

NPL

- ◆ 105°C 5000 Hours
- ◆ Long Life
- ◆ High Stability, Low ESR, High Frequency
- ◆ RoHS Compliant (2011/65/EU) , AEC-Q200

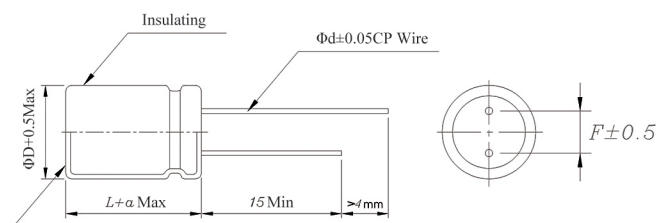


■ Specification

Items	Characteristics								
Operation Temperature Range	-55°C~+105°C								
Rated Voltage	6.3~100V								
Capacitance Range	2.2~10000μF 120Hz/20°C								
Capacitance Tolerance	±20%(120Hz/20°C)								
Dissipation Factor	Less than standard data 120Hz/20°C								
Leakage Current	Less than standard data charging 2mins with rated voltage, 20°C								
ESR	Less than standard data 100KHz/20°C								
Endurance	After load rated voltage for 5000hours at 105°C, the following specification shall be satisfied after placing capacitor for 16 hours at 20°C <table> <tr> <td>Capacitance change</td><td>Within±20% of the initial value</td></tr> <tr> <td>ESR</td><td>Not more than 150% of the specified value</td></tr> <tr> <td>Dissipation Factor</td><td>Not more than 150% of the specified value</td></tr> <tr> <td>Leakage current</td><td>Not more than the specified value</td></tr> </table>	Capacitance change	Within±20% of the initial value	ESR	Not more than 150% of the specified value	Dissipation Factor	Not more than 150% of the specified value	Leakage current	Not more than the specified value
Capacitance change	Within±20% of the initial value								
ESR	Not more than 150% of the specified value								
Dissipation Factor	Not more than 150% of the specified value								
Leakage current	Not more than the specified value								
Humidity	Store the capacitor at 60°C under the condition of 90%~95%RH with no load for 1000hrs, the following specifications shall be satisfied after placing capacitor for 16 hours at 20°C. <table> <tr> <td>Capacitance change</td><td>Within±20% of the initial value</td></tr> <tr> <td>ESR</td><td>Not more than 150% of the specified value</td></tr> <tr> <td>Dissipation Factor</td><td>Not more than 150% of the specified value</td></tr> <tr> <td>Leakage current</td><td>Not more than the specified value</td></tr> </table>	Capacitance change	Within±20% of the initial value	ESR	Not more than 150% of the specified value	Dissipation Factor	Not more than 150% of the specified value	Leakage current	Not more than the specified value
Capacitance change	Within±20% of the initial value								
ESR	Not more than 150% of the specified value								
Dissipation Factor	Not more than 150% of the specified value								
Leakage current	Not more than the specified value								

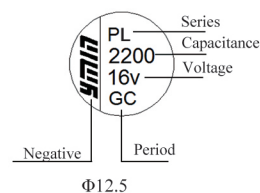
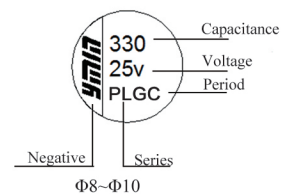
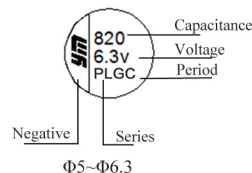
If you have question for leakage current, please apply rated voltage on capacitors at 105°C for 2hours, then test the leakage current again at 20°C.

