 x 11 8 x 11	300 330	8 x 11 10 x 12	400 420	10 x 12 10 x 15	420 500	10 x 15 10 x 19.5 13 x 20	430 510 590	13 x 20	740	13 x 20 13 x 25	755 850
680														
1000	10 x 12	530	10 x 12 10 x 15	580 620	10 x 15 10 x 19.5	630 740	10 x 19.5 13 x 20	760 950	13 x 20 13 x 25 10 x 30	950 1050 900	13 x 25 16 x 25	1100 1350	16 x 25 16 x 32	1310 1550
1500														
2200	10 x 19.5 13 x 20	840 990	10 x 19.5 13 x 20	880 1050	13 x 25 13 x 20	1200 1100	13 x 25 16 x 25	1300 1500	16 x 25 16 x 32	1600 1750	16 x 36 18 x 36	1850 2090		
3300	10 x 19.5 13 x 20	1000 1150	13 x 20 13 x 25	1250 1350	13 x 25 16 x 25	1200 1200	16 x 25 16 x 32	1660 1900	16 x 36 18 x 36	1970 2220	18 x 36	2170		
4700	13 x 25 16 x 25	1700 1700	13 x 25 16 x 25	1500 1800	16 x 25 16 x 32	1650 2100	16 x 32 18 x 36	1950 2360	18 x 36	2400				
6800	16 x 25	1900	16 x 25 16 x 32	2150 2150	16 x 36 18 x 36	2100 2500	18 x 36	2500						
10000	16 x 25 16 x 32	2250 2250	18 x 36 16 x 36	2500 2225	18 x 36	2600								
15000	18 x 36 16 x 36	2680 2680	18 x 36	2950										
22000	18 x 40	3200												

CAP. (µF)	RATED VOLTAGE WV													
	100		160		200		250		350		400		450	
	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
0.22														
0.47	5 x 11	10	5 x 11	10	5 x 11	12	5 x 11	12			6.3 x 11	14	6.3 x 11	14
1.0	5 x 11	15	5 x 11	15	5 x 11	17	5 x 11	15			6.3 x 11	15	8 x 11	19
							6.3 x 11	15			8 x 11	19		
2.2	5 x 11	25	6.3 x 11	20	6.3 x 11	20	6.3 x 11	24					10 x 12	29
					8 x 11	26	8 x 11	25			10 x 12	20		
3.3	5 x 11	30	6.3 x 11	30	6.3 x 11	30	8 x 11	30			10 x 12	32	10 x 15	35
			8 x 11	35	8 x 11	35	10 x 12	35						
4.7	5 x 11	35	6.3 x 11	32	8 x 11	36	8 x 11	36					10 x 15	50
			8 x 11	40	10 x 12	45	10 x 12	40			10 x 15	41		
6.8														
	5 x 11	60	8 x 11	50	10 x 12	57	10 x 15	70					10 x 19	75
10	6.3 x 11	70	10 x 12	65	10 x 15	70					10 x 19.5	45	13 x 20	60
											13 x 20	70	13 x 25	75
15														
	6.3 x 11	105	10 x 15	110	10 x 15	110	10 x 19.5	130			13 x 20	105		
22	8 x 11	110									13 x 25	110	16 x 25	110
											16 x 25	120	16 x 32	110
	8 x 11	140	10 x 19.5	150	10 x 19.5	160	13 x 20	140						
33	10 x 12	160					13 x 25	160						
											16 x 25	140	16 x 36	150
	10 x 12	190			13 x 20	160	13 x 25	210						
47	10 x 15	210			13 x 25	180					16 x 32	220	18 x 40	230
			13 x 20	180										
68														
100	10 x 19.5	380	13 x 25	250	16 x 25	330	16 x 32	310						
			16 x 25	300										
150														
	13 x 25	710	16 x 32	450										
220			16 x 36	510	18 x 36	520								
					18 x 40	520								
	13 x 25	720	18 x 36	540										
	16 x 25	860	18 x 40	600										
330														
470	16 x 25	1100												
	16 x 32	1100												
680														
1000	18 x 40	1350												
2200														