

# PC series

- Low ESR at high frequency range.
- Rated voltage :2.5~63V.
- Endurance:15,000hours at 105°C
- Applications:LCD Monitor,LCD-TV,D/A Inverter,SPS,D/D Converter.etc.
- ROHS compliant
- Halogen Free compliant



## SPECIFICATIONS

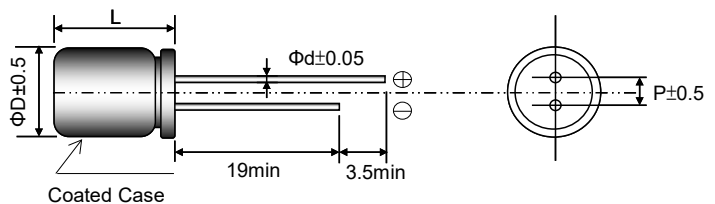
Items	Conditions	Characteristics	
Category Temperature Range	—	-55 to +105°C	
Rated Voltage Range	—	2.5~63V	
Capacitance Tolerance	at 20°C,120HZ	±20%(M)	
Surge Voltage	at 105°C	Rated voltage ×1.15V	
Leakage Current	at 20°CAfter 2 minutes	I≤0.2CV or 300(μA) Whichever is greater measured,after 2minutes application of rated working voltage at +20°C. Please see the attached characteristics list	
Dissipation Factor ( tan δ)	at 20°C,120Hz	Please see the attached characteristics list	
Low Temperature Characteristics (Max. Impedance Ratio)	at -55°C,100kHz	Z(-55°C)/Z(+20°C) ≤ 1.25	
	at -25°C,100kHz	Z(-25°C)/Z(+20°C) ≤ 1.15	
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20°Cafter the rated voltage is applied for 15,000 hours at 105°C.	Appearance	No significant damage.
		Capacitance change	±20% of the initial value.
		DF(tanδ)	≤150% of the initial specified value.
		ESR	≤150% of the initial specified value.
		Leakage current	≤The initial specified value.
Damp Heag (Steady State)	The following specifications shall be satisfied when the capacitors are restored to 20°C after subjecting them to subjecting them to store at 60°C, 90 to 95% RH for 1,000 hours ,without DC applied.	Appearance	No significant damage.
		Capacitance change	±20% of the initial value.
		DF(tanδ)	≤150% of the initial specified value.
		ESR	≤150% of the initial specified value.
		Leakage current	≤The initial specified value.
Surge Voltage	The capacitors shall be subjected to 1,000 cycles each consisting of charge with the surge voltages specified at 105°C for 30 seconds through aprotective resistor (R=1kΩ) and discharge for 5 minutes 30seconds	Appearance	No significant damage.
		Capacitance change	±20% of the initial value.
		DF(tanδ)	≤150% of the initial specified value.
		ESR	≤150% of the initial specified value.
		Leakage current	≤The initial specified value.

※ Note:If any doubt arises,measure the leakage current after following voltage treatment.  
Voltage treatment :DC rated voltage are applied to the capacitors for 120 minutes at 105°C.

## MARKING AND DIMENSIONS

**Polarity Marking (Cathode)**

**Series Code**  
**Rated Capacitance**  
**Rated Voltage**



(Unit:mm)

Size	5X6	6.3X6	6.3X9	6.3X10.5	8X8	8X11.5	8X14	8X16	8X20	10X11.5	10X14	10X16
ΦD	5	6.3	6.3	6.3	8	8	8	8	8	10	10.0	10.0
L	L+1.0 max	L+1.0 max	L+1.0 max	L+1.5 max	L+1.5 max	L+1.5 max	L+1.0 max	L+1.0 max	L+1.5 max	L+1.5 max	L+1.0 max	L+1.5 max
Φd	0.45	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
P	2.0	2.5	2.5	2.5	3.5	3.5	3.5	3.5	3.5	5.0	5.0	5.0