■ Standard Size



Vent
 Remark: capacitors with diameter more than 6.3 have safety vent

D(±0.5)	5	5.5	6.3	8	10	12.5
d(±0.05)	0.45/0.50	0.45/0.50	0.45/0.50	0.6	0.6	0.6
F(±0.5)	2.0	2.5	2.5	3.5	5.0	5.0
α	+1					



■ Rated Ripple Current Frequency Correction Factor

Frequency(Hz)	120Hz	1KHz	10KHz	100KHz	300KHz
Correction factor	0.10	0.45	0.50	1.00	1.00

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■ Standard Size

Rated Voltage (Surge Voltage) (V)	Capacitance (μF)	Size ΦD×L(mm)	L.C. (μA,2min)	Tanδ 120Hz	ESR (mΩ100kHz)	Ripple current (mA/r.m.s) 105°C100kHz
6.3(7.2)	100	5×5.7	280	0.08	20	2400
6.3(7.2)	100	6.3×4.2	280	0.08	20	2500
6.3(7.2)	150	5×5.7	280	0.08	20	2400
6.3(7.2)	150	6.3×4.2	280	0.08	20	2500
6.3(7.2)	180	5×5.7	280	0.08	18	2600
6.3(7.2)	180	6.3×4.2	280	0.08	20	2500
6.3(7.2)	220	5×5.7	280	0.08	18	2600
6.3(7.2)	220	6.3×4.2	280	0.08	20	2500
6.3(7.2)	270	5×7	340	0.08	12	3400
6.3(7.2)	270	6.3×5.7	340	0.08	18	2800
6.3(7.2)	330	5×7	416	0.08	12	3400
6.3(7.2)	330	6.3×5.7	416	0.08	18	2800
6.3(7.2)	390	5×8	491	0.08	12	3400
6.3(7.2)	390	6.3×5.7	491	0.08	8	4800
6.3(7.2)	470	5×8	592	0.08	12	3650
6.3(7.2)	470	6.3×7	592	0.08	8	4800
6.3(7.2)	470	8×6	592	0.08	18	3000
6.3(7.2)	560	5.5×8	706	0.08	12	3800
6.3(7.2)	560	6.3×7	706	0.08	8	4800
6.3(7.2)	560	8×6	706	0.08	16	3450
6.3(7.2)	680	6.3×8	857	0.08	8	5000
6.3(7.2)	680	8×7	857	0.08	12	4200
6.3(7.2)	820	5.5×9	1033	0.08	8	4900
6.3(7.2)	820	6.3×9	1033	0.08	8	5250
6.3(7.2)	820	6.3×7.5	1033	0.08	8	4900
6.3(7.2)	820	8×7	1033	0.08	12	4200
6.3(7.2)	1000	6.3×10	1260	0.08	8	5500
6.3(7.2)	1000	8×8	1260	0.08	8	5600
6.3(7.2)	1000	10×7	1260	0.08	12	4500
6.3(7.2)	1200	6.3×11	1512	0.08	8	5700
6.3(7.2)	1200	8×9	1512	0.08	8	5800
6.3(7.2)	1200	10×8	1512	0.08	8	5800
6.3(7.2)	1500	8×11	1890	0.09	8	6150
6.3(7.2)	1500	10×9	1890	0.09	8	6050
6.3(7.2)	2000	8×14	2520	0.10	7	7250
6.3(7.2)	2000	10×10	2520	0.10	8	6300
6.3(7.2)	2200	8×14	2772	0.10	7	7500
6.3(7.2)	2200	10×10	2772	0.10	8	6300
6.3(7.2)	2500	10×12	3150	0.11	8	6500
6.3(7.2)	2700	10×12	3402	0.11	8	6500
6.3(7.2)	3300	10×12	4158	0.13	8	6640
6.3(7.2)	3900	10×14	4914	0.14	7	7600
6.3(7.2)	4700	10×16	5922	0.15	7	8100

