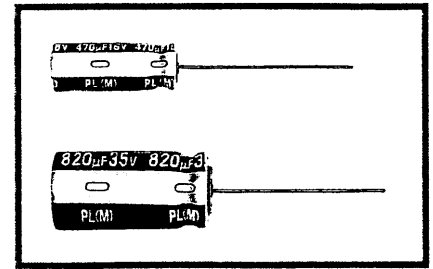


PL series Extremely Low Impedance, High Reliability



- Same case size as PF series, but extremely low impedance as little as 1/2 of PF series.
- High reliability withstanding 5000 hours load life at +105°C (3000/2000 hours for smaller case size as specified below).
- Capacitance ranges available based on the numerical values in E12 series under JIS.

345-1343



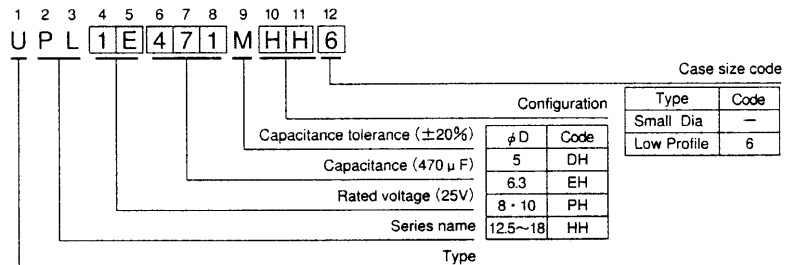
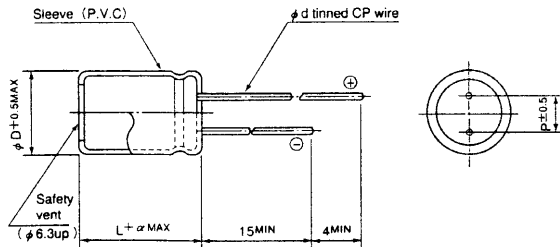
ALUMINUM ELECTROLYTIC CAPACITORS

Specifications

Item	Performance Characteristics																
Operating Temperature Range	-55~+105°C																
Voltage Range	6.3~63V																
Capacitance Range	0.47~15000 µF																
Capacitance Tolerance	±20% at 120Hz, 20°C																
Leakage Current	After 1 minute's application of rated voltage, leakage current is not more than 0.03CV or 4 µA, whichever is greater.																
tan δ	For capacitance of more than 1000 µF, add 0.02 for every increase of 1000 µF. Measurement frequency : 120Hz, Temperature : 20°C																
	<table border="1"> <tr> <th>Rated voltage(V)</th> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> <td>63</td> </tr> <tr> <th>tan δ (MAX.)</th> <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>0.08</td> </tr> </table>	Rated voltage(V)	6.3	10	16	25	35	50	63	tan δ (MAX.)	0.22	0.19	0.16	0.14	0.12	0.10	0.08
Rated voltage(V)	6.3	10	16	25	35	50	63										
tan δ (MAX.)	0.22	0.19	0.16	0.14	0.12	0.10	0.08										
Stability at Low Temperature	Measurement frequency : 120Hz																
	<table border="1"> <tr> <th>Rated voltage(V)</th> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> <td>63</td> </tr> <tr> <th>Impedance ratio ZT/Z20(MAX.)</th> <td>Z--55°C / Z+20°C</td> <td>4</td> <td>4</td> <td>3</td> <td>3</td> <td>3</td> <td>2</td> <td>2</td> </tr> </table>	Rated voltage(V)	6.3	10	16	25	35	50	63	Impedance ratio ZT/Z20(MAX.)	Z--55°C / Z+20°C	4	4	3	3	3	2
Rated voltage(V)	6.3	10	16	25	35	50	63										
Impedance ratio ZT/Z20(MAX.)	Z--55°C / Z+20°C	4	4	3	3	3	2	2									
Load Life	After an application of D.C. bias voltage plus the rated ripple current for 5000 hours (2000 hours for D=5 and 6.3, 3000 hours for D=8) at 105°C the peak voltage shall not exceed the rated D.C. voltage, the capacitors meet the characteristic requirements shown on the right.																
	<table border="1"> <tr> <th>Capacitance change</th> <td>Within ±20% of initial value</td> </tr> <tr> <th>tan δ</th> <td>200% or less of initial specified value</td> </tr> <tr> <th>Leakage current</th> <td>Initial specified value or less</td> </tr> </table>	Capacitance change	Within ±20% of initial value	tan δ	200% or less of initial specified value	Leakage current	Initial specified value or less										
	Capacitance change	Within ±20% of initial value															
tan δ	200% or less of initial specified value																
Leakage current	Initial specified value or less																
Shelf Life	After leaving capacitors under no load at 105°C for 1000 hours, they meet the specified value for load life characteristics listed above. The value of tan δ is, however, 150% or less of initial specified value.																
Marking	Printed with white color letter on dark brown sleeve.																
Applicable Standards	JIS C 5141 and JIS C 5102.																

