NPH

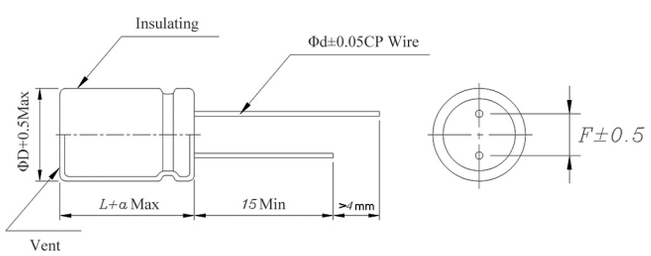
- 105℃ 2000 Hours
- High Voltage
- High Stability, Low ESR, High Frequency
- RoHS Compliant（2011/65/EU）

■ Specification

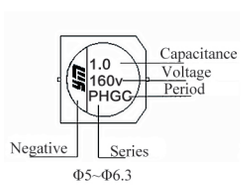
Items	Characteristics
Operation Temperature Range	-55℃~+105℃
Rated Voltage	125~250V
Capacitance Range	1.0~82μF 120Hz/20℃
Capacitance Tolerance	±20%(120Hz/20℃)
Dissipation Factor	Less than standard data 120Hz/20℃
Leakage Current	Less than standard data charging 2mins with rated voltage, 20℃
ESR	Less than 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℃.

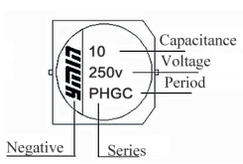
■ Standard Size



Remark:capacitors with diameter more than 6.3 have safety vent

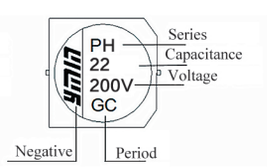


Φ5~Φ6.3



Φ8~Φ10

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



Φ12.5

■ 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
125(144)	1.5	6.3×5.7	300	0.12	400	1200
125(144)	2.2	6.3×5.7	300	0.12	400	1200
125(144)	2.7	6.3×7	300	0.12	350	1550
125(144)	3.3	6.3×7	300	0.12	350	1550
125(144)	4.7	6.3×9	300	0.12	250	1700
125(144)	4.7	8×6.2	300	0.12	200	1250
125(144)	5.6	6.3×9	300	0.12	250	1700
125(144)	5.6	8×7	300	0.12	200	1450
125(144)	6.8	6.3×11	300	0.12	200	1850
125(144)	6.8	8×8	300	0.12	200	1450
125(144)	8.2	6.3×11	300	0.12	200	1850
125(144)	8.2	8×9	300	0.12	80	1800
125(144)	10	8×9	300	0.12	80	1800
125(144)	12	8×11.5	300	0.12	80	1980
125(144)	12	10×7	300	0.12	100	1500
125(144)	15	8×11.5	375	0.12	80	1980
125(144)	15	10×9	375	0.12	80	1950
125(144)	18	8×13	450	0.12	80	2100
125(144)	18	10×10	450	0.12	80	2050
125(144)	22	8×15	550	0.12	60	2550
125(144)	22	10×11	550	0.12	80	2100
125(144)	27	8×16	675	0.12	60	2600
125(144)	27	10×13	675	0.12	80	2200
125(144)	33	10×16	825	0.12	60	2700
125(144)	39	10×17	975	0.12	60	2700
125(144)	39	12.5×12.5	975	0.12	80	2350
125(144)	47	10×18	1175	0.12	60	2800
125(144)	47	12.5×14	1175	0.12	80	2450
125(144)	56	10×21	1400	0.12	60	3000
125(144)	56	12.5×16	1400	0.12	60	3000
125(144)	68	12.5×18	1700	0.12	60	3200
125(144)	82	12.5×20	2050	0.12	60	3350
160(184)	1	5×5	300	0.12	500	1200
160(184)	1.2	5×5	300	0.12	500	1200
160(184)	1.5	6.3×5.7	300	0.12	400	1200
160(184)	2.2	6.3×7	300	0.12	350	1400
160(184)	3.3	6.3×9	300	0.12	250	1700
160(184)	3.3	8×7	300	0.12	200	1450
160(184)	4.7	6.3×11	300	0.12	200	1850
160(184)	4.7	8×8	300	0.12	150	1500
160(184)	5.6	6.3×11	300	0.12	200	1850
160(184)	5.6	8×7	300	0.12	200	1450
160(184)	6.8	6.3×11	300	0.12	200	1850

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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
160(184)	6.8	8×9	300	0.12	80	1800
160(184)	8.2	8×9	300	0.12	80	1800
160(184)	8.2	10×7	300	0.12	100	1500
160(184)	10	8×11.5	320	0.12	80	1980
160(184)	10	10×9	320	0.12	80	1950
160(184)	12	8×11.5	384	0.12	80	1980
160(184)	12	10×9	384	0.12	80	1950
160(184)	15	8×13	480	0.12	80	2100
160(184)	15	10×10	480	0.12	80	2100
160(184)	18	8×15	576	0.12	60	2550
160(184)	18	10×11	576	0.12	80	2100
160(184)	22	8×17	704	0.12	60	2650
160(184)	22	10×13	704	0.12	80	2200
160(184)	27	8×17	864	0.12	60	2650
160(184)	27	10×15	864	0.12	60	2700
160(184)	33	10×17	1056	0.12	60	2750
160(184)	39	10×18	1248	0.12	60	2800
160(184)	39	12.5×14	1248	0.12	80	2450
160(184)	47	12.5×16	1504	0.12	80	2600
160(184)	56	12.5×18	1792	0.12	60	3200
160(184)	68	12.5×20	2176	0.12	60	3350
200(230)	1	6.3×5.7	300	0.12	400	1200
200(230)	1.5	6.3×7	300	0.12	350	1400
200(230)	2.2	6.3×9	300	0.12	250	1700
200(230)	3.3	8×7	300	0.12	200	1450
200(230)	3.9	8×9	300	0.12	100	1450
200(230)	4.7	8×9	300	0.12	80	1800
200(230)	4.7	10×7	300	0.12	100	1500
200(230)	5.6	8×11.5	300	0.12	80	1980
200(230)	6.8	8×11.5	300	0.12	80	1980
200(230)	6.8	10×9	300	0.12	80	1950
200(230)	8.2	8×14	328	0.12	80	2150
200(230)	8.2	10×9	328	0.12	80	1950
200(230)	10	8×16	400	0.12	60	2600
200(230)	10	10×12	400	0.12	80	2150
200(230)	15	10×13	600	0.12	80	2200
200(230)	18	10×16	720	0.12	60	2700
200(230)	18	12.5×12.5	720	0.12	60	2700
200(230)	22	12.5×14	880	0.12	80	2450
250(288)	4.7	8×11.5	300	0.12	80	1980
250(288)	6.8	8×14	340	0.12	80	2150
250(288)	6.8	10×11	340	0.12	80	2150
250(288)	8.2	8×16	410	0.12	60	2600
250(288)	8.2	10×12	410	0.12	80	2150
250(288)	10	10×12	500	0.12	80	2150