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■ Standard Size

Rated Voltage (Surge Voltage) (V)	Capacitance (μF)	Size ΦD×L(mm)	L.C. (μA,2min)	Tanδ 120Hz	ESR (mΩ100kHz)	Ripple current (mA/r.m.s) 105°C100kHz
6.3(7.2)	4700	12.5 × 12.5	5922	0.15	8	7600
6.3(7.2)	5600	10 × 18	7056	0.17	7	8500
6.3(7.2)	5600	12.5 × 14	7056	0.17	8	7900
6.3(7.2)	6800	10 × 21	7500	0.20	7	9100
6.3(7.2)	6800	12.5 × 16	7500	0.20	7	8950
6.3(7.2)	8200	12.5 × 18	7500	0.22	7	9450
6.3(7.2)	10000	12.5 × 20	7500	0.26	7	9850
7.5(8.6)	270	5 × 7	405	0.08	12	3400
7.5(8.6)	270	6.3 × 5.7	405	0.08	18	2800
7.5(8.6)	330	5 × 9	495	0.08	12	3800
7.5(8.6)	330	6.3 × 5.7	495	0.08	12	3700
7.5(8.6)	390	5 × 10	585	0.08	10	4350
7.5(8.6)	390	6.3 × 7	585	0.08	12	3900
7.5(8.6)	390	8 × 6	585	0.08	18	3250
7.5(8.6)	470	5 × 11	705	0.08	10	4500
7.5(8.6)	470	5.15 × 9	705	0.08	12	3850
7.5(8.6)	470	6.3 × 8	705	0.08	12	4100
7.5(8.6)	470	8 × 6	705	0.08	18	3000
7.5(8.6)	560	6.3 × 9	840	0.08	9	5000
7.5(8.6)	560	8 × 6	840	0.08	18	3250
7.5(8.6)	680	6.3 × 10	1020	0.08	8	5500
7.5(8.6)	680	8 × 7	1020	0.08	12	4200
7.5(8.6)	820	6.3 × 11	1230	0.08	8	5700
7.5(8.6)	820	8 × 8	1230	0.08	8	5600
7.5(8.6)	1000	6.3 × 11	1500	0.08	8	5900
7.5(8.6)	1000	8 × 9	1500	0.08	8	5800
10(11.5)	47	5 × 5.7	280	0.08	30	1900
10(11.5)	47	6.3 × 4.2	280	0.08	30	2100
10(11.5)	68	5 × 5.7	280	0.08	30	1900
10(11.5)	68	6.3 × 4.2	280	0.08	30	2100
10(11.5)	82	5 × 5.7	280	0.08	30	1900
10(11.5)	82	6.3 × 4.2	280	0.08	30	2100
10(11.5)	100	5 × 5.7	280	0.08	30	1900
10(11.5)	100	6.3 × 4.2	280	0.08	30	2100
10(11.5)	150	5 × 7	300	0.08	15	3050
10(11.5)	150	6.3 × 5.7	300	0.08	30	2200
10(11.5)	180	5 × 7	360	0.08	15	3050
10(11.5)	180	6.3 × 5.7	360	0.08	30	2200
10(11.5)	220	5 × 7	440	0.08	15	3050
10(11.5)	220	6.3 × 5.7	440	0.08	30	2200
10(11.5)	270	5 × 10	540	0.08	12	3950
10(11.5)	270	6.3 × 5.7	540	0.08	16	3200
10(11.5)	330	5 × 11	660	0.08	12	4100

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■ Standard Size

Rated Voltage (Surge Voltage) (V)	Capacitance (μ F)	Size $\Phi D \times L$ (mm)	L.C. (μ A,2min)	Tan δ 120Hz	ESR (m Ω 100kHz)	Ripple current (mA/r.m.s) 105°C100kHz
10(11.5)	330	6.3×7	660	0.08	16	3200
10(11.5)	390	6.3×7	780	0.08	12	3900
10(11.5)	390	8×6	780	0.08	30	2550
10(11.5)	470	6.3×8	940	0.08	12	4300
10(11.5)	470	8×7	940	0.08	30	2550
10(11.5)	560	6.3×10	1120	0.08	10	4900
10(11.5)	560	8×7	1120	0.08	14	2550
10(11.5)	680	6.3×11	1360	0.08	9	5400
10(11.5)	680	8×8	1360	0.08	10	5100
10(11.5)	820	8×9	1640	0.08	9	5500
10(11.5)	820	10×7	1640	0.08	14	2850
10(11.5)	1000	8×11	2000	0.08	9	5800
10(11.5)	1000	10×8	2000	0.08	9	5500
10(11.5)	1500	8×14	3000	0.09	8	6800
10(11.5)	1500	10×12	3000	0.09	9	6300
10(11.5)	2200	10×14	4400	0.10	8	7000
10(11.5)	2500	10×14	5000	0.11	8	7000
10(11.5)	2700	10×16	5400	0.11	8	7500
10(11.5)	3300	10×18	6600	0.13	8	7900
10(11.5)	3300	12.5×14	6600	0.13	9	7500
10(11.5)	3900	10×21	7500	0.14	8	8400
10(11.5)	3900	12.5×16	7500	0.14	8	8400
10(11.5)	4700	12.5×18	7500	0.15	8	8400
10(11.5)	5600	12.5×18	7500	0.17	8	8800
10(11.5)	6800	12.5×20	7500	0.20	8	9200
12(13.8)	180	5×7	432	0.08	15	3050
12(13.8)	180	6.3×5.7	432	0.08	30	2200
12(13.8)	220	5×9	528	0.08	15	3400
12(13.8)	220	6.3×5.7	528	0.08	16	3200
12(13.8)	270	5×10	648	0.08	12	3950
12(13.8)	270	6.3×7	648	0.08	16	3200
12(13.8)	330	5×10	792	0.08	12	3950
12(13.8)	330	6.3×7	792	0.08	12	3900
12(13.8)	330	8×6	792	0.08	30	2550
12(13.8)	390	5×11	936	0.08	12	4100
12(13.8)	390	5.5×9	936	0.08	15	3450
12(13.8)	390	6.3×8	936	0.08	12	4100
12(13.8)	470	6.3×9	1128	0.08	12	4300
12(13.8)	470	8×7	1128	0.08	14	2550
12(13.8)	560	6.3×10	1344	0.08	10	4900
12(13.8)	560	8×7	1344	0.08	14	2550
12(13.8)	680	6.3×11	1632	0.08	9	5400
12(13.8)	680	8×8	1632	0.08	10	5100

