

PF series

+105°C, Low ESR, Long life(低阻抗, 长寿命)

◆ FEATURES

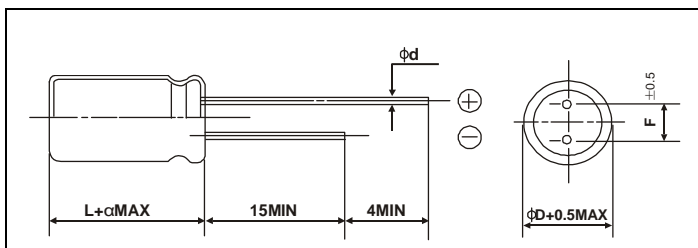
- Low ESR and long life
- Endurance: 5000 hours at 105°C
- RoHS Compliant and lead-free.
- Recommended Application: System board, Display Card, Small Charger, Intelligent TV.



◆ SPECIFICATIONS

Items	Characteristics														
Category Temperature Range	-55~+105°C														
Rated Voltage Range	2.5~25V.DC														
Nominal Capacitance Range	10~2200μ F														
Capacitance Tolerance	±20%(120Hz,+20°C)														
Leakage Current(MAX, 20°C)	I=0.2CV or 500uA, whichever is greater. after 2 minutes with rated working voltage														
Dissipation Factor(MAX) Tanδ (20°C, 120Hz)	<table border="1"> <tr> <td>Rated Voltage(V)</td> <td>2.5</td> <td>4</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> </tr> <tr> <td>Tanδ (Max)</td> <td colspan="3">0.08</td> <td colspan="3">0.12</td> </tr> </table>	Rated Voltage(V)	2.5	4	6.3	10	16	25	Tanδ (Max)	0.08			0.12		
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Tanδ (Max)	0.08			0.12											
ESR(100K~300KHz, 20°C)	Value in characteristics table														
Temperature Characteristic (Impedance Ratio at 100KHz)	Z(+105°C)/ Z(+20°C) ≤ 1.25 Z(-55°C) / Z(+20°C) ≤ 1.25														
Load Life	After applying rated voltage with max ripple current for 5000 hrs at 105°C, the capacitors shall meet the following requirements														
	<table border="1"> <tr> <td>Capacitance Change</td> <td>Within ±20% of the initial value</td> </tr> <tr> <td>Dissipation Factor</td> <td>Not more than 150% of the specified value</td> </tr> <tr> <td>ESR</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	Dissipation Factor	Not more than 150% of the specified value	ESR	Not more than 150% of the specified value	Leakage Current	Not more than the specified value						
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	ESR	Not more than 150% of the specified value													
Leakage Current	Not more than the specified value														
Humidity Test	After subjecting 90 to 95% RH for 2000 hours at 60°C, no voltage, The capacitors shall meet The requirement as Endurance.														
Surge Test	After subjecting to 1000 cycles each consisting of charge with the surge voltage specified at Normal temperature for 30 seconds through a protective resistor and discharge for 5 minutes 30 seconds, the capacitors shall meet the following requirements.														
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Leakage Current	Not more than the specified value														

◆ CASE SIZE TABLE



φD	5	6.3	8	10
F	2.0	2.5	3.5	5.0
φd	0.5		0.6	
α	L+1.0 max			

◆ STANDARD RATINGS

V.DC (SV)	Cap	Size	ESR	Ripple Current	Leakage Current
	(μ F)	Φ D \times L(mm)	($m\Omega/20^\circ\text{C}, 100\text{kHz}$)	($m\text{Arms}/20^\circ\text{C}, 100\text{kHz}$)	($\mu\text{A}/\text{max}$)
2.5V (2.9)	390	6.3 \times 11	20	2160	500
	560	6.3 \times 9	10	4000	500
	560	8 \times 9	7	6100	500
	820	6.3 \times 9	7	5000	500
	820	8 \times 9	7	6100	500
	1200	8 \times 11	8	6100	600
	1200	10 \times 12	8	6100	600
	1500	10 \times 12	8	6100	750
6.3V (7.2)	560	6.3 \times 9	15	4710	500
	560	8 \times 9	10	6100	500
	560	8 \times 11	10	6100	500
	680	8 \times 9	7	6100	544
	820	8 \times 11	7	6100	656
	1000	6.3 \times 11	15	6100	800
	1200	10 \times 12	8	6640	960
	47	6.3 \times 6	50	1100	500
	82	6.3 \times 6	50	1100	500
	100	5 \times 7	70	1100	500
	100	6.3 \times 6	50	1100	500
	150	4 \times 7	70	1100	500
	150	5 \times 7	70	1100	500
	220	5 \times 8	30	3500	600
	220	6.3 \times 6	30	3160	600
	220	6.3 \times 9	18	2160	600
	270	5 \times 8	30	3700	500
	270	8 \times 9	10	3220	500
	330	5 \times 8	40	3220	500
	330	5 \times 11	40	3220	500
	330	6.3 \times 6	30	3160	500
	390	5 \times 9	30	3220	500
	390	8 \times 9	10	3700	500
	470	6.3 \times 9	15	3220	592
	470	8 \times 9	8	5580	592
	560	6.3 \times 9	8	5080	706
	560	8 \times 9	8	6100	706
	680	6.3 \times 9	8	5080	857
	680	6.3 \times 11	20	5080	857
	680	8 \times 9	9	5860	857
	680	8 \times 11	9	5860	857
	820	6.3 \times 11	9	5030	1033
	820	8 \times 9	9	5860	1033
	820	8 \times 11	8	5860	1033
	820	10 \times 12	7	6640	1033
	1000	8 \times 9	10	5580	1260
1000	8 \times 11	10	5580	1260	
1000	10 \times 10	10	6100	1260	