Radial Lead Type

Type numbering system (Example : 25V 470 µF φ 12.5×15)

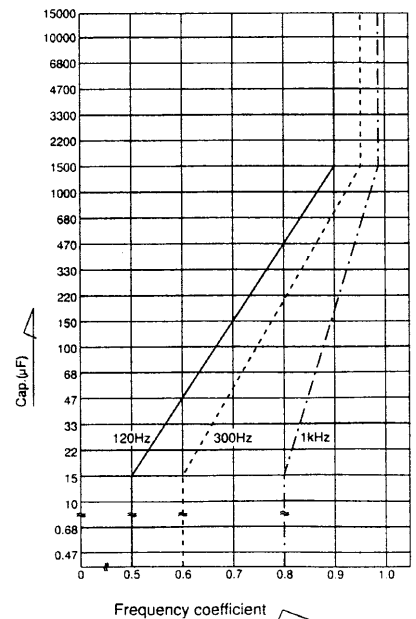


α	(L < 20)	1.5
	(L ≥ 20)	2.0

φ D	5	6.3	8	10	12.5	16	18
P	2.0	2.5	3.5	5.0	5.0	7.5	7.5
φ d	0.5	0.5	0.6	0.6	0.6*	0.8	0.8

*In case L > 25 for φ 12.5 (D) case sizes, lead diameter φ 0.8 (d) will be applied.

- Frequency coefficient of allowable ripple current (10kHz~200kHz=1)



Please refer to page 17, 18, 19 about the formed or taped product spec.
Please refer to page 3 for the minimum order quantity.

• Dimension table in next pages.

PL series

■ Dimensions

DXL (mm)

