

PL

Extremely Low Impedance, High Reliability

series



Low Impedance

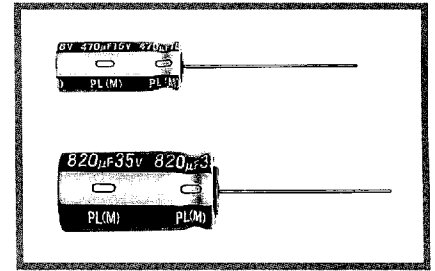


Long Life



Anti-Solvent Feature

- Same case size as PF series, but extremely low impedance as little as 1/2 or 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.

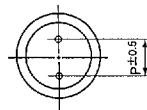
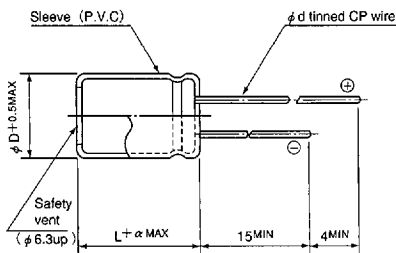


Specifications

Item	Performance Characteristics								
Operating Temperature Range	-55~+105℃								
Voltage Range	6.3~63V								
Capacitance Range	0.47~15000 μ F								
Capacitance Tolerance	±20% at 120Hz, 20℃								
Leakage Current	After 1 minute's application of rated voltage, leakage current is not more than 0.03CV or 4 μ A, whichever is greater.								
tan δ	For capacitance of more than 1000 μ F, add 0.02 for every increase of 1000 μ F. Measurement frequency : 120Hz, Temperature : 20℃								
	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								
	Rated voltage(V)		6.3	10	16	25	35	50	63
	Impedance ratio ZT/Z20(MAX.)	Z-55℃ /Z+20℃	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℃ the peak voltage shall not exceed the rated D.C. voltage, the capacitors meet the characteristic requirements shown on the right.								
	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℃ 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 φ12.5X15)



1 2 3 4 5 6 7 8 9 10 11 12
U P L 1 E 4 7 1 M H H 6

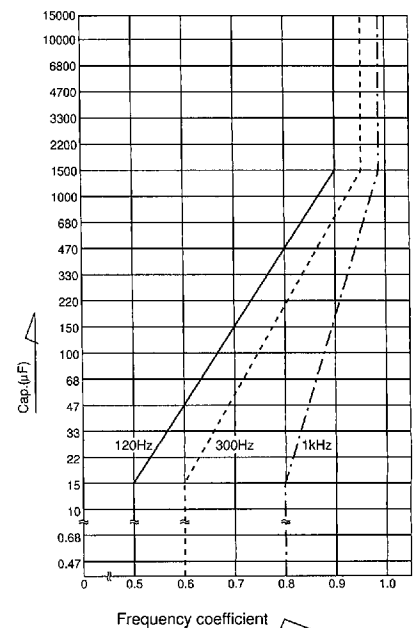
Capacitance tolerance (±20%)	Configuration	Type	Code
Capacitance (470 µF)	φ D	Small Dia	—
Rated voltage (25V)	Code	Low Profile	6
Series name	8 · 10		
	12.5~18		

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 φ12.5 (D) case sizes, lead diameter φ0.8 (d) will be applied.

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



• Dimension table in next pages.

