

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, decoupling, by pass, and filtering circuit in entertainment electronics.

Feature High CV Product with Moderate Cost

Multiplier for Ripple Current

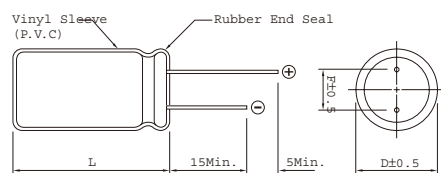
Frequency coefficient

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

DIAGRAM OF DIMENSIONS



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

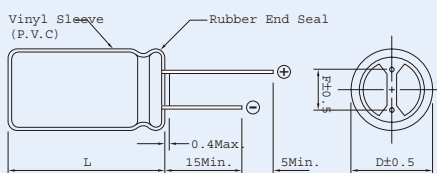
- (a) Capacitance Change : Within 20% of Initial Value
- (b) Dissipation Factor : Not Exceed 200% of Initial Requirement
- (c) Leakage Current : Not Exceed 200% of Initial Requirement



RoHS
COMPLIANT

Dimensions : mm

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



CASE SIZE & PERMISSIBLE RIPPLE CURRENT OF STANDARD PRODUCTS

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	85
													6.3 x 11	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	100
											6.3 x 11	110	8 x 11	140
47	5 x 11	70	5 x 11	75	5 x 11	80	5 x 11	90	5 x 11	100	6.3 x 11	120	8 x 11	150
										6.3 x 11	110	8 x 11	150	
68														
100	5 x 11	100	5 x 11	110	5 x 11	140	6.3 x 11	150	6.3 x 11	185	8 x 11	200		
	6.3 x 11	154			6.3 x 11	140			8 x 11	190	10 x 12	250	10 x 12	260
220	5 x 11	170	5 x 11	190	6.3 x 11	200	8 x 11	260	10 x 12	330	10 x 12	380	10 x 15	410
	6.3 x 11	170	6.3 x 11	190	8 x 11	240	10 x 12	320					10 x 19.5	460
330	6.3 x 11	210							10 x 12	420	10 x 15	490	10 x 19.5	540
	8 x 11	300	8 x 11	330	8 x 11	300			10 x 15	450	10 x 19.5	540	13 x 20	650
							10 x 12	380						
470			6.3 x 11	300	8 x 11	400			10 x 15	430			13 x 20	755
	8 x 11	300	8 x 11	330	10 x 12	420	10 x 12	420	10 x 19.5	510	13 x 20	740	13 x 25	850
							10 x 15	500	13 x 20	590				
680														
1000			10 x 12	580	10 x 15	630	10 x 19.5	760	13 x 20	950	13 x 25	1100	16 x 25	1310
	10 x 12	530	10 x 15	620	10 x 19.5	740			13 x 25	1050	16 x 25	1350	16 x 32	1550
							13 x 20	950	10 x 30	900				
1500														
2200	10 x 19.5	840	10 x 19.5	880			13 x 25	1300	16 x 25	1600	16 x 36	1850		
	13 x 20	990	13 x 20	1050	13 x 25	1200	16 x 25	1500	16 x 32	1750	18 x 36	2090		
					13 x 20	1100								
3300	10 x 19.5	1000	13 x 20	1250	13 x 25	1200	16 x 25	1660	16 x 36	1970	18 x 36	2170		
	13 x 20	1150	13 x 25	1350	16 x 25	1200	16 x 32	1900	18 x 36	2220				
4700			13 x 25	1500	16 x 25	1650	16 x 32	1950	18 x 36	2400				
			16 x 25	1800	16 x 32	2100	18 x 36	2360						
	16 x 25	1700												
	16 x 25	1900	16 x 25	2150			18 x 36	2500						
6800			16 x 32	2150		16 x 36	2100							
					18 x 36	2500								
10000	16 x 25	2250	18 x 36	2500	18 x 36	2600								
	16 x 32	2250	16 x 36	2225										
15000	18 x 36	2680	18 x 36	2950										
	16 x 36	2680												
22000	18 x 40	3200												

Note : * I. D x L : mm

* 2. mA rms at 85°C, 120Hz



CASE SIZE & PERMISSIBLE RIPPLE CURRENT OF STANDARD PRODUCTS

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
											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
													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
4.7	5 x 11	35	6.3 x 11	32	8 x 11	36	8 x 11	36					10 x 15	50
6.8														
10	5 x 11	60	8 x 11	50	10 x 12	57	10 x 15	70					10 x 19	75
													13 x 20	60
													13 x 25	75
15														
22	6.3 x 11	105	10 x 15	110	10 x 15	110	10 x 19.5	130			13 x 20	105		
											13 x 25	110	16 x 25	110
											16 x 25	120	16 x 32	110
33	8 x 11	140	10 x 19.5	150	10 x 19.5	160	13 x 20	140						
47	10 x 12	190			13 x 20	160	13 x 25	210						
68														
100	10 x 19.5	380	13 x 25	250	16 x 25	330	16 x 32	310						
150														
220	13 x 25	710	16 x 32	450										
330	13 x 25	720	18 x 36	540										
470	16 x 25	1100												
680	16 x 32	1100												
1000	18 x 40	1350												
2200														

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