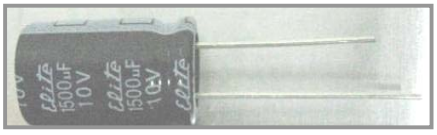
EY Series

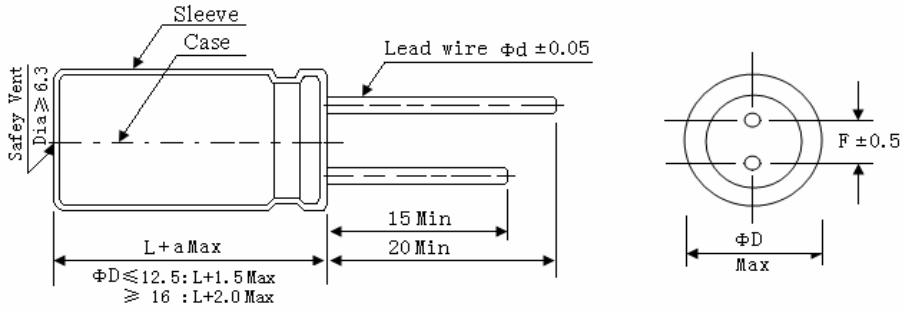


Miniaturized, Low E.S.R and low impedance.
Suitable for use in high ripple current capability.
Load life 4,000~10,000 hours at 105℃.

SPECIFICATIONS

Item	Performance Characteristics
Category Temperature Range	-40 ~ +105℃
Working Voltage Range	6.3 ~ 100Vdc
Capacitance Range	10 ~ 10,000 μF
Capacitance Tolerance	±20% (at 25℃ and 120Hz)
Dissipation Factor (tanδ) (at 25℃, 120Hz)	<table><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><td>100</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><td>0.08</td></tr></table> The above values should be increased by 0.02 for every additional 1000μF
Leakage Current	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 for2 minutes.
Endurance	The following requirements shall be satisfied when the capacitor are restored to 25℃ after the rated voltage applied for 4,000~10,000 hours at 105℃. <table><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>≦ specified value</td></tr></table><table><tr><td rowspan="2">Size</td><td colspan="2">Life time (hours)</td></tr><tr><td>(6.3~10WV)</td><td>(16~100WV)</td></tr><tr><td>≦6.3Φ</td><td>4,000</td><td>5,000</td></tr><tr><td>8 ~ 10 Φ</td><td>6,000</td><td>7,000</td></tr><tr><td>12.5Φ</td><td>8,000</td><td>10,000</td></tr></table>
Shelf Life	The following requirements shall be satisfied when the capacitor are restored to 25℃ after exposing them for 1,000 hours at 105℃ without voltage applied. <table><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>≦ specified value</td></tr></table>
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

EY Series

Case size & Permissible rated ripple current:

Nominal capacitance (uF)	6.3V				10V			
	Case size DΦ×L (mm)	Max impd @25℃ 100kHz (Ω)	Max impd. @-10℃ 100kHz (Ω)	Max. Rated ripple current @105℃ 100kHz (mA rms)	Case size DΦ×L (mm)	Max impd. @25℃ 100kHz (Ω)	Max impd. @-10℃ 100kHz (Ω)	Max. Rated ripple current @105℃ 100kHz (mA rms)
100					5×11	0.580	2.300	215
150	5×11	0.570	2.300	210	5×11	0.580	2.300	230
220	6.3×11	0.250	0.900	320	6.3×11	0.220	0.870	340
330	6.3×11	0.210	0.870	340	6.3×11	0.220	0.870	380
470	8×12	0.150	0.580	345	8×12	0.130	0.520	640
680	8×12	0.130	0.520	645	8×16	0.086	0.350	845
		0.080			10×13	0.080	0.310	865
820	10×13	0.080	0.320	865	10×16	0.070	0.280	1015
1000	8×16	0.085	0.350	870	8×20	0.068	0.270	1050
					10×16	0.060	0.240	1215
1200	8×20	0.071	0.260	1050	10×20	0.045	0.180	1410
	10×16	0.062	0.240	1215				
1500	10×20	0.045	0.180	1410	10×25	0.041	0.170	1610
					12.5×16	0.049	0.160	1450
1800	12.5×16	0.048	0.160	1460	12.5×20	0.039	0.150	1710
2200	10×25	0.042	0.170	1650	10×30	0.030	0.120	1920
		0.030			12.5×20	0.035	0.120	1910
					16×15	0.042	0.120	1900
2700	10×30	0.030	0.120	1900	18×15	0.042	0.110	2220
	16×15	0.041	0.120	1945				
3300	12.5×20	0.034	0.120	1900	12.5×25	0.026	0.089	2230
3900	12.5×25	0.026	0.088	2240	12.5×30	0.023	0.078	2660
	18×15	0.042	0.11	2210	16×22	0.026	0.078	2540
4700	12.5×30	0.023	0.078	2650	12.5×35	0.020	0.065	2890
5600	12.5×35	0.020	0.065	2890	12.5×40	0.016	0.055	3360
	16×22	0.026	0.077	2540	16×25	0.020	0.060	2940
					18×20	0.025	0.066	2870
6800	12.5×40	0.016	0.055	3350	16×32	0.016	0.050	3460
	16×25	0.020	0.060	2940	18×25	0.018	0.049	3150
	18×20	0.025	0.066	2870				
8200	16×32	0.016	0.050	3450	16×35	0.015	0.044	3610
					18×32	0.015	0.040	4180
10000	16×35	0.014	0.044	3620	16×40	0.013	0.038	4090
	18×25	0.018	0.049	3150	18×35	0.012	0.038	4150
12000	16×40	0.012	0.038	4090	18×40	0.011	0.032	4290
	18×32	0.014	0.040	4180				
15000	18×35	0.013	0.038	4230				
18000	18×40	0.012	0.032	4290				