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Rated Voltage (Surge Voltage) (V)	Capacitance (μF)	Size ΦD×L(mm)	L.C. (μA,2min)	Tanδ 120Hz	ESR (mΩ100kHz)	Ripple current (mA/r.m.s) 105°C100kHz
12(13.8)	1000	8×10	2400	0.08	10	5200
16(18.4)	22	5×5.7	280	0.08	30	1900
16(18.4)	22	6.3×4.2	280	0.08	30	2100
16(18.4)	33	5×5.7	280	0.08	30	1900
16(18.4)	33	6.3×4.2	280	0.08	30	2100
16(18.4)	47	5×5.7	280	0.08	30	1900
16(18.4)	47	6.3×4.2	280	0.08	30	2100
16(18.4)	68	5×5.7	280	0.08	30	1900
16(18.4)	68	6.3×4.2	280	0.08	30	2100
16(18.4)	82	5.15×5.7	280	0.08	30	1900
16(18.4)	82	6.3×4.2	280	0.08	30	2100
16(18.4)	100	5×7	320	0.08	30	2000
16(18.4)	100	5×7	320	0.08	30	2200
16(18.4)	100	6.3×5.7	320	0.08	30	2100
16(18.4)	150	5×8	480	0.08	30	2200
16(18.4)	150	6.3×5.7	480	0.08	30	2200
16(18.4)	220	5×10	704	0.08	12	3950
16(18.4)	220	5.5×9	704	0.08	12	3950
16(18.4)	220	6.3×7	704	0.08	20	2850
16(18.4)	220	6.3×7	704	0.08	20	2850
16(18.4)	270	6.3×8	864	0.08	15	3500
16(18.4)	270	8×7	864	0.08	30	2550
16(18.4)	330	6.3×9	1056	0.08	12	4300
16(18.4)	330	8×7	1056	0.08	30	2550
16(18.4)	390	6.3×9	1248	0.08	12	4300
16(18.4)	470	6.3×11	1504	0.08	10	4900
16(18.4)	470	8×8	1504	0.08	20	3300
16(18.4)	560	8×9	1792	0.08	12	4700
16(18.4)	560	10×8	1792	0.08	12	4700
16(18.4)	680	8×10	2176	0.08	10	5350
16(18.4)	680	10×8	2176	0.08	12	4700
16(18.4)	820	8×12	2624	0.08	10	5500
16(18.4)	820	10×9	2624	0.08	12	4950
16(18.4)	1000	8×14	3200	0.08	8	6800
16(18.4)	1000	8×16	3200	0.08	10	5800
16(18.4)	1000	10×9	3200	0.08	12	5200
16(18.4)	1500	10×12	4800	0.09	8	8400
16(18.4)	1800	10×16	5760	0.10	8	7000
16(18.4)	2200	10×18	7040	0.10	8	7900
16(18.4)	2200	10×20	7040	0.10	8	7500
16(18.4)	2200	12.5×14	7040	0.10	10	7100
16(18.4)	2700	10×21	7500	0.11	8	8400
16(18.4)	2700	12.5×16	7500	0.11	10	7100