Capl (μF)	V (Code) Size code	6.3 (0J)		10 (1A)		16 (1C)		25 (1E)		35 (1V)		50 (1H)		63 (1J)	
		—	6	—	6	—	6	—	6	—	6	—	6	—	6
0.47	R47												5X11		
0.68	R68												5X11		
1	010												5X11		
1.5	1R5												5X11		
2.2	2R2												5X11		
3.3	3R3												5X11		
4.7	4R7												5X11		
6.8	6R8												5X11		
10	100												5X11	5X11	
12	120												5X11	5X11	
15	150												5X11	6.3X11	
18	180												5X11	6.3X11	
22	220									5X11			6.3X11	6.3X11	
27	270									5X11			6.3X11	6.3X11	
33	330								5X11	6.3X11			6.3X11	6.3X15	
39	390								5X11	6.3X11			6.3X11	6.3X15	
47	470						5X11		6.3X11	6.3X11			6.3X15	8X11.5	
56	560						5X11		6.3X11	6.3X11			6.3X15	8X15	10X12.5
68	680				5X11		6.3X11		6.3X11	6.3X15			8X11.5	8X15	10X12.5
82	820				5X11		6.3X11		6.3X11	6.3X15			8X15	10X12.5	8X20 10X15
100	101	5X11			6.3X11		6.3X11		6.3X15	8X11.5			8X20 10X15	10X20	12.5X15
120	121	5X11			6.3X11		6.3X11		6.3X15	8X15	10X12.5		8X20 10X15	10X20	12.5X15
150	151	6.3X11			6.3X11		6.3X15		8X11.5	8X15	10X12.5		8X20 12.5X15	10X25	12.5X15
180	181	6.3X11			6.3X11		6.3X15		8X15	10X12.5	8X20	10X15	10X20 12.5X15	10X31.5	16X15
220	221	6.3X11			6.3X15		8X11.5		8X15	10X12.5	8X20	10X15	10X25 12.5X15	12.5X20	16X15
270	271	6.3X15			6.3X15		8X15	10X12.5	8X20	10X15	10X20	12.5X15	10X31.5	16X15	12.5X25 18X15
330	331	6.3X15			8X11.5		8X15	10X12.5	8X20	10X15	10X20	12.5X15	10X31.5	16X15	12.5X25 18X15
390	391	8X11.5			8X15	10X12.5	8X20	10X15	10X20	12.5X15	10X25	12.5X15	12.5X25 16X15	12.5X31.5	16X20
470	471	8X15	10X12.5		8X15	10X12.5	8X20	10X15	10X20	12.5X15	10X31.5	16X15	12.5X25 18X15	12.5X35.5	16X25
560	561	8X15	10X12.5		8X20	10X15	10X20	12.5X15	10X25	12.5X15	12.5X20	16X15	12.5X31.5 16X20	12.5X40	18X20
680	681	8X20	10X15		8X20	10X15	10X20	12.5X15	10X31.5	16X15	12.5X25	18X15	12.5X35.5 16X20	16X31.5	18X25
820	821	8X20	10X15		10X20	12.5X15	10X25	12.5X15	12.5X20	16X15	12.5X25	18X15	12.5X40 18X20	16X35.5	18X31.5
1000	102	10X20	12.5X15		10X20	12.5X15	10X31.5	16X15	12.5X25	18X15	12.5X31.5	16X20	16X31.5 18X25	16X40	18X35.5
1200	122	10X20	12.5X15		10X25	12.5X15	12.5X20	16X15	12.5X25	18X15	12.5X35.5	16X25	16X35.5 18X31.5	18X40	
1500	152	10X25	12.5X15		10X31.5	16X15	12.5X25	18X15	12.5X31.5	16X20	12.5X40	18X20	16X40 18X31.5		
1800	182	10X31.5	16X15		12.5X20	16X15	12.5X31.5	16X20	12.5X35.5	16X25	16X31.5	18X25	18X35.5		
2200	222	10X31.5	16X15		12.5X25	18X15	12.5X31.5	16X20	12.5X40	18X20	16X35.5	18X31.5	18X40		
2700	272	12.5X25	18X15		12.5X31.5	16X20	12.5X35.5	16X25	16X31.5	18X25	16X40	18X35.5			
3300	332	12.5X25	18X15		12.5X35.5	16X20	12.5X40	18X20	16X35.5	18X31.5	18X40				
3900	392	12.5X31.5	16X20		12.5X40	18X20	16X31.5	18X25	16X40	18X35.5					
4700	472	12.5X35.5	18X20		16X31.5	18X25	16X35.5	18X31.5	18X40						
5600	562	12.5X40	18X20		16X35.5	18X25	16X40	18X35.5							
6800	682	16X31.5	18X25		16X35.5	18X31.5	18X35.5								
8200	822	16X35.5	18X31.5		16X40	18X35.5	18X40								
10000	103	16X40	18X31.5		18X40										
12000	123	18X35.5													
15000	153	18X40													

*In case of low profile type, [6] will be put at 12th digit of type numbering system.