PL series

■Dimensions

		V (Code)		6.3 (0J)		10 (1A)		16 (1C)		25 (1E)		35 (1V)		50 (1H)		63 (1J)		DXL (mm)	
Cap. (μF)	Code	Size code	Code	—	6	—	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	8X20	10X15	
82	820				5X11		6.3X11		6.3X11		6.3X15		8X20	10X15	10X20	10X20	12.5X15		
100	101	5X11			6.3X11		6.3X11		6.3X15		8X11.5		8X15	10X12.5	8X20	10X15	10X20	12.5X15	
120	121	5X11			6.3X11		6.3X11		6.3X15		8X15	10X12.5	8X20	10X15	10X20	12.5X15	10X20	12.5X15	
150	151	6.3X11			6.3X11		6.3X15		8X11.5		8X15	10X12.5	10X20	12.5X15	10X20	12.5X15	10X25	12.5X15	
180	181	6.3X11			6.3X11		6.3X15		8X15	10X12.5	8X20	10X15	10X20	12.5X15	10X20	12.5X15	10X31.5	16X15	
220	221	6.3X11			6.3X15		8X11.5		8X15	10X12.5	8X20	10X15	10X20	12.5X15	10X31.5	16X15	12.5X20	16X15	
270	271	6.3X15			6.3X15		8X15	10X12.5	8X15	10X15	10X20	12.5X15	10X20	12.5X15	10X31.5	16X15	12.5X25	18X15	
330	331	6.3X15			8X11.5		8X15	10X12.5	8X20	10X15	10X20	12.5X15	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	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	16X20	12.5X35.5	16X25	
560	561	8X15	10X12.5		8X20	10X15	10X20	12.5X15	10X25	12.5X15	12.5X20	16X15	12.5X31.5	16X20	12.5X35.5	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	16X31.5	18X25	
820	821	8X20	10X15	10X20	12.5X15	10X25	12.5X15	12.5X20	16X15	12.5X25	18X15	12.5X40	18X20	16X31.5	18X25	16X40	18X31.5	18X35.5	
1000	102	10X20	12.5X15	10X20	12.5X15	10X31.5	16X15	12.5X25	18X15	12.5X31.5	16X20	16X31.5	18X25	16X40	18X31.5	18X40			
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		6.3 (0J)									
				—				6					
				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		5×11	0.85	1.70	150	99					
120	121	5×11		5×11	0.65	1.30	175	115					
150	151	6.3×11		6.3×11	0.49	0.98	225	155					
180	181	6.3×11		6.3×11	0.39	0.78	250	175					
220	221	6.3×11		6.3×11	0.30	0.60	285	205					
270	271	6.3×15		6.3×15	0.24	0.48	370	275					
330	331	6.3×15		6.3×15	0.20	0.40	405	310					
390	391	8×11.5		8×11.5	0.17	0.34	445	345					
470	471	8×15		8×15	0.14	0.28	550	435	10×12.5	0.14	0.28	575	455
560	561	8×15		8×15	0.12	0.24	595	480	10×12.5	0.13	0.26	600	485
680	681	8×20		8×20	0.10	0.20	730	605	10×15	0.11	0.22	700	580
820	821	8×20		8×20	0.085	0.17	795	670	10×15	0.095	0.19	750	635
1000	102	10×20		10×20	0.075	0.15	950	820	12.5×15	0.085	0.17	890	765
1200	122	10×20		10×20	0.065	0.13	1020	895	12.5×15	0.075	0.15	950	835
1500	152	10×25		10×25	0.055	0.11	1220	1090	12.5×15	0.065	0.13	1020	915
1800	182	10×31.5		10×31.5	0.050	0.10	1370	1230	16×15	0.055	0.11	1270	1140
2200	222	10×31.5		10×31.5	0.043	0.086	1470	1320	16×15	0.049	0.098	1340	1200
2700	272	12.5×25		12.5×25	0.038	0.076	1590	1430	18×15	0.044	0.088	1500	1350
3300	332	12.5×25		12.5×25	0.034	0.068	1710	1530	18×15	0.039	0.078	1600	1440
3900	392	12.5×31.5		12.5×31.5	0.031	0.062	1910	1710	16×20	0.036	0.072	1720	1540
4700	472	12.5×35.5		12.5×35.5	0.028	0.056	2100	1890	18×20	0.032	0.064	1920	1720
5600	562	12.5×40		12.5×40	0.026	0.052	2270	2040	18×20	0.030	0.060	1980	1780
6800	682	16×31.5		16×31.5	0.024	0.048	2370	2130	18×25	0.027	0.054	2210	1980
8200	822	16×35.5		16×35.5	0.022	0.044	2550	2290	18×31.5	0.025	0.050	2390	2150
10000	103	16×40		16×40	0.020	0.040	2750	2470	18×31.5	0.023	0.046	2490	2240
12000	123	18×35.5		18×35.5	0.019	0.038	2820	2530					
15000	153	18×40		18×40	0.018	0.036	2960	2660					