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Rated Voltage (Surge Voltage) (V)	Capacitance (μF)	Size ΦD×L(mm)	L.C. (μA,2min)	Tanδ 120Hz	ESR (mΩ100kHz)	Ripple current (mA/r.m.s) 105°C100kHz
16(18.4)	3300	12.5×18	7500	0.13	8	8400
16(18.4)	3900	12.5×20	7500	0.14	8	8800
25(28.8)	10	5×5.7	280	0.08	40	1650
25(28.8)	10	6.3×4.2	280	0.08	40	1800
25(28.8)	15	5×5.7	280	0.08	40	1650
25(28.8)	15	6.3×4.2	280	0.08	40	1800
25(28.8)	22	5×5.7	280	0.08	40	1650
25(28.8)	22	6.3×4.2	280	0.08	40	1800
25(28.8)	33	5×5.7	280	0.08	40	1650
25(28.8)	33	6.3×4.2	280	0.08	40	1800
25(28.8)	39	5×5.7	280	0.08	40	1650
25(28.8)	39	6.3×4.2	280	0.08	40	1800
25(28.8)	47	5×5.7	280	0.08	30	2050
25(28.8)	47	6.3×4.2	280	0.08	40	1800
25(28.8)	68	5×7	340	0.08	30	2200
25(28.8)	68	6.3×5.7	340	0.08	40	1900
25(28.8)	100	5×9	500	0.08	30	2400
25(28.8)	100	6.3×5.7	500	0.08	30	2350
25(28.8)	150	6.3×8	750	0.08	16	3550
25(28.8)	150	8×6	750	0.08	30	2550
25(28.8)	180	6.3×8	900	0.08	16	3550
25(28.8)	180	8×7	900	0.08	30	2550
25(28.8)	220	6.3×9	1100	0.08	20	3500
25(28.8)	220	8×7	1100	0.08	30	2700
25(28.8)	220	10×6	1100	0.08	30	2700
25(28.8)	330	8×9	1650	0.08	16	4000
25(28.8)	330	10×8	1650	0.08	16	4100
25(28.8)	470	8×14	2350	0.08	16	4800
25(28.8)	470	8×11	2350	0.08	16	4200
25(28.8)	470	10×9	2350	0.08	16	4300
25(28.8)	560	8×14	2800	0.08	16	4800
25(28.8)	560	8×11	2800	0.08	16	4400
25(28.8)	560	10×10	2800	0.08	16	4500
25(28.8)	680	8×14	3400	0.08	16	4800
25(28.8)	680	10×12	3400	0.08	16	4700
25(28.8)	820	8×16	4100	0.08	16	5050
25(28.8)	820	8×17	4100	0.08	16	4900
25(28.8)	820	10×13	4100	0.08	16	4800
25(28.8)	1000	10×16	5000	0.08	16	5300
25(28.8)	1000	12.5×12.5	5000	0.08	16	5300
25(28.8)	1500	10×18	7500	0.09	16	5600
25(28.8)	1500	12.5×14	7500	0.09	16	5600
25(28.8)	1800	10×21	7500	0.10	16	6000