PL series

Standard ratings

Cap. (μF)	V (Code) Size code	Item Code	6.3 (0J)										
			Case size φ D×L (mm)	Impedance (Ω MAX)		Allowable ripple (mA rms)		Case size φ D×L (mm)	Impedance (Ω MAX)		Allowable ripple (mA rms)		
				20°C/100kHz	-10°C/100kHz	105°C/10kHz~ 200kHz	105°C/120Hz		20°C/100kHz	-10°C/100kHz	105°C/10kHz~ 200kHz	105°C/120Hz	
100	101		5×11	0.85	1.70	150	99						
120	121		5×11	0.65	1.30	175	115						
150	151		6.3×11	0.49	0.98	225	155						
180	181		6.3×11	0.39	0.78	250	175						
220	221		6.3×11	0.30	0.60	285	205						
270	271		6.3×15	0.24	0.48	370	275						
330	331		6.3×15	0.20	0.40	405	310						
390	391		8×11.5	0.17	0.34	445	345						
470	471		8×15	0.14	0.28	550	435	10×12.5	0.14	0.28	575	455	
560	561		8×15	0.12	0.24	595	480	10×12.5	0.13	0.26	600	485	
680	681		8×20	0.10	0.20	730	605	10×15	0.11	0.22	700	580	
820	821		8×20	0.085	0.17	795	670	10×15	0.095	0.19	750	635	
1000	102		10×20	0.075	0.15	950	820	12.5×15	0.085	0.17	890	765	
1200	122		10×20	0.065	0.13	1020	895	12.5×15	0.075	0.15	950	835	
1500	152		10×25	0.055	0.11	1220	1090	12.5×15	0.065	0.13	1020	915	
1800	182		10×31.5	0.050	0.10	1370	1230	16×15	0.055	0.11	1270	1140	
2200	222		10×31.5	0.043	0.086	1470	1320	16×15	0.049	0.098	1340	1200	
2700	272		12.5×25	0.038	0.076	1590	1430	18×15	0.044	0.088	1500	1350	
3300	332		12.5×25	0.034	0.068	1710	1530	18×15	0.039	0.078	1600	1440	
3900	392		12.5×31.5	0.031	0.062	1910	1710	16×20	0.036	0.072	1720	1540	
4700	472		12.5×35.5	0.028	0.056	2100	1890	18×20	0.032	0.064	1920	1720	
5600	562		12.5×40	0.026	0.052	2270	2040	18×20	0.030	0.060	1980	1780	
6800	682		16×31.5	0.024	0.048	2370	2130	18×25	0.027	0.054	2210	1980	
8200	822		16×35.5	0.022	0.044	2550	2290	18×31.5	0.025	0.050	2390	2150	
10000	103		16×40	0.020	0.040	2750	2470	18×31.5	0.023	0.046	2490	2240	
12000	123		18×35.5	0.019	0.038	2820	2530						
15000	153		18×40	0.018	0.036	2960	2660						

Cap. (μF)	V (Code) Size code	Item Code	10 (1A)										
			Case size φ D×L (mm)	Impedance (Ω MAX)		Allowable ripple (mA rms)		Case size φ D×L (mm)	Impedance (Ω MAX)		Allowable ripple (mA rms)		
				20°C/100kHz	-10°C/100kHz	105°C/10kHz~ 200kHz	105°C/120Hz		20°C/100kHz	-10°C/100kHz	105°C/10kHz~ 200kHz	105°C/120Hz	
68	680		5×11	0.80	1.60	155	97						
82	820		5×11	0.65	1.30	175	110						
100	101		6.3×11	0.55	1.10	210	135						
120	121		6.3×11	0.44	0.88	235	160						
150	151		6.3×11	0.35	0.70	265	185						
180	181		6.3×11	0.29	0.58	290	205						
220	221		6.3×15	0.24	0.48	370	270						
270	271		6.3×15	0.20	0.40	405	300						
330	331		8×11.5	0.16	0.32	460	350						
390	391		8×15	0.14	0.28	550	430	10×12.5	0.15	0.30	555	430	
470	471		8×15	0.12	0.24	595	475	10×12.5	0.13	0.26	600	475	
560	561		8×20	0.10	0.20	730	590	10×15	0.11	0.22	700	565	
680	681		8×20	0.085	0.17	795	660	10×15	0.090	0.18	770	635	
820	821		10×20	0.070	0.14	985	835	12.5×15	0.080	0.16	920	780	
1000	102		10×20	0.060	0.12	1060	915	12.5×15	0.065	0.13	1040	895	
1200	122		10×25	0.050	0.10	1280	1120	12.5×15	0.060	0.12	1060	930	
1500	152		10×31.5	0.045	0.090	1440	1290	16×15	0.050	0.10	1330	1190	
1800	182		12.5×20	0.039	0.078	1470	1320	16×15	0.044	0.088	1420	1270	
2200	222		12.5×25	0.034	0.068	1710	1530	18×15	0.039	0.078	1600	1440	
2700	272		12.5×31.5	0.030	0.060	1940	1740	16×20	0.035	0.070	1740	1560	
3300	332		12.5×35.5	0.026	0.052	2180	1960	16×20	0.031	0.062	1850	1660	
3900	392		12.5×40	0.024	0.048	2360	2120	18×20	0.028	0.056	2050	1840	
4700	472		16×31.5	0.023	0.046	2420	2170	18×25	0.026	0.052	2250	2020	
5600	562		16×35.5	0.021	0.042	2610	2340	18×25	0.024	0.048	2340	2100	
6800	682		16×35.5	0.020	0.040	2680	2410	18×31.5	0.022	0.044	2540	2280	
8200	822		16×40	0.019	0.038	2820	2530	18×35.5	0.021	0.042	2690	2420	
10000	103		18×40	0.017	0.034	3040	2730						