Cap. (μF)		V (Code) Size code		10 (1A)									
				—				6					
				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		5×11	0.80	1.60	155	97					
82	820	5×11		5×11	0.65	1.30	175	110					
100	101	6.3×11		6.3×11	0.55	1.10	210	135					
120	121	6.3×11		6.3×11	0.44	0.88	235	160					
150	151	6.3×11		6.3×11	0.35	0.70	265	185					
180	181	6.3×11		6.3×11	0.29	0.58	290	205					
220	221	6.3×15		6.3×15	0.24	0.48	370	270					
270	271	6.3×15		6.3×15	0.20	0.40	405	300					
330	331	8×11.5		8×11.5	0.16	0.32	460	350					
390	391	8×15		8×15	0.14	0.28	550	430	10×12.5	0.15	0.30	555	430
470	471	8×15		8×15	0.12	0.24	595	475	10×12.5	0.13	0.26	600	475
560	561	8×20		8×20	0.10	0.20	730	590	10×15	0.11	0.22	700	565
680	681	8×20		8×20	0.085	0.17	795	660	10×15	0.090	0.18	770	635
820	821	10×20		10×20	0.070	0.14	985	835	12.5×15	0.080	0.16	920	780
1000	102	10×20		10×20	0.060	0.12	1060	915	12.5×15	0.065	0.13	1040	895
1200	122	10×25		10×25	0.050	0.10	1280	1120	12.5×15	0.060	0.12	1060	930
1500	152	10×31.5		10×31.5	0.045	0.090	1440	1290	16×15	0.050	0.10	1330	1190
1800	182	12.5×20		12.5×20	0.039	0.078	1470	1320	16×15	0.044	0.088	1420	1270
2200	222	12.5×25		12.5×25	0.034	0.068	1710	1530	18×15	0.039	0.078	1600	1440
2700	272	12.5×31.5		12.5×31.5	0.030	0.060	1940	1740	16×20	0.035	0.070	1740	1560
3300	332	12.5×35.5		12.5×35.5	0.026	0.052	2180	1960	16×20	0.031	0.062	1850	1660
3900	392	12.5×40		12.5×40	0.024	0.048	2360	2120	18×20	0.028	0.056	2050	1840
4700	472	16×31.5		16×31.5	0.023	0.046	2420	2170	18×25	0.026	0.052	2250	2020
5600	562	16×35.5		16×35.5	0.021	0.042	2610	2340	18×25	0.024	0.048	2340	2100
6800	682	16×35.5		16×35.5	0.020	0.040	2680	2410	18×31.5	0.022	0.044	2540	2280
8200	822	16×40		16×40	0.019	0.038	2820	2530	18×35.5	0.021	0.042	2690	2420
10000	103	18×40		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.

PL series

■ Standard ratings

V (Code) Size Code Item Cap. (μF) Code		16 (1C)									
		—					6				
		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 Cap. (μF) Code		25 (1E)									
		—					6				
		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) Size code Item Code		35 (1V)									
				—				6					
				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
22	220	5×11			0.75	1.50	160	85					
27	270	5×11			0.60	1.20	180	99					
33	330	6.3×11			0.49	0.98	225	125					
39	390	6.3×11			0.41	0.82	245	140					
47	470	6.3×11			0.34	0.68	270	160					
56	560	6.3×11			0.28	0.56	295	180					
68	680	6.3×15			0.24	0.48	370	230					
82	820	6.3×15			0.19	0.38	415	265					
100	101	8×11.5			0.16	0.32	460	305					
120	121	8×15			0.14	0.28	550	370	10×12.5	0.15	0.30	555	375
150	151	8×15			0.12	0.24	595	415	10×12.5	0.12	0.24	625	435
180	181	8×20			0.10	0.20	730	520	10×15	0.11	0.22	700	500
220	221	8×20			0.085	0.17	795	580	10×15	0.090	0.18	770	560
270	271	10×20			0.070	0.14	985	735	12.5×15	0.080	0.16	920	690
330	331	10×20			0.060	0.12	1060	810	12.5×15	0.065	0.13	1020	780
390	391	10×25			0.055	0.11	1220	955	12.5×15	0.060	0.12	1060	825
470	471	10×31.5			0.046	0.092	1420	1130	16×15	0.055	0.11	1270	1010
560	561	12.5×20			0.041	0.082	1430	1160	16×15	0.048	0.096	1360	1100
680	681	12.5×25			0.036	0.072	1660	1370	18×15	0.042	0.084	1540	1270
820	821	12.5×25			0.032	0.064	1760	1490	18×15	0.038	0.076	1620	1370
1000	102	12.5×31.5			0.029	0.058	1980	1710	16×20	0.034	0.068	1770	1530
1200	122	12.5×35.5			0.026	0.052	2180	1920	16×25	0.031	0.062	1980	1740
1500	152	12.5×40			0.024	0.048	2360	2120	18×20	0.028	0.056	2050	1840
1800	182	16×31.5			0.022	0.044	2470	2220	18×25	0.025	0.050	2290	2060
2200	222	16×35.5			0.020	0.040	2680	2410	18×31.5	0.023	0.046	2490	2240
2700	272	16×40			0.018	0.036	2900	2610	18×35.5	0.021	0.042	2690	2420
3300	332	18×40			0.017	0.034	3040	2730					

