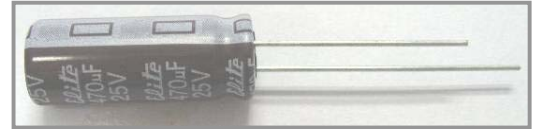


# ALUMINUM ELECTROLYTIC CAPACITORS



## EJ Series

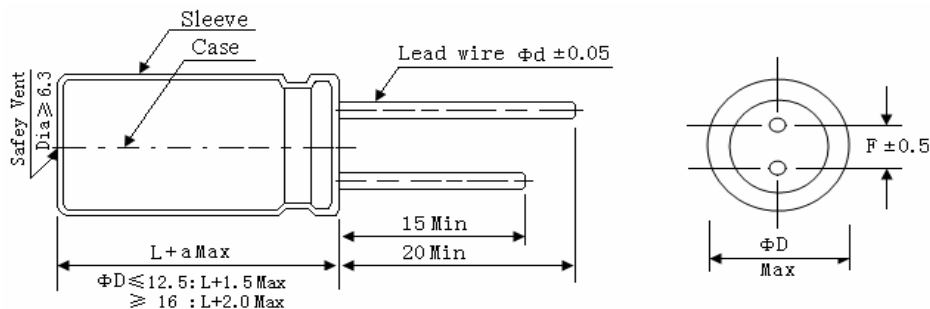
Low impedance and high ripple current.  
Load life 3,000 to 5,000 hours at 105°C.



### SPECIFICATIONS

Item	Performance Characteristics																
Category Temperature Range	-55 ~ +105°C																
Working Voltage Range	6.3 ~ 63Vdc																
Capacitance Range	10 ~ 10,000 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> <td>50</td> <td>63</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> <td>0.10</td> <td>0.09</td> </tr> </table>	Rated Voltage (V)	6.3	10	16	25	35	50	63	tanδ(Max)	0.22	0.19	0.16	0.14	0.12	0.10	0.09
	Rated Voltage (V)	6.3	10	16	25	35	50	63									
tanδ(Max)	0.22	0.19	0.16	0.14	0.12	0.10	0.09										
The above values should be increased by 0.02 for every additional 1000μF																	
Leakage Current	$I = 0.01CV$ or $3 \mu A$ , whichever is greater. I : Leakage current (μA) C : Rated capacitance (μF) V : Rated voltage (V) Impress the rated voltage for 2 minutes.																
Endurance	The following requirements shall be satisfied when the capacitor are restored to 25°C after the rated voltage applied for 3,000 to 5,000 hours at 105°C.																
	<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>≅ 10 Φ</td> <td>5,000</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			≅ 10 Φ	5,000
	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														
		≅ 10 Φ	5,000														
Shelf Life	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.																
	<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										
	Capacitance change	≅ ±25% of the initial value															
Dissipation factor(tanδ)	≅ 200% of the specified value																
Leakage current	≅ 200% of the specified value																
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

# ALUMINUM ELECTROLYTIC CAPACITORS



## EJ Series

### Case size & Permissible rated ripple current:

Nominal capacitance (uF)	6.3V				10V			
	Case size DΦ×L (mm)	Max impd @25°C 100kHz (Ω)	Max impd. @-10°C 100kHz (Ω)	Max 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 Ripple current @105°C 100kHz (mA rms)
100	5×11	0.65	3.6	155	5×11	0.58	2.3	210
220	6.3×11	0.40	1.6	255	6.3×11	0.22	0.87	340
330	6.3×11	0.22	0.87	340	8×12	0.21	0.85	410
470	8×12	0.18	0.80	400	8×12	0.13	0.52	640
560	8×12	0.17	0.75	460	8×16	0.12	0.48	675
680	8×12	0.13	0.52	640	8×16	0.087	0.35	840
820	8×16	0.095	0.48	730	8×20	0.085	0.33	875
1000	8×16	0.087	0.35	840	10×16	0.060	0.24	1210
1200	8×20	0.069	0.27	1050	10×20	0.046	0.18	1400
1500	10×20	0.046	0.18	1400	10×20	0.045	0.18	1440
2200	10×20	0.045	0.18	1440	12.5×20	0.035	0.12	1900
2700	10×30	0.035	0.12	1910	12.5×25	0.034	0.11	1945
3300	12.5×20	0.030	0.12	1900	12.5×25	0.027	0.089	2230
3900	12.5×25	0.027	0.089	2230	12.5×30	0.024	0.078	2650
4700	12.5×30	0.024	0.078	2650	12.5×35	0.020	0.065	2880
5600	12.5×35	0.020	0.065	2880	12.5×40	0.017	0.056	3350
6800	12.5×40	0.017	0.056	3350	16×32	0.017	0.050	3450
8200	16×32	0.017	0.050	3450	16×36	0.015	0.044	3610
10000	16×36	0.015	0.044	3610	16×40	0.013	0.038	4080