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Rated Voltage (Surge Voltage) (V)	Capacitance (μF)	Size ΦD×L(mm)	L.C. (μA,2min)	Tanδ 120Hz	ESR (mΩ100kHz)	Ripple current (mA/r.m.s) 105°C100kHz
25(28.8)	1800	12.5×16	7500	0.10	16	5900
25(28.8)	2200	12.5×18	7500	0.10	16	6200
25(28.8)	2700	12.5×20	7500	0.11	16	6500
35(41)	10	5×5.7	300	0.12	60	1350
35(41)	10	6.3×4.2	300	0.12	60	1400
35(41)	15	5×5.7	300	0.12	60	1350
35(41)	15	6.3×4.2	300	0.12	60	1400
35(41)	22	5×5.7	300	0.12	60	1450
35(41)	22	6.3×4.2	300	0.12	60	1400
35(41)	33	5×5.7	300	0.12	60	1450
35(41)	33	6.3×4.2	300	0.12	60	1400
35(41)	39	5×7	300	0.12	50	1700
35(41)	39	6.3×5.7	300	0.12	60	1550
35(41)	47	5×7	329	0.12	50	1700
35(41)	47	6.3×5.7	329	0.12	60	1550
35(41)	56	5×7	392	0.12	50	1700
35(41)	56	6.3×5.7	392	0.12	60	1650
35(41)	68	5×8	476	0.12	50	1800
35(41)	68	6.3×5.7	476	0.12	60	1650
35(41)	68	8×6	476	0.12	60	1650
35(41)	82	5×9	574	0.12	50	1900
35(41)	82	6.3×7	574	0.12	50	1900
35(41)	100	6.3×7	700	0.12	50	1900
35(41)	100	8×6	700	0.12	60	1800
35(41)	120	6.3×8	840	0.12	50	2050
35(41)	120	8×7	840	0.12	60	1900
35(41)	150	6.3×9	1050	0.12	50	2150
35(41)	150	8×7	1050	0.12	60	1900
35(41)	180	6.3×10	1260	0.12	40	2500
35(41)	180	8×7	1260	0.12	60	1900
35(41)	220	6.3×11	1540	0.12	40	2600
35(41)	220	8×8	1540	0.12	50	2200
35(41)	220	10×7	1540	0.12	60	2050
35(41)	330	8×10	2310	0.12	30	3100
35(41)	330	10×8	2310	0.12	50	2350
35(41)	390	8×12	2730	0.12	30	3200
35(41)	390	10×10	2730	0.12	50	2550
35(41)	470	8×14	3290	0.12	20	4250
35(41)	470	10×12	3290	0.12	30	3400
35(41)	560	8×16	3920	0.12	20	4550
35(41)	560	10×12	3920	0.12	30	3450
35(41)	680	10×14	4760	0.12	20	4450
35(41)	820	10×16	5000	0.12	20	4700

NPL

■ Standard Size

Rated Voltage (Surge Voltage) (V)	Capacitance (μF)	Size ΦD×L(mm)	L.C. (μA,2min)	Tanδ 120Hz	ESR (mΩ100kHz)	Ripple current (mA/r.m.s) 105°C100kHz
35(41)	820	12.5 × 12.5	5000	0.12	30	3900
35(41)	1000	10 × 18	5000	0.08	20	5000
35(41)	1000	12.5 × 14	5000	0.08	30	4100
35(41)	1200	10 × 21	5000	0.08	20	5300
35(41)	1200	12.5 × 16	5000	0.08	20	5300
35(41)	1500	12.5 × 18	5000	0.09	20	5600
35(41)	1800	12.5 × 20	5000	0.10	20	5850
50(58)	10	5 × 5.7	300	0.12	60	1350
50(58)	10	6.3 × 4.2	300	0.12	60	1400
50(58)	12	5 × 5.7	300	0.12	60	1350
50(58)	12	6.3 × 4.2	300	0.12	60	1400
50(58)	15	5 × 5.7	300	0.12	60	1450
50(58)	15	6.3 × 4.2	300	0.12	60	1400
50(58)	18	5 × 7	300	0.12	60	1450
50(58)	18	6.3 × 5.7	300	0.12	60	1400
50(58)	22	5 × 7	300	0.12	60	1450
50(58)	22	6.3 × 5.7	300	0.12	60	1550
50(58)	33	5 × 9	330	0.12	50	1800
50(58)	33	6.3 × 7	330	0.12	60	1650
50(58)	39	5 × 10	390	0.12	40	2200
50(58)	39	6.3 × 7	390	0.12	60	1650
50(58)	47	6.3 × 8	470	0.12	50	1900
50(58)	47	8 × 7	470	0.12	60	1650
50(58)	56	6.3 × 9	560	0.12	50	1900
50(58)	56	8 × 7	560	0.12	60	1800
50(58)	68	6.3 × 10	680	0.12	50	2150
50(58)	68	8 × 7	680	0.12	60	1800
50(58)	82	6.3 × 11	820	0.12	40	2500
50(58)	82	8 × 8	820	0.12	60	1900
50(58)	100	8 × 9	1000	0.12	50	2200
50(58)	100	10 × 7	1000	0.12	60	2000
50(58)	120	8 × 10	1200	0.12	50	2300
50(58)	120	10 × 7	1200	0.12	60	2050
50(58)	150	8 × 12	1500	0.12	50	2300
50(58)	150	10 × 8	1500	0.12	50	2350
50(58)	180	8 × 14	1800	0.12	40	2800
50(58)	180	10 × 9	1800	0.12	50	2450
50(58)	220	8 × 16	2200	0.12	30	3500
50(58)	220	10 × 12	2200	0.12	40	2900
50(58)	220	10 × 12	2200	0.12	50	2450
50(58)	270	10 × 13	2700	0.12	40	3000
50(58)	330	10 × 16	3300	0.12	30	3800
50(58)	390	10 × 18	3900	0.12	30	3800