EY Series

Case size & Permissible rated ripple current:

Nominal capacitance (uF)	16V				25V			
	Case size DΦ×L (mm)	Max impd. @25℃ 100kHz (Ω)	Max impd. @-10℃ 100kHz (Ω)	Max. Rated ripple current @105℃ 100kHz (mA rms)	Case size DΦ×L (mm)	Max impd. @25℃ 100kHz (Ω)	Max imapd @-10℃ 100kHz (Ω)	Max. Rated ripple current @105℃ 100kHz (mA rms)
10	5×11	1.100	3.02	96	5×11	1.100	3.02	100
22	5×11	0.750	2.80	120	5×11	0.700	2.80	140
47	5×11	0.600	2.60	100	5×11	0.570	2.30	120
56	5×11	0.570	2.30	220	5×11	0.570	2.30	240
100	5×11	0.350	0.76	260	6.3×11	0.210	0.87	340
	6.3×11	0.210	0.82	310				
120	6.3×11	0.210	0.87	340				
220	6.3×11	0.150	0.65	450	8×12	0.120	0.52	650
	8×12	0.190	0.85	760				
330	8×12	0.120	0.52	650	8×16	0.087	0.35	850
					10×13	0.081	0.32	870
470	8×16	0.086	0.35	840	8×20	0.070	0.27	1050
	10×13	0.080	0.32	865	10×16	0.060	0.24	1210
680	8×20	0.069	0.27	1060	10×20	0.045	0.18	1410
	10×16	0.060	0.24	1210	12.5×16	0.049	0.16	1460
820	10×20	0.052	0.22	1310	10×25	0.041	0.17	1660
1000	10×20	0.045	0.18	1410	10×30	0.030	0.12	1920
	12.5×16	0.050	0.16	1450	12.5×20	0.034	0.12	1910
					16×15	0.042	0.12	1940
1200	10×25	0.043	0.17	1650	18×15	0.043	0.11	2220
1500	10×30	0.030	0.12	1920	12.5×25	0.026	0.089	2240
	12.5×20	0.035	0.12	1910				
	16×15	0.042	0.12	1940				
1800	12.5×25	0.028	0.095	2140	12.5×30	0.024	0.078	2660
					16×22	0.026	0.078	2540
2200	12.5×25	0.026	0.089	2240	12.5×35	0.020	0.065	2890
	18×15	0.042	0.11	2220	18×20	0.025	0.066	2870
2700	12.5×30	0.023	0.077	2650	12.5×40	0.016	0.056	3360
	16×22	0.026	0.078	2540	16×25	0.021	0.060	2940
3300	12.5×35	0.020	0.066	2890	16×30	0.016	0.050	3460
					18×25	0.018	0.048	3150
3900	12.5×40	0.016	0.056	3350	16×35	0.014	0.043	3620
	16×25	0.021	0.060	2930	18×32	0.015	0.040	4180
	16×22	0.025	0.067	2860				
4700	16×32	0.016	0.050	3450	16×40	0.012	0.038	4090
	18×25	0.018	0.049	3150	18×35	0.013	0.038	4230
5600	16×35	0.015	0.044	3620	18×40	0.011	0.032	4290
	18×32	0.015	0.040	4180				
6800	16×40	0.012	0.038	4080				
8200	18×35	0.014	0.038	4230				
18000	18×40	0.011	0.032	4290				