Cap. (μF)		V (Code) Size code Item Code		50 (1H)									
				—				6					
				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
0.47	R47	5×11			23.0	46.0	22	11					
0.68	R68	5×11			16.0	32.0	28	14					
1	010	5×11			11.0	22.0	36	18					
1.5	1R5	5×11			7.50	15.0	45	22					
2.2	2R2	5×11			5.00	10.0	54	27					
3.3	3R3	5×11			3.30	6.60	66	33					
4.7	4R7	5×11			2.20	4.40	81	40					
6.8	6R8	5×11			1.80	3.60	91	45					
10	100	5×11			1.40	2.80	115	57					
12	120	5×11			1.20	2.40	125	62					
15	150	5×11			0.93	1.86	145	72					
18	180	5×11			0.80	1.60	155	79					
22	220	6.3×11			0.65	1.30	195	100					
27	270	6.3×11			0.53	1.06	215	115					
33	330	6.3×11			0.43	0.86	240	135					
39	390	6.3×11			0.36	0.72	260	150					
47	470	6.3×15			0.30	0.60	330	195					
56	560	6.3×15			0.25	0.50	360	220					
68	680	8×11.5			0.20	0.40	410	255					
82	820	8×15			0.17	0.34	500	320	10×12.5	0.18	0.36	510	330
100	101	8×20			0.14	0.28	620	410	10×15	0.16	0.32	580	385
120	121	8×20			0.12	0.24	670	455	10×15	0.13	0.26	640	435
150	151	10×20			0.10	0.20	820	570	12.5×15	0.11	0.22	785	545
180	181	10×20			0.085	0.17	890	635	12.5×15	0.095	0.19	845	605
220	221	10×25			0.075	0.15	1040	760	12.5×15	0.080	0.16	920	670
270	271	10×31.5			0.065	0.13	1200	900	16×15	0.070	0.14	1120	840
330	331	10×31.5			0.055	0.11	1300	995	16×15	0.060	0.12	1210	925
390	391	12.5×25			0.048	0.096	1440	1120	16×15	0.055	0.11	1270	990
470	471	12.5×25			0.044	0.088	1500	1190	18×15	0.046	0.092	1470	1170
560	561	12.5×31.5			0.040	0.080	1680	1360	16×20	0.044	0.088	1550	1260
680	681	12.5×35.5			0.036	0.072	1850	1530	16×20	0.040	0.080	1630	1350
820	821	12.5×40			0.033	0.066	2010	1700	18×20	0.036	0.072	1810	1530
1000	102	16×31.5			0.030	0.060	2120	1830	18×25	0.033	0.066	2000	1730
1200	122	16×35.5			0.028	0.056	2260	1990	18×31.5	0.031	0.062	2140	1880
1500	152	16×40			0.026	0.052	2410	2170	18×31.5	0.029	0.058	2220	1990
1800	182	18×35.5			0.025	0.050	2460	2210					
2200	222	18×40			0.024	0.048	2560	2300					

※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	63 (1J)									
							6					
			Case size φD×L (mm)	Impedance (Ω MAX.)		Allowable ripple (mA rms)		Case size φD×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.