NPL

■ Standard Size

Rated Voltage (Surge Voltage) (V)	Capacitance (μF)	Size ΦD×L(mm)	L.C. (μA,2min)	Tanδ 120Hz	ESR (mΩ100kHz)	Ripple current (mA/r.m.s) 105°C100kHz
50(58)	390	12.5×14	3900	0.12	40	3350
50(58)	470	10×21	4700	0.12	30	4050
50(58)	470	12.5×14	4700	0.12	40	3500
50(58)	560	12.5×16	5000	0.12	30	4300
50(58)	680	12.5×20	5000	0.12	30	4550
50(58)	820	12.5×20	5000	0.12	30	4750
63(73)	6.8	5×5.7	300	0.12	60	1350
63(73)	6.8	6.3×4.2	300	0.12	60	1400
63(73)	8.2	5×5.7	300	0.12	60	1450
63(73)	8.2	6.3×4.2	300	0.12	60	1400
63(73)	10	5×7	300	0.12	60	1450
63(73)	10	6.3×4.2	300	0.12	60	1400
63(73)	15	5×7	300	0.12	60	1450
63(73)	15	6.3×5.7	300	0.12	60	1400
63(73)	22	5×9	300	0.12	50	1900
63(73)	22	6.3×7	300	0.12	50	1900
63(73)	33	6.3×8	416	0.12	50	1900
63(73)	33	8×7	416	0.12	60	1800
63(73)	39	6.3×9	491	0.12	50	2150
63(73)	39	8×7	491	0.12	60	1800
63(73)	47	6.3×10	592	0.12	40	2500
63(73)	47	8×8	592	0.12	60	1900
63(73)	56	8×8	706	0.12	50	2200
63(73)	56	10×8	706	0.12	60	1950
63(73)	68	8×9	857	0.12	50	2300
63(73)	68	10×7	857	0.12	60	2050
63(73)	82	8×10	1033	0.12	50	2300
63(73)	82	10×9	1033	0.12	60	2050
63(73)	100	8×12	1260	0.12	40	2700
63(73)	100	10×10	1260	0.12	50	2350
63(73)	120	10×12	1512	0.12	50	2450
63(73)	150	10×13	1890	0.12	40	3000
63(73)	180	10×14	2268	0.12	30	3600
63(73)	220	10×16	2772	0.12	30	3800
63(73)	220	12.5×12.5	2772	0.12	40	3350
63(73)	270	10×21	3402	0.12	30	4050
63(73)	270	12.5×14	3402	0.12	40	3500
63(73)	330	10×21	4158	0.12	30	4350
63(73)	330	12.5×16	4158	0.12	30	4300
63(73)	390	12.5×18	4914	0.12	30	4550
63(73)	470	12.5×20	5000	0.12	30	4750
80(92)	4.7	5×5.7	300	0.12	60	1350
80(92)	4.7	6.3×4.2	300	0.12	60	1400