* In case of low profile type, [6] will be put at 12th digit of type numbering system.

ALUMINUM ELECTROLYTIC CAPACITORS

PL series

Standard ratings

V (Code) Size Code		Item	16 (1C)									
			Case size φ D×L (mm)	Impedance (Ω MAX)		Allowable ripple (mA rms)		Case size φ D×L (mm)	Impedance (Ω MAX)		Allowable ripple (mA rms)	
				20°C/100kHz	-10°C/100kHz	105°C/10kHz~ 200kHz	105°C/120Hz		20°C/100kHz	-10°C/100kHz	105°C/10kHz~ 200kHz	105°C/120Hz
47	470	5×11	0.80	1.60	155	92						
56	560	5×11	0.65	1.30	175	105						
68	680	6.3×11	0.50	1.00	220	135						
82	820	6.3×11	0.42	0.84	240	155						
100	101	6.3×11	0.35	0.70	265	175						
120	121	6.3×11	0.29	0.58	290	195						
150	151	6.3×15	0.23	0.46	375	260						
180	181	6.3×15	0.20	0.40	405	285						
220	221	8×11.5	0.16	0.32	460	335						
270	271	8×15	0.14	0.28	550	410	10×12.5	0.14	0.28	575	430	
330	331	8×15	0.12	0.24	595	455	10×12.5	0.12	0.24	625	480	
390	391	8×20	0.10	0.20	730	570	10×15	0.10	0.20	730	570	
470	471	8×20	0.090	0.18	770	615	10×15	0.090	0.18	770	615	
560	561	10×20	0.075	0.15	950	770	12.5×15	0.080	0.16	920	745	
680	681	10×20	0.065	0.13	1020	845	12.5×15	0.070	0.14	985	815	
820	821	10×25	0.055	0.11	1220	1030	12.5×15	0.060	0.12	1060	895	
1000	102	10×31.5	0.047	0.094	1410	1210	16×15	0.055	0.11	1270	1090	
1200	122	12.5×20	0.041	0.082	1430	1250	16×15	0.046	0.092	1390	1220	
1500	152	12.5×25	0.036	0.072	1660	1490	18×15	0.041	0.082	1560	1400	
1800	182	12.5×31.5	0.032	0.064	1880	1690	16×20	0.037	0.074	1700	1530	
2200	222	12.5×31.5	0.028	0.056	2010	1800	16×20	0.033	0.066	1800	1620	
2700	272	12.5×35.5	0.025	0.050	2220	1990	16×25	0.030	0.060	2010	1800	
3300	332	12.5×40	0.023	0.046	2410	2160	18×20	0.027	0.054	2090	1880	
3900	392	16×31.5	0.022	0.044	2470	2220	18×25	0.025	0.050	2290	2060	
4700	472	16×35.5	0.020	0.040	2680	2410	18×31.5	0.023	0.046	2490	2240	
5600	562	16×40	0.019	0.038	2820	2530	18×35.5	0.022	0.044	2620	2350	
6800	682	18×35.5	0.018	0.036	2900	2610						
8200	822	18×40	0.017	0.034	3040	2730						

