NP1

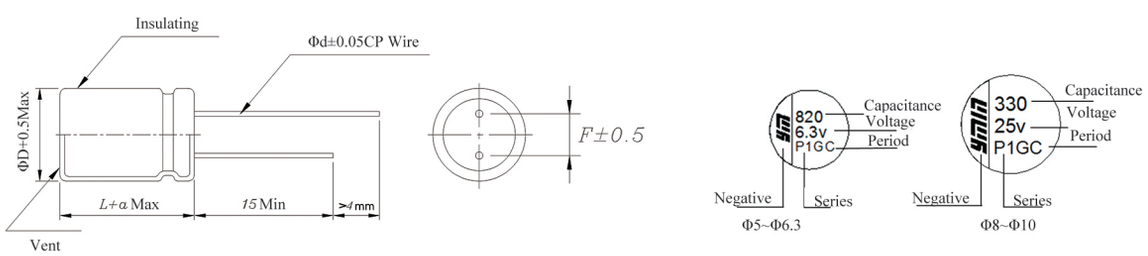
- 105℃ 2000 Hours
- Standard Product
- High Stability, Low ESR, High Frequency
- RoHS Compliant（2011/65/EU）

■ Specification

Items	Characteristics
Operation Temperature Range	-55℃~+105℃
Rated Voltage	6.3~25V
Capacitance Range	10~2500μF 120Hz/20℃
Capacitance Tolerance	±20%(120Hz/20℃)
Dissipation Factor	Less than standard data 120Hz/20℃
Leakage Current	Less than standard data charging 2mins with rated voltage, 20℃
ESR	Less than standard data 100KHz/20℃
Endurance	After load rated voltage for 2000hours at 105℃, the following specification shall be satisfied after placing capacitor for 16 hours at 20℃
	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℃ under the condition of 90%~95%R.H with no load for 1000hrs, the following specifications shall be satisfied after placing capacitor for 16 hours at 20℃.
	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℃ for 2hours, then test the leakage current again at 20℃.

■ Standard Size



Remark:capacitors with diameter more than 6.3 have safety vent

D(±0.5)	5	6.3	8	10
d(±0.05)	0.45/0.50	0.45/0.50	0.6	0.6
F(±0.5)	2.0	2.5	3.5	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

NP1

■ 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	6.3×7	280	0.08	8	4800
6.3(7.2)	150	6.3×7	280	0.08	8	4800
6.3(7.2)	180	6.3×7	280	0.08	8	4800
6.3(7.2)	180	8×8	280	0.08	8	5600
6.3(7.2)	180	8×11	280	0.08	8	6150
6.3(7.2)	220	5×9	280	0.08	10	4150
6.3(7.2)	220	6.3×7	280	0.08	8	4800
6.3(7.2)	220	8×8	280	0.08	8	5600
6.3(7.2)	220	8×11	280	0.08	8	6150
6.3(7.2)	270	5×9	340	0.08	10	4150
6.3(7.2)	270	6.3×7	340	0.08	8	4800
6.3(7.2)	270	8×8	340	0.08	8	5600
6.3(7.2)	270	8×11	340	0.08	8	6150
6.3(7.2)	330	5×9	416	0.08	10	4150
6.3(7.2)	330	5×11	416	0.08	10	4500
6.3(7.2)	330	6.3×7	416	0.08	8	4800
6.3(7.2)	330	8×8	416	0.08	8	5600
6.3(7.2)	330	8×11	416	0.08	8	6150
6.3(7.2)	390	6.3×7	491	0.08	8	4800
6.3(7.2)	390	6.3×9	491	0.08	8	5250
6.3(7.2)	390	8×8	491	0.08	8	5600
6.3(7.2)	390	8×11	491	0.08	8	6150
6.3(7.2)	470	6.3×9	592	0.08	8	5250
6.3(7.2)	470	6.3×10	592	0.08	8	5500
6.3(7.2)	470	8×8	592	0.08	8	5600
6.3(7.2)	470	8×11	592	0.08	8	6150
6.3(7.2)	560	6.3×9	706	0.08	8	5250
6.3(7.2)	560	8×8	706	0.08	8	5600
6.3(7.2)	560	8×11	706	0.08	8	6150
6.3(7.2)	680	6.3×10	857	0.08	8	5500
6.3(7.2)	680	8×8	857	0.08	8	5600
6.3(7.2)	680	8×11	857	0.08	8	6150
6.3(7.2)	680	10×12	857	0.08	8	6640
6.3(7.2)	820	8×11	1033	0.08	8	6150
6.3(7.2)	820	10×12	1033	0.08	8	6640
6.3(7.2)	1000	8×11	1260	0.08	8	6150
6.3(7.2)	1000	10×12	1260	0.08	8	6640
6.3(7.2)	1200	8×11	1512	0.08	8	6150
6.3(7.2)	1200	10×12	1512	0.08	8	6640
6.3(7.2)	1500	10×12	1890	0.09	8	6640
6.3(7.2)	2000	10×12	2520	0.10	8	6640
6.3(7.2)	2200	10×12	2772	0.10	8	6640
6.3(7.2)	2500	10×12	3150	0.11	8	6640

