

ALUMINUM ELECTROLYTIC CAPACITORS



EV Series

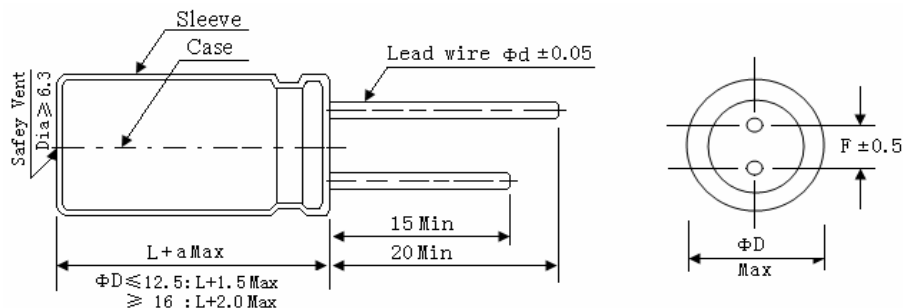
Low impedance and ripple current.
Load life 3,000~6,000 hours at 105°C.



SPECIFICATIONS

Item	Performance Characteristics																				
Category Temperature Range	-55 ~ +105°C																				
Working Voltage Range	6.3 ~ 35Vdc																				
Capacitance Range	10 ~ 8,200 μF																				
Capacitance Tolerance	±20% (at 25°C and 120Hz)																				
Dissipation Factor (tanδ) (at 25°C, 120Hz)	<table border="1"> <tr> <td>Rated Voltage (V)</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> </tr> <tr> <td>tanδ(Max)</td> <td>0.22</td> <td>0.19</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> </tr> </table>	Rated Voltage (V)	6.3	10	16	25	35	tanδ(Max)	0.22	0.19	0.16	0.14	0.12								
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The above values should be increased by 0.02 for every additional 1000μF																					
Leakage Current	<p>$I = 0.01CV$ or 3 μA, whichever is greater. I : Leakage current (μA) C : Rated capacitance (μF) V : Rated voltage (V) Impress the rated voltage for 2 minutes.</p>																				
Endurance	<p>The following requirements shall be satisfied when the capacitor are restored to 25°C after the rated voltage applied for 3,000~6,000 hours at 105°C.</p> <table border="1"> <tr> <td>Capacitance change</td> <td>≅ ±25% of the initial value</td> <td>Size</td> <td>Life time (hours)</td> </tr> <tr> <td>Dissipation factor(tanδ)</td> <td>≅ 200% of the specified value</td> <td>≅ 6.3Φ</td> <td>3,000</td> </tr> <tr> <td>Leakage current</td> <td>≅ specified value</td> <td>= 8 Φ</td> <td>4,000</td> </tr> <tr> <td></td> <td></td> <td>= 10Φ</td> <td>5,000</td> </tr> <tr> <td></td> <td></td> <td>≅ 12.5Φ</td> <td>6,000</td> </tr> </table>	Capacitance change	≅ ±25% of the initial value	Size	Life time (hours)	Dissipation factor(tanδ)	≅ 200% of the specified value	≅ 6.3Φ	3,000	Leakage current	≅ specified value	= 8 Φ	4,000			= 10Φ	5,000			≅ 12.5Φ	6,000
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Shelf Life	<p>The following requirements shall be satisfied when the capacitor are restored to 25°C after exposing them for 1,000 hours at 105°C without voltage applied.</p> <table border="1"> <tr> <td>Capacitance change</td> <td>≅ ±25% of the initial value</td> </tr> <tr> <td>Dissipation factor(tanδ)</td> <td>≅ 200% of the specified value</td> </tr> <tr> <td>Leakage current</td> <td>≅ 200% of the specified value</td> </tr> </table>	Capacitance change	≅ ±25% of the initial value	Dissipation factor(tanδ)	≅ 200% of the specified value	Leakage current	≅ 200% of the specified value														
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Others	Conforms to JIS-C-5101-4 (1998), characteristic W.																				

DIMENSIONS (mm)



ΦD	5	6.3	8	10	12.5 L < 35	12.5 L ≥ 35	16	18
ΦD	ΦD +0.5 Max							ΦD +1.0 Max
Φd	0.5	0.5	0.6	0.6	0.6	0.8	0.8	0.8
F	2.0	2.5	3.5	5.0	5.0		7.5	7.5



EV Series

Case size & Permissible rated ripple current:

Nominal Capacitance (uF)	25 V				35 V			
	Case Size DΦ×L (mm)	Max. impd @25°C 100kHz (Ω)	Max. impd @-10°C 100kHz (Ω)	Max. Rated ripple current @105°C 100kHz (mA rms)	Case Size DΦ×L (mm)	Max. impd @25°C 100kHz (Ω)	Max. impd @-10°C 100kHz (Ω)	Max. Rated ripple current @105°C 100kHz (mA rms)
10	5×11	0.650	1.320	300	5×11	0.840	2.420	360
47					5×11	0.230	0.760	360
68	5×11	0.230	0.760	360	6.3×11	0.100	0.330	450
100	6.3×11	0.100	0.330	450	6.3×11	0.100	0.330	550
150	8×12	0.100	0.330	550	8×12	0.059	0.181	820
220	8×12	0.059	0.181	810	8×12	0.059	0.181	990
					8×16	0.048	0.150	1200
270	8×12	0.059	0.181	900	8×16	0.046	0.143	1330
330	8×12	0.059	0.181	990	10×13	0.043	0.133	1360
390	8×16	0.046	0.143	1330	8×20	0.031	0.105	1550
470	10×13	0.043	0.133	1360	10×16	0.030	0.095	1815
560	8×20	0.031	0.105	1550	10×20	0.019	0.057	2160
680	10×16	0.030	0.095	1815	10×25	0.017	0.051	2475
820	10×20	0.019	0.057	2160	12.5×20	0.016	0.041	2725
1000	10×25	0.017	0.051	2475	12.5×20	0.016	0.041	2920
1200	12.5×20	0.016	0.041	2180	12.5×25	0.014	0.041	3190
1500	12.5×20	0.016	0.041	2725	12.5×32	0.012	0.031	3795
					16×20	0.014	0.036	3575
1800	12.5×35	0.014	0.036	3190	12.5×36	0.011	0.029	3925
2200	12.5×30	0.012	0.031	3795	16×26	0.012	0.033	3990
	16×20	0.014	0.036	3575				
2700	12.5×36	0.011	0.029	3925				
3300	16×26	0.012	0.033	3990				

RIPPLE CURRENT MULTIPLIERS

Frequency Multipliers

Vdc	Cap.(uF)	Frequency (Hz)			
		120	1K	10K	100K
6.3 ~ 63	10 ~ 68	0.30	0.55	0.80	1.00
	82 ~ 220	0.40	0.60	0.85	1.00
	330 ~ 820	0.50	0.65	0.90	1.00
	1000 ~ 10000	0.60	0.70	0.95	1.00