V (Code) Size Code		Item	25 (1E)									
			Case size φ D×L (mm)	Impedance (Ω MAX)		Allowable ripple (mA rms)		Case size φ D×L (mm)	Impedance (Ω MAX)		Allowable ripple (mA rms)	
				20°C/100kHz	-10°C/100kHz	105°C/10kHz~ 200kHz	105°C/120Hz		20°C/100kHz	-10°C/100kHz	105°C/10kHz~ 200kHz	105°C/120Hz
33	330	5×11	0.80	1.60	155	88						
39	390	5×11	0.65	1.30	175	100						
47	470	6.3×11	0.55	1.10	210	125						
56	560	6.3×11	0.44	0.88	235	140						
68	680	6.3×11	0.36	0.72	260	160						
82	820	6.3×11	0.30	0.60	285	180						
100	101	6.3×15	0.24	0.48	370	245						
120	121	6.3×15	0.20	0.40	405	275						
150	151	8×11.5	0.16	0.32	460	320						
180	181	8×15	0.14	0.28	550	390	10×12.5	0.15	0.30	555	395	
220	221	8×15	0.11	0.22	625	455	10×12.5	0.13	0.26	600	435	
270	271	8×20	0.095	0.19	750	560	10×15	0.11	0.22	700	525	
330	331	8×20	0.085	0.17	795	610	10×15	0.095	0.19	750	575	
390	391	10×20	0.070	0.14	985	770	12.5×15	0.080	0.16	920	720	
470	471	10×20	0.065	0.13	1020	810	12.5×15	0.070	0.14	985	785	
560	561	10×25	0.055	0.11	1220	990	12.5×15	0.060	0.12	1060	860	
680	681	10×31.5	0.046	0.092	1420	1180	16×15	0.055	0.11	1270	1050	
820	821	12.5×20	0.041	0.082	1430	1210	16×15	0.049	0.098	1340	1130	
1000	102	12.5×25	0.036	0.072	1660	1430	18×15	0.043	0.086	1520	1310	
1200	122	12.5×25	0.032	0.064	1760	1550	18×15	0.039	0.078	1600	1400	
1500	152	12.5×31.5	0.029	0.058	1980	1780	16×20	0.034	0.068	1770	1590	
1800	182	12.5×35.5	0.026	0.052	2180	1960	16×25	0.031	0.062	1980	1780	
2200	222	12.5×40	0.024	0.048	2360	2120	18×20	0.028	0.056	2050	1840	
2700	272	16×31.5	0.022	0.044	2470	2220	18×25	0.025	0.050	2290	2060	
3300	332	16×35.5	0.020	0.040	2680	2410	18×31.5	0.023	0.046	2490	2240	
3900	392	16×40	0.019	0.038	2820	2530	18×35.5	0.021	0.042	2690	2420	
4700	472	18×40	0.018	0.036	2960	2660						

*In case of low profile type, [6] will be put at 12th digit of type numbering system.