STANDARD RATINGS

V.DC (SV)	Cap	Size	ESR	Ripple Current	Leakage Current
	(μ F)	Φ D \times L(mm)	($m\Omega$ /20°C,100kHz)	(mArms/20°C,100kHz)	(μ A/max)
6.3V (7.2)	1000	10 \times 12	7	6100	1260
	1200	8 \times 11	8	4700	1512
	1500	10 \times 10	10	5560	1890
	1500	10 \times 12	10	5560	1890
	2000	10 \times 12	10	5560	2520
	2200	10 \times 12	10	4700	2772
10V (11.5)	47	6.3 \times 9	25	2900	500
	47	6.3 \times 11	25	2900	500
	68	6.3 \times 9	25	2900	500
	100	5 \times 8	45	2820	500
	100	5 \times 11	30	2820	500
	100	6.3 \times 9	25	2820	500
	220	5 \times 11	30	2820	500
	220	6.3 \times 6	30	2700	500
	220	6.3 \times 11	15	3200	500
	220	8 \times 9	12	3200	500
	270	6.3 \times 9	25	4420	540
	330	6.3 \times 9	25	2820	660
	330	6.3 \times 11	20	2820	660
	330	8 \times 9	11	5000	660
	330	8 \times 11	11	5080	660
	390	8 \times 11	11	5080	780
	470	6.3 \times 11	20	3160	940
	470	8 \times 9	11	3900	940
	470	8 \times 11	11	3900	940
	470	10 \times 12	10	6100	940
	560	6.3 \times 11	15	3160	1120
	560	8 \times 9	10	5600	1120
	560	8 \times 11	10	6100	1120
	560	10 \times 10	10	5600	1120
	560	10 \times 12	10	6100	1120
	680	6.3 \times 11	15	3900	1360
	680	8 \times 11	12	3900	1360
	680	10 \times 10	12	6100	1360
	680	10 \times 12	10	6100	1360
	820	8 \times 11	12	3900	1640
	1000	8 \times 11	12	3900	2000
	1000	10 \times 12	10	6100	2000
1200	8 \times 11	12	3900	2400	
1200	10 \times 12	10	6100	2400	
1500	10 \times 12	10	6100	3000	

STANDARD RATINGS

V.DC (SV)	Cap	Size	ESR	Ripple Current	Leakage Current
	(μ F)	$\Phi D \times L$ (mm)	($m\Omega / 20^\circ C, 100kHz$)	($mArms / 20^\circ C, 100kHz$)	($\mu A / max$)
16V (18.4)	10	6.3×6	40	1810	500
	47	5×6	40	1810	500
	47	6.3×6	40	1810	500
	47	6.3×9	25	2820	500
	82	5×8	40	1810	500
	100	5×11	30	2490	500
	100	6.3×*6	24	2490	500
	100	6.3×9	24	2820	500
	100	6.3×11	24	2820	500
	120	6.3×9	24	2820	500
	150	6.3×6	25	2820	500
	150	6.3×9	25	2820	500
	180	6.3×9	16	2820	576
	180	8×9	16	2820	576
	220	6.3×9	20	2820	704
	220	6.3×11	20	2820	701
	220	8×9	14	3300	704
	220	8×11	15	3300	704
	270	6.3×11	20	3160	864
	270	8×9	11	5080	864
	270	8×11	11	5080	864
	270	10×10	11	5080	864
	330	6.3×11	25	2820	1056
	330	8×9	13	4700	1056
	330	8×11	11	4700	1056
	330	10×10	16	4720	1056
	330	10×12	16	4720	1056
	470	8×9	16	3300	1504
	470	8×11	11	5080	1504
	470	10×10	10	6100	1504
470	10×12	10	6100	1504	
560	10×10	10	6100	1792	
560	10×12	10	6100	1792	
680	10×12	10	6100	2170	
820	10×12	10	6100	2624	
1000	10×12	10	6100	3200	
1200	10×12	10	6100	3840	
20V (23)	33	6.3×7	50	2000	500
	100	8×11	20	2750	500
	120	6.3×1	24	2000	500
	150	10×12	30	2820	600
	180	8×11	24	2750	720
	180	10×12	20	2820	720
	360	8×11	40	2750	1440

STANDARD RATINGS

V.DC (SV)	Cap	Size	ESR	Ripple Current	Leakage Current
	(μ F)	Φ D \times L(mm)	($m\Omega$ /20°C,100kHz)	(mArms/20°C,100kHz)	(μ A/max)
25V (28.7)	22	8 \times 9	32	1300	500
	33	8 \times 9	30	2050	500
	47	8 \times 9	30	2100	500
	56	8 \times 9	30	2150	500
	68	8 \times 9	30	2150	500
	100	6.3 \times 11	25	2150	500
	100	8 \times 9	25	2150	500
	100	8 \times 11	20	2750	500
	100	10 \times 12	20	2750	500
	120	8 \times 9	30	2750	600
	120	8 \times 11	24	2750	600
	150	8 \times 11	20	2750	900
	180	8 \times 11	20	2750	1100
	220	8 \times 11	20	2750	1100
	220	10 \times 12	20	2750	1100
	270	8 \times 11	20	2750	1350
	330	8 \times 12	20	2700	1650
	330	10 \times 12	20	2700	1650
	360	8 \times 12	40	2220	1800
470	10 \times 12	20	2700	2350	