Nominal capacitance (uF)	16V				25V			
	Case size DΦ×L (mm)	Max impd. @25°C 100kHz (Ω)	Max impd. @-10°C 100kHz (Ω)	Max 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 Ripple current @105°C 100kHz (mA rms)
47	5×11	0.80	2.8	120	5×11	0.58	2.3	210
68	6.3×11	0.56	2.2	220	6.3×11	0.36	1.8	230
100	6.3×11	0.52	1.5	255	6.3×11	0.22	0.87	340
150	8×12	0.21	0.86	350	8×12	0.20	0.69	405
220	8×12	0.20	0.79	405	8×12	0.13	0.52	640
330	8×12	0.13	0.52	640	8×16	0.087	0.35	840
470	8×16	0.087	0.35	840	10×16	0.060	0.24	1210
560	8×20	0.085	0.34	865	10×20	0.058	0.23	1220
680	8×20	0.069	0.27	1050	10×20	0.046	0.18	1400
820	10×20	0.058	0.23	1220	10×25	0.042	0.17	1650
1000	10×20	0.046	0.18	1400	12.5×20	0.035	0.12	1900
1200	10×25	0.042	0.17	1650	12.5×25	0.034	0.11	1936
1500	12.5×20	0.035	0.12	1900	12.5×25	0.027	0.089	2230
2200	12.5×25	0.027	0.089	2230	12.5×35	0.020	0.065	2880
2700	12.5×30	0.024	0.078	2650	12.5×40	0.017	0.056	3350
3300	12.5×35	0.020	0.065	2880	16×32	0.017	0.050	3450
3900	12.5×40	0.017	0.056	3350	16×36	0.015	0.044	3610
4700	16×32	0.017	0.050	3450	16×40	0.013	0.038	4080
5600	16×36	0.015	0.044	3610				
6800	16×40	0.013	0.038	4080				

# ALUMINUM ELECTROLYTIC CAPACITORS



## EJ Series

### Case size & Permissible rated ripple current:

Nominal capacitance (uF)	35V				50V			
	Case size DΦ×L (mm)	Max impd. @25°C 100kHz (Ω)	Max impd. @-10°C 100kHz (Ω)	Max 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 Ripple current @105°C 100kHz (mA rms)
10	5×11	1.5	3.8	100	5×11	1.45	3.5	105
22	5×11	0.75	3.2	160	5×11	0.7	2.8	180
33	5×11	0.58	2.3	210	6.3×11	0.48	1.70	215
47	6.3×11	0.49	1.8	215	6.3×11	0.40	1.60	220
68	8×12	0.21	0.87	350	8×12	0.28	1.10	355
100	8×12	0.20	0.85	405	8×12	0.17	0.68	555
150	8×12	0.13	0.52	640	8×16	0.12	0.48	730
220	8×16	0.087	0.35	840	10×16	0.084	0.34	1050
330	10×16	0.060	0.24	1210	10×25	0.055	0.22	1440
470	10×20	0.046	0.18	1400	12.5×20	0.045	0.15	1660
560	10×25	0.042	0.17	1650	12.5×25	0.034	0.11	1950
680	10×30	0.031	0.12	1910	12.5×30	0.030	0.10	2310
820	12.5×25	0.030	0.11	1938	12.5×35	0.025	0.083	2510
1000	12.5×25	0.027	0.089	2230	16×25	0.025	0.075	2555
1200	12.5×30	0.024	0.078	2650	16×32	0.022	0.066	3010
1500	12.5×35	0.020	0.065	2880	16×36	0.019	0.057	3150
2200	16×32	0.017	0.050	3450	18×36	0.017	0.046	3680
2700	16×36	0.015	0.044	3610	18×40	0.014	0.038	3800
3300	16×40	0.013	0.038	4080				
3900	18×40	0.012	0.032	4280				

Nominal capacitance (uF)	63V			
	Case size DΦ×L (mm)	Max impd @25°C 100kHz (Ω)	Max impd @-10°C 100kHz (Ω)	Max Ripple current @105°C 100kHz (mA rms)
10	5×11	2.85	9.3	30
22	6.3×11	1.85	7.2	60
33	6.3×11	1.20	5.0	115
47	8×12	1.0	4.5	170
68	8×12	0.61	2.5	245
100	8×16	0.43	1.9	305
100	10×12	0.43	1.9	305
220	10×20	0.21	0.92	470
220	10×25	0.20	0.84	531
330	12.5×25	0.12	0.45	784
470	12.5×30	0.10	0.42	905
560	12.5×35	0.083	0.35	1050
680	12.5×40	0.071	0.30	1180
820	16×32	0.054	0.20	1570
1000	16×36	0.045	0.17	1790
1200	16×40	0.040	0.15	2020
1500	18×40	0.036	0.13	2330

### RIPPLE CURRENT MULTIPLIERS

#### Frequency Multipliers

Vdc	Cap.(uF)	Frequency (Hz)				
		50/60	120	1K	10K	100K
6.3 ~ 63	10 ~ 220	0.30	0.50	0.80	0.95	1.00
	330 ~ 820	0.57	0.71	0.90	0.98	1.00
	1000 ~ 10000	0.75	0.87	0.98	1.00	1.00