NP1

■ 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
7.5(8.6)	270	5×7	405	0.08	12	3400
7.5(8.6)	330	5×9	495	0.08	12	3800
7.5(8.6)	390	5×10	585	0.08	10	4350
7.5(8.6)	470	5×11	705	0.08	10	4500
7.5(8.6)	680	6.3×9	1020	0.08	9	5000
7.5(8.6)	680	6.3×11	1020	0.08	8	5700
7.5(8.6)	1000	8×11	1500	0.08	8	6150
10(11.5)	33	6.3×5	280	0.08	30	2200
10(11.5)	39	6.3×5	280	0.08	30	2200
10(11.5)	47	6.3×7	280	0.08	12	3900
10(11.5)	68	6.3×7	280	0.08	12	3900
10(11.5)	82	6.3×7	280	0.08	12	3900
10(11.5)	100	6.3×7	280	0.08	12	3900
10(11.5)	100	5×7	280	0.08	15	3050
10(11.5)	150	5×11	300	0.08	12	4100
10(11.5)	150	6.3×7	300	0.08	12	3900
10(11.5)	180	5×11	360	0.08	12	4100
10(11.5)	180	6.3×9	360	0.08	12	4300
10(11.5)	180	8×8	360	0.08	10	5100
10(11.5)	180	8×11	360	0.08	9	5800
10(11.5)	220	6.3×9	440	0.08	12	4300
10(11.5)	220	8×8	440	0.08	10	5100
10(11.5)	220	8×11	440	0.08	9	5800
10(11.5)	270	6.3×9	540	0.08	12	4300
10(11.5)	270	6.3×11	540	0.08	9	5400
10(11.5)	270	8×8	540	0.08	10	5100
10(11.5)	270	8×11	540	0.08	9	5800
10(11.5)	330	6.3×11	660	0.08	9	5400
10(11.5)	330	8×8	660	0.08	10	5100
10(11.5)	330	8×11	660	0.08	9	5800
10(11.5)	390	6.3×11	780	0.08	9	5400
10(11.5)	390	8×8	780	0.08	10	5100
10(11.5)	390	8×11	780	0.08	9	5800
10(11.5)	470	6.3×11	940	0.08	9	5400
10(11.5)	470	8×8	940	0.08	10	5100
10(11.5)	470	8×11	940	0.08	9	5800
10(11.5)	560	8×11	1120	0.08	9	5800
10(11.5)	680	8×11	1360	0.08	9	5800
10(11.5)	680	10×12	1360	0.08	9	6300
10(11.5)	820	10×12	1640	0.08	9	6300
10(11.5)	1000	10×12	2000	0.08	9	6300
10(11.5)	1200	10×12	2400	0.08	9	6300
10(11.5)	1500	10×12	3000	0.09	9	6300