PL series

Standard ratings

Cap. (μF)		V (Code)		35 (1V)									
		Size code		—					6				
		Item	Case size φDXL (mm)	Impedance (Ω MAX.)		Allowable ripple (mA rms)		Case size φDXL (mm)	Impedance (Ω MAX.)		Allowable ripple (mA rms)		
				20°C/100kHz	-10°C/100kHz	105°C/100kHz~200kHz	105°C/120Hz		20°C/100kHz	-10°C/100kHz	105°C/100kHz~200kHz	105°C/120Hz	
22	220	5X11	0.75	1.50	160	85							
27	270	5X11	0.60	1.20	180	99							
33	330	6.3X11	0.49	0.98	225	125							
39	390	6.3X11	0.41	0.82	245	140							
47	470	6.3X11	0.34	0.68	270	160							
56	560	6.3X11	0.28	0.56	295	180							
68	680	6.3X15	0.24	0.48	370	230							
82	820	6.3X15	0.19	0.38	415	265							
100	101	8X11.5	0.16	0.32	460	305							
120	121	8X15	0.14	0.28	550	370	10X12.5	0.15	0.30	555	375		
150	151	8X15	0.12	0.24	595	415	10X12.5	0.12	0.24	625	435		
180	181	8X20	0.10	0.20	730	520	10X15	0.11	0.22	700	500		
220	221	8X20	0.085	0.17	795	580	10X15	0.090	0.18	770	560		
270	271	10X20	0.070	0.14	985	735	12.5X15	0.080	0.16	920	690		
330	331	10X20	0.060	0.12	1060	810	12.5X15	0.065	0.13	1020	780		
390	391	10X25	0.055	0.11	1220	955	12.5X15	0.060	0.12	1060	825		
470	471	10X31.5	0.046	0.092	1420	1130	16X15	0.055	0.11	1270	1010		
560	561	12.5X20	0.041	0.082	1430	1160	16X15	0.048	0.096	1360	1100		
680	681	12.5X25	0.036	0.072	1660	1370	18X15	0.042	0.084	1540	1270		
820	821	12.5X25	0.032	0.064	1760	1490	18X15	0.038	0.076	1620	1370		
1000	102	12.5X31.5	0.029	0.058	1980	1710	16X20	0.034	0.068	1770	1530		
1200	122	12.5X35.5	0.026	0.052	2180	1920	16X25	0.031	0.062	1980	1740		
1500	152	12.5X40	0.024	0.048	2360	2120	18X20	0.028	0.056	2050	1840		
1800	182	16X31.5	0.022	0.044	2470	2220	18X25	0.025	0.050	2290	2060		
2200	222	16X35.5	0.020	0.040	2680	2410	18X31.5	0.023	0.046	2490	2240		
2700	272	16X40	0.018	0.036	2900	2610	18X35.5	0.021	0.042	2690	2420		
3300	332	18X40	0.017	0.034	3040	2730							

Cap. (μF)		V (Code)		50 (1H)									
		Size code		—					6				
		Item	Case size φDXL (mm)	Impedance (Ω MAX.)		Allowable ripple (mA rms)		Case size φDXL (mm)	Impedance (Ω MAX.)		Allowable ripple (mA rms)		
				20°C/100kHz	-10°C/100kHz	105°C/100kHz~200kHz	105°C/120Hz		20°C/100kHz	-10°C/100kHz	105°C/100kHz~200kHz	105°C/120Hz	
0.47	R47	5X11	23.0	46.0	22	11							
0.68	R68	5X11	16.0	32.0	28	14							
1	010	5X11	11.0	22.0	36	18							
1.5	1R5	5X11	7.50	15.0	45	22							
2.2	2R2	5X11	5.00	10.0	54	27							
3.3	3R3	5X11	3.30	6.60	66	33							
4.7	4R7	5X11	2.20	4.40	81	40							
6.8	6R8	5X11	1.80	3.60	91	45							
10	100	5X11	1.40	2.80	115	57							
12	120	5X11	1.20	2.40	125	62							
15	150	5X11	0.93	1.86	145	72							
18	180	5X11	0.80	1.60	155	79							
22	220	6.3X11	0.65	1.30	195	100							
27	270	6.3X11	0.53	1.06	215	115							
33	330	6.3X11	0.43	0.86	240	135							
39	390	6.3X11	0.36	0.72	260	150							
47	470	6.3X15	0.30	0.60	330	195							
56	560	6.3X15	0.25	0.50	360	220							
68	680	8X11.5	0.20	0.40	410	255							
82	820	8X15	0.17	0.34	500	320	10X12.5	0.18	0.36	510	330		
100	101	8X20	0.14	0.28	620	410	10X15	0.16	0.32	580	385		
120	121	8X20	0.12	0.24	670	455	10X15	0.13	0.26	640	435		
150	151	10X20	0.10	0.20	820	570	12.5X15	0.11	0.22	785	545		
180	181	10X20	0.085	0.17	890	635	12.5X15	0.095	0.19	845	605		
220	221	10X25	0.075	0.15	1040	760	12.5X15	0.080	0.16	920	670		
270	271	10X31.5	0.065	0.13	1200	900	16X15	0.070	0.14	1120	840		
330	331	10X31.5	0.055	0.11	1300	995	16X15	0.060	0.12	1210	925		
390	391	12.5X25	0.048	0.096	1440	1120	16X15	0.055	0.11	1270	990		
470	471	12.5X25	0.044	0.088	1500	1190	18X15	0.046	0.092	1470	1170		
560	561	12.5X31.5	0.040	0.080	1680	1360	16X20	0.044	0.088	1550	1260		
680	681	12.5X35.5	0.036	0.072	1850	1530	16X20	0.040	0.080	1630	1350		
820	821	12.5X40	0.033	0.066	2010	1700	18X20	0.036	0.072	1810	1530		
1000	102	16X31.5	0.030	0.060	2120	1830	18X25	0.033	0.066	2000	1730		
1200	122	16X35.5	0.028	0.056	2260	1990	18X31.5	0.031	0.062	2140	1880		
1500	152	16X40	0.026	0.052	2410	2170	18X31.5	0.029	0.058	2220	1990		
1800	182	18X35.5	0.025	0.050	2460	2210							
2200	222	18X40	0.024	0.048	2560	2300							