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STANDARD RATINGS

Rated Voltage (S.V.)	Cap (μF)	Size Code DxL	Leakage current (μA) max.	ESR (mΩ) max. 100k to 300kHz / 20°C	Rated Ripple Current (mA rms) 100kHz / 105°C	D.F. (tanδ) max. 120Hz / 20°C
2.5 (2.9)	560	6.3×9	300	8	5080	0.12
	560	8×8	300	7	5820	0.12
	820	6.3×9	410	8	5080	0.12
	1200	8×8	600	7	5580	0.12
	1500	8×11.5	750	7	5820	0.12
	2,700	10×11.5	1350	7	6100	0.12
4 (4.6)	560	6.3×9	448	8	5080	0.12
	560	8×8	448	7	5580	0.12
	680	8×8	544	7	5580	0.12
	820	8×11.5	656	7	5820	0.12
	2200	10×11.5	1760	7	6100	0.12
6.3 (7.2)	100	5×6	300	13	1500	0.12
	220	5×8	300	12	2400	0.12
	470	6.3×9	592	10	4500	0.12
	560	6.3×9	706	10	5080	0.12
	560	8×8	706	10	5580	0.12
	1,000	8×11.5	1260	7	5820	0.12
	1,000	10×11.5	1260	7	6200	0.12
	2,200	10×11.5	2772	7	6200	0.12
10 (11.5)	220	6.3×9	440	10	2820	0.12
	270	6.3×9	540	10	5580	0.12
	560	8×8	1120	8	5580	0.12
	680	8×8	1360	9	5580	0.12
	820	8×11.5	1640	9	5820	0.12
	1,000	10×11.5	2000	9	6100	0.12
	1500	10×11.5	3000	9	6100	0.12
16 (18.4)	82	6.3×6	300	30	2200	0.12
	100	6.3×6	320	30	2200	0.12
	220	6.3×9	704	15	3500	0.12
	270	6.3×9	864	15	3500	0.12
	330	6.3×10.5	1056	15	3500	0.12
	470	8×8	1504	13	4500	0.12
	470	8×11.5	1504	13	5400	0.12
	470	10×11.5	1504	13	6100	0.12
	560	8×11.5	1792	16	5400	0.12
	680	10×11.5	2176	16	6100	0.12
	820	10×11.5	2624	10	6100	0.12
	1000	8×16	3200	10	6100	0.12
	1000	10×12	3200	10	6100	0.12
	1500	8×20	4800	8	6100	0.12
	1500	10×16	4800	8	6500	0.12
1800	10×20	5760	8	6800	0.12	
2200	10×20	7040	8	6800	0.12	

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20 (23)	22	6.3×6	300	60	1450	0.12
	82	6.3×6	328	60	1450	0.12
	220	6.3×9	880	40	1620	0.12
	330	8×8	1320	40	2400	0.12
	470	8x11.5	1880	24	3320	0.12
	820	10x11.5	3280	20	3800	0.12
25 (28.8)	6.8	6.3×6	300	80	1200	0.12
	47	6.3×6	300	40	2000	0.12
	100	6.3×9	500	30	2150	0.12
	180	8×8	900	30	2580	0.12
	220	8x11.5	1100	25	3200	0.12
	330	10x10	1650	28	3800	0.12
	470	10x11.5	2350	25	4100	0.12
	560	10x14	2800	16	4500	0.12
	680	8X16	3400	16	4600	0.12
	820	10x14	4100	16	5000	0.12
35 (40.3)	22	6.3x6	300	70	1450	0.12
	68	6.3x9	476	40	1500	0.12
	82	8x7	574	60	1800	0.12
	100	8x8	700	30	2100	0.12
	100	8x11.5	700	26	2300	0.12
	100	10x11.5	700	24	3000	0.12
	150	8x8	1050	30	2500	0.12
	180	8x11.5	1260	26	2800	0.12
	220	10x10	1540	26	3000	0.12
	220	10x11.5	1540	24	3200	0.12
	330	10x11.5	2310	24	3600	0.12
	470	10x16	3290	20	5000	0.12
50 (57.5)	12	6.3×9	300	60	1500	0.12
	33	6.3x9	330	60	1500	0.12
	33	8x7	330	60	1500	0.12
	47	8x8	470	32	1850	0.12
	68	8x11.5	680	30	2250	0.12
	47	8x11.5	470	30	2250	0.12
	100	10x11.5	1000	28	2560	0.12
	150	10x11.5	1500	28	2620	0.12
63 (72.5)	22	6.3x9	300	60	1500	0.12
	33	8x8	415	32	2050	0.12
	33	10x10	415	32	2200	0.12
	47	8x11.5	592	26	2200	0.12
	56	10x10	705	30	2300	0.12
	82	10x11.5	1033	26	2350	0.12
	100	10x11.5	1260	25	2550	0.12

## FREQUENCY COEFFICIENT FOR RIPPLE CURRENT

Frequency	120Hz ≤ f < 1kHz	1kHz ≤ f < 10kHz	10kHz ≤ f < 100kHz	100kHz ≤ f < 500kHz
Coefficient	0.05	0.3	0.7	1.0