

## PF series Long Life to 5,000Hours



### Features

- ◆ Super Long Life to 5,000Hours.
- ◆ Low ESR at high frequency range.

