

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



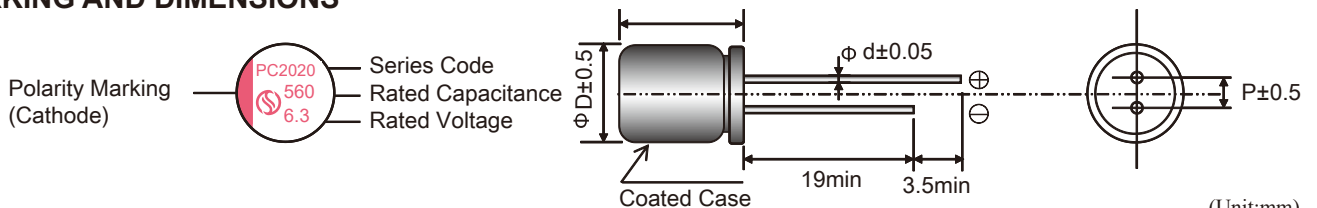
PC

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.
Dissipation Factor (tan δ)	at 20°C,120Hz	Please see the attached characteristics list
Characteristics of Impedance at low, high temperature	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 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



Size Code	5X6	6.3X6	6.3X9	6.3X11	8X8	8X12	8X14	8X16	8X20	10X12	10X14	10X16
φ D	5	6.3	6.3	6.3	8	8	8	8	8	10.0	10.0	10.0
L	L+1.0 max	L+1.0 max	L+1 max	L+1.0 max	L+1.5 max	L+1.0 max	L+1.0 max	L+1.0 max	L+1.5 max	L+1.0 max	L+1.0 max	L+1.5 max
φ d	0.45	0.45	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
P	2	2.5	2.5	2.5	3.5	3.5	3.5	3.5	3.5	5.0	5.0	5.0

PC SERIES STANDARD CHARACTERISTICS LIST

Rated Voltage (S.V.)	Cap (μF)	Size DxL	Leakage current (μA) max. ※2	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	5,080	0.12
	560	8×8	300	7	5,820	0.12
	820	6.3×9	410	8	5,080	0.12
	1200	8×8	600	7	5,580	0.12
	1500	8×12	750	7	5,820	0.12
	2,700	10×12	1,350	7	6,100	0.12
4 (4.6)	560	6.3×9	448	8	5,080	0.12
	560	8×8	448	7	5,580	0.12
	680	8×8	544	7	5,580	0.12
	820	8×12	656	7	5,820	0.12
	2200	10×12	1,760	7	6,100	0.12
6.3 (7.2)	100	5×6	300	13	1,500	0.12
	220	5×8	300	12	2,400	0.12
	470	6.3×9	592	10	4,500	0.12
	560	6.3×9	706	10	5,080	0.12
	560	8×8	706	10	5,580	0.12
	1,000	8×12	1,260	7	5,820	0.12
	1,000	10×12	1,260	7	6,200	0.12
	2,200	10×12	2,772	7	6,200	0.12
10 (11.5)	220	6.3×9	440	10	2,820	0.12
	270	6.3×9	540	10	5,580	0.12
	560	8×8	1,120	8	5,580	0.12
	680	8×8	1,360	9	5,580	0.12
	820	8×12	1,640	9	5,820	0.12
	1,000	10×12	2,000	9	6,100	0.12
	1500	10×12	3,000	9	6,100	0.12
16 (18.4)	82	6.3×6	300	30	2,200	0.12
	100	6.3×6	320	30	2,200	0.12
	220	6.3×9	704	15	3,500	0.12
	270	6.3×9	864	15	3,500	0.12
	330	6.3×11	1,056	15	3,500	0.12
	470	8×8	1,504	13	4,500	0.12
	470	8×12	1,504	13	5,400	0.12
	470	10×12	1,504	13	6,100	0.12
	560	8×12	1,792	16	5,400	0.12
	680	10×12	2,176	16	6,100	0.12
	820	10×12	2,624	10	6,100	0.12
	1000	8×16	3,200	10	6,100	0.12
	1000	10×12	3,200	10	6,100	0.12
	1500	8×20	4,800	8	6,100	0.12
	1500	10×16	4,800	8	6,500	0.12
	1800	10×20	5,760	8	6,800	0.12
2200	10×20	7,040	8	6,800	0.12	

※ 1. Capacitance tolerance : ±20%(M)
 ※ 2. After 2 minutes

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PC SERIES STANDARD CHARACTERISTICS LIST

Rated Voltage (S.V.)	Cap (μF)	Size DxL	Leakage current (μA) max. ※2	ESR (mΩ) max. 100k to 300kHz / 20°C	Rated Ripple Current (mA rms) 100kHz / 105°C	D.F. (tanδ) max. 120Hz / 20°C
20 (23)	22	6.3×6	300	60	1,450	0.12
	82	6.3×6	328	60	1,450	0.12
	220	6.3×9	880	40	1,620	0.12
	330	8×8	1,320	40	2,400	0.12
	470	8×12	1,880	24	3,320	0.12
	820	10×12	3,280	20	3800	0.12
25 (28.8)	6.8	6.3×6	300	80	1,200	0.12
	47	6.3×6	300	40	2,000	0.12
	100	6.3×9	500	30	2150	0.12
	180	8×8	900	30	2580	0.12
	220	8×12	1100	25	3200	0.12
	330	10×10	1650	28	3800	0.12
	470	10×12	2350	25	4100	0.12
	560	10×14	2800	16	4500	0.12
	680	8×16	3400	16	4600	0.12
820	10×14	4100	16	5000	0.12	
35 (40.3)	22	6.3×6	300	70	1,450	0.12
	68	6.3×9	476	40	1,500	0.12
	82	8×7	574	60	1,800	0.12
	100	8×8	700	30	2,100	0.12
	100	8×12	700	26	2,300	0.12
	100	10×12	700	24	3,000	0.12
	150	8×8	1,050	30	2,500	0.12
	180	8×12	1,260	26	2,800	0.12
	220	10×10	1,540	26	3,000	0.12
	220	10×12	1,540	24	3,200	0.12
	330	10×12	2,310	24	3,600	0.12
	470	10×16	3,290	20	5,000	0.12
	50 (57.5)	12	6.3×9	300	60	1,500
33		6.3×9	330	60	1,500	0.12
33		8×7	330	60	1,500	0.12
47		8×8	470	32	1,850	0.12
68		8×12	680	30	2,250	0.12
47		8×12	470	30	2,250	0.12
100		10×12	1,000	28	2,560	0.12
150		10×12	1,500	28	2,620	0.12
63 (72.5)	22	6.3×9	300	60	1,500	0.12
	33	8×8	415	32	2,050	0.12
	33	10×10	415	32	2,200	0.12
	47	8×12	592	26	2,200	0.12
	56	10×10	705	30	2,300	0.12
	82	10×12	1,033	26	2,350	0.12
	100	10×12	1,260	25	2,550	0.12

※ 1. Capacitance tolerance : ±20%(M)

※ 2. After 2 minutes

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

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