EY Series

Case size & Permissible rated ripple current:

Nominal capacitance (uF)	35V				50V			
	Case size DΦ×L (mm)	Max impd @25℃ 100kHz (Ω)	Max impd @-10℃ 100kHz (Ω)	Max. Rated ripple current @105℃ 100kHz (mA rms)	Case size DΦ×L (mm)	Max impd @25℃ 100kHz (Ω)	Max impd @-10℃ 100kHz (Ω)	Max. Rated ripple current @105℃ 100kHz (mA rms)
10					5×11	1.300	2.800	135
22					5×11	0.700	2.500	180
33	5×11	0.560	2.300	220	6.3×11	0.600	1.900	205
47	6.3×11	0.350	1.400	280	6.3×11	0.380	1.500	220
56	6.3×11	0.210	0.860	340	8×12	0.300	1.200	300
100	8×12	0.150	0.560	510	8×12	0.160	0.670	560
150	8×12	0.130	0.520	650	8×16	0.120	0.480	740
220	8×16	0.086	0.350	850	10×16	0.083	0.340	1050
330	10×16	0.060	0.240	1210	10×25	0.053	0.220	1450
470	10×20	0.045	0.180	1410	12.5×20	0.044	0.150	1670
560	10×25	0.041	0.160	1650	12.5×25	0.033	0.110	1950
680	10×30	0.030	0.120	1920	12.5×30	0.030	0.100	2320
820	12.5×25	0.029	0.095	2050	12.5×35	0.023	0.081	2520
1000	12.5×25	0.028	0.088	2230	16×25	0.025	0.075	2555
1200	12.5×30	0.023	0.078	2660	16×32	0.021	0.066	3020
1500	125×35	0.020	0.065	2880	16×36	0.018	0.056	3150
2200	16×32	0.016	0.056	3350	18×36	0.017	0.046	3690
2700	16×36	0.015	0.044	3620	18×40	0.014	0.038	3810
3300	16×40	0.013	0.038	4090				
3900	18×40	0.012	0.033	4290				

Nominal capacitance (uF)	63V				100V			
	Case size DΦ×L (mm)	Max impd @25℃ 100kHz (Ω)	Max impd @-10℃ 100kHz (Ω)	Max. Rated ripple current @105℃ 100kHz (mA rms)	Case size DΦ×L (mm)	Max impd @25℃ 100kHz (Ω)	Max impd @-10℃ 100kHz (Ω)	Max. Rated ripple current @105℃ 100kHz (mA rms)
6.8					5×11	2.200	9.200	56
15	5×11	2.200	9.200	56	6.3×11	1.200	5.000	120
33	6.3×11	1.200	5.000	120	8×16	0.580	3.200	160
47	8×12	0.680	3.100	190	10×12	0.430	1.800	290
68	8×12	0.600	2.900	245	10×16	0.300	1.500	350
100	10×16	0.350	1.800	320	10×25	0.200	0.840	535
120	10×16	0.300	1.500	355	10×30	0.150	0.710	665
180	10×20	0.200	0.940	470	12.5×25	0.120	0.450	790
220	10×25	0.200	0.840	535	12.5×30	0.100	0.420	905
330	12.5×25	0.120	0.450	790	12.5×40	0.070	0.300	1190
470	12.5×30	0.100	0.420	910	16×36	0.045	0.170	1790
560	12.5×35	0.082	0.350	1050	16×40	0.040	0.150	2030
680	12.5×40	0.070	0.300	1190	18×36	0.040	0.150	1790
820	16×32	0.053	0.200	1580	18×40	0.036	0.130	2340
1000	16×36	0.045	0.170	1790				
1200	16×40	0.040	0.150	2020				
1500	18×40	0.035	0.130	2340				

RIPPLE CURRENT MULTIPLIERS

Frequency Multipliers

Vdc	Cap.(uF)	Frequency (Hz)			
		120	1K	10K	100K
6.3 ~ 100	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