NP1

■ 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
16(18.4)	22	6.3×7	280	0.08	15	3500
16(18.4)	33	6.3×7	280	0.08	15	3500
16(18.4)	47	6.3×7	280	0.08	15	3500
16(18.4)	68	6.3×7	280	0.08	15	3500
16(18.4)	82	6.3×7	280	0.08	15	3500
16(18.4)	100	6.3×7	320	0.08	15	3500
16(18.4)	100	6.3×11	320	0.08	10	5100
16(18.4)	100	8×11	320	0.08	10	5500
16(18.4)	150	6.3×10	480	0.08	10	4900
16(18.4)	150	8×8	480	0.08	12	4500
16(18.4)	180	6.3×7	576	0.08	15	3500
16(18.4)	180	6.3×11	576	0.08	10	5100
16(18.4)	180	8×8	576	0.08	12	4500
16(18.4)	180	8×11	576	0.08	10	5500
16(18.4)	220	6.3×10	704	0.08	10	4900
16(18.4)	220	8×8	704	0.08	12	4500
16(18.4)	220	8×11	704	0.08	10	5500
16(18.4)	270	6.3×10	864	0.08	10	4900
16(18.4)	270	8×8	864	0.08	12	4500
16(18.4)	270	8×11	864	0.08	10	5500
16(18.4)	270	10×12	864	0.08	10	6000
16(18.4)	330	8×8	1056	0.08	12	4500
16(18.4)	330	8×11	1056	0.08	10	5500
16(18.4)	330	10×12	1056	0.08	10	6000
16(18.4)	390	8×8	1248	0.08	12	4500
16(18.4)	390	8×11	1248	0.08	10	5500
16(18.4)	390	10×12	1248	0.08	10	6000
16(18.4)	470	8×11	1504	0.08	10	5500
16(18.4)	470	10×12	1504	0.08	10	6000
16(18.4)	560	8×11	1792	0.08	10	5500
16(18.4)	560	10×12	1792	0.08	10	6000
16(18.4)	680	10×12	2176	0.08	10	6000
16(18.4)	820	10×12	2624	0.08	10	6000
16(18.4)	1000	10×12	3200	0.08	10	6000
16(18.4)	1000	8×16	3200	0.08	8	7100
25(28.8)	10	6.3×7	280	0.08	16	3400
25(28.8)	15	6.3×7	280	0.08	16	3400
25(28.8)	22	6.3×7	280	0.08	16	3400
25(28.8)	22	6.3×9	280	0.08	16	3750
25(28.8)	33	6.3×9	280	0.08	16	3750
25(28.8)	39	6.3×9	280	0.08	16	3750
25(28.8)	39	8×8	280	0.08	16	3900
25(28.8)	39	8×11	280	0.08	16	4400

NP1

■ 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
25(28.8)	47	6.3×11	280	0.08	20	3650
25(28.8)	47	8×8	280	0.08	16	3900
25(28.8)	47	8×11	280	0.08	16	4400
25(28.8)	68	8×8	340	0.08	16	3900
25(28.8)	68	8×11	340	0.08	16	4400
25(28.8)	82	8×8	410	0.08	16	3900
25(28.8)	82	8×11	410	0.08	16	4400
25(28.8)	100	8×11	500	0.08	16	4400
25(28.8)	100	10×12	500	0.08	16	4700
25(28.8)	150	8×11	750	0.08	16	4400
25(28.8)	150	10×12	750	0.08	16	4700
25(28.8)	180	8×11	900	0.08	16	4400
25(28.8)	180	10×12	900	0.08	16	4700
25(28.8)	220	8×11	1100	0.08	16	4400
25(28.8)	220	10×12	1100	0.08	16	4700
25(28.8)	270	8×11	1350	0.08	16	4400
25(28.8)	270	10×12	1350	0.08	16	4700
25(28.8)	330	10×12	1650	0.08	16	4700
25(28.8)	390	10×12	1950	0.08	16	4700
25(28.8)	470	10×12	2350	0.08	16	4700
25(28.8)	560	10×12	2800	0.08	16	4700
25(28.8)	680	8×16	3400	0.08	16	5050
25(28.8)	820	10×12	4100	0.08	16	4700
25(28.8)	1000	10×16	5000	0.08	16	5300