NPL

■ Standard Size

Rated Voltage (Surge Voltage) (V)	Capacitance (μ F)	Size Φ D×L(mm)	L.C. (μ A,2min)	Tan δ 120Hz	ESR (m Ω 100kHz)	Ripple current (mA/r.m.s) 105°C100kHz
80(92)	6.8	5×5.7	300	0.12	60	1450
80(92)	6.8	6.3×4.2	300	0.12	60	1400
80(92)	8.2	5×7	300	0.12	60	1450
80(92)	8.2	6.3×4.2	300	0.12	60	1400
80(92)	10	5×7	300	0.12	60	1450
80(92)	10	6.3×5.7	300	0.12	60	1400
80(92)	15	5×9	300	0.12	50	1900
80(92)	15	6.3×7	300	0.12	50	1900
80(92)	22	6.3×8	352	0.12	50	1900
80(92)	22	8×7	352	0.12	60	1800
80(92)	33	6.3×10	528	0.12	40	2500
80(92)	33	8×7	528	0.12	60	1800
80(92)	39	6.3×11	624	0.12	40	2600
80(92)	39	8×8	624	0.12	50	2200
80(92)	47	8×9	752	0.12	50	2200
80(92)	47	10×7	752	0.12	60	2050
80(92)	56	8×10	896	0.12	50	2300
80(92)	56	10×9	896	0.12	50	2450
80(92)	68	8×11	1088	0.12	40	2700
80(92)	68	10×9	1088	0.12	50	2450
80(92)	82	8×14	1312	0.12	40	2900
80(92)	82	10×10	1312	0.12	50	2550
80(92)	100	8×16	1600	0.12	30	3500
80(92)	100	10×12	1600	0.12	40	2950
80(92)	120	10×13	1920	0.12	40	3000
80(92)	150	10×16	2400	0.12	30	3800
80(92)	150	12.5×12.5	2400	0.12	40	3350
80(92)	180	10×18	2880	0.12	30	4050
80(92)	180	12.5×14	2880	0.12	40	3500
80(92)	220	10×21	3520	0.12	30	4350
80(92)	220	12.5×16	3520	0.12	30	4300
80(92)	270	12.5×18	4320	0.12	30	4550
80(92)	330	12.5×20	5000	0.12	30	4750
100(115)	2.2	5×5.7	300	0.12	80	1200
100(115)	2.2	6.3×4.2	300	0.12	80	1250
100(115)	3.3	5×5.7	300	0.12	60	1450
100(115)	3.3	6.3×4.2	300	0.12	80	1250
100(115)	4.7	5×7	300	0.12	60	1450
100(115)	4.7	6.3×5.7	300	0.12	80	1350
100(115)	5.6	5×7	300	0.12	60	1450
100(115)	5.6	6.3×5.7	300	0.12	80	1350
100(115)	6.8	5×8	300	0.12	60	1550
100(115)	6.8	6.3×5.7	300	0.12	60	1650

NPL

■ Standard Size

Rated Voltage (Surge Voltage) (V)	Capacitance (μF)	Size ΦD×L(mm)	L.C. (μA,2min)	Tanδ 120Hz	ESR (mΩ100kHz)	Ripple current (mA/r.m.s) 105°C100kHz
100(115)	8.2	5×9	300	0.12	60	1700
100(115)	8.2	6.3×7	300	0.12	60	1650
100(115)	10	6.3×7	300	0.12	60	1650
100(115)	12	6.3×8	300	0.12	50	1900
100(115)	15	6.3×9	300	0.12	50	2150
100(115)	15	8×7	300	0.12	60	1800
100(115)	18	6.3×10	360	0.12	50	2250
100(115)	18	8×8	360	0.12	60	1900
100(115)	22	6.3×12	440	0.12	50	2300
100(115)	22	8×8	440	0.12	50	2200
100(115)	27	8×11	540	0.12	50	2200
100(115)	27	10×7	540	0.12	60	2050
100(115)	33	8×11	660	0.12	50	2300
100(115)	33	10×9	660	0.12	50	2450
100(115)	39	8×14	780	0.12	50	2400
100(115)	39	10×9	780	0.12	50	2450
100(115)	47	10×10	940	0.12	50	2550
100(115)	56	10×12	1120	0.12	50	2650
100(115)	68	10×16	1360	0.12	50	2700
100(115)	82	10×18	1640	0.12	40	3100
100(115)	82	12.5×12.5	1640	0.12	50	3000
100(115)	100	10×21	2000	0.12	40	3500
100(115)	100	12.5×14	2000	0.12	50	3150
100(115)	120	10×21	2400	0.12	40	3750
100(115)	120	12.5×16	2400	0.12	40	3700
100(115)	150	12.5×18	3000	0.12	40	3900
100(115)	180	12.5×20	3600	0.12	40	4100