*:In case of low profile type, [6] will be put at 12th digit of type numbering system.

ALUMINUM ELECTROLYTIC CAPACITORS

PL series

■ Standard ratings

Cap. (μF)	Code	Item	Case size φ D×L (mm)	63 (1J)				6					
				Impedance (Ω MAX.)		Allowable ripple (mA rms)		Case size φ D×L (mm)	Impedance (Ω MAX.)		Allowable ripple (mA rms)		
				20°C/100kHz	-10°C/100kHz	105°C/10kHz~ 200kHz	105°C/120Hz		20°C/100kHz	-10°C/100kHz	105°C/10kHz~ 200kHz	105°C/120Hz	
10	100	5×11		1.06	2.12	135	67						
12	120	5×11		0.93	1.86	145	72						
15	150	6.3×11		0.73	1.46	185	92						
18	180	6.3×11		0.63	1.26	195	100						
22	220	6.3×11		0.52	1.04	215	110						
27	270	6.3×11		0.43	0.86	240	130						
33	330	6.3×15		0.35	0.70	305	170						
39	390	6.3×15		0.30	0.60	330	190						
47	470	8×11.5		0.25	0.50	365	215						
56	560	8×15		0.21	0.42	450	275	10×12.5	0.23	0.46	450	275	
68	680	8×15		0.17	0.34	500	315	10×12.5	0.19	0.38	495	310	
82	820	8×20		0.15	0.30	600	385	10×15	0.16	0.32	580	375	
100	101	10×20		0.12	0.24	750	495	12.5×15	0.14	0.28	695	460	
120	121	10×20		0.10	0.20	820	555	12.5×15	0.12	0.24	750	510	
150	151	10×25		0.090	0.18	950	665	12.5×15	0.095	0.19	845	590	
180	181	10×31.5		0.075	0.15	1110	790	16×15	0.080	0.16	1050	750	
220	221	12.5×20		0.065	0.13	1140	835	16×15	0.070	0.14	1120	820	
270	271	12.5×25		0.055	0.11	1340	1000	18×15	0.060	0.12	1290	965	
330	331	12.5×25		0.049	0.098	1420	1090	18×15	0.050	0.10	1410	1080	
390	391	12.5×31.5		0.043	0.086	1620	1260	16×20	0.047	0.094	1500	1170	
470	471	12.5×35.5		0.039	0.078	1780	1420	16×25	0.042	0.084	1700	1350	
560	561	12.5×40		0.035	0.070	1950	1580	18×20	0.039	0.078	1730	1400	
680	681	16×31.5		0.032	0.064	2050	1700	18×25	0.035	0.070	1940	1610	
820	821	16×35.5		0.029	0.058	2220	1880	18×31.5	0.032	0.064	2110	1780	
1000	102	16×40		0.027	0.054	2370	2050	18×35.5	0.029	0.058	2280	1970	
1200	122	18×40		0.025	0.050	2510	2210						

※In case of low profile type, [6] will be put at 12th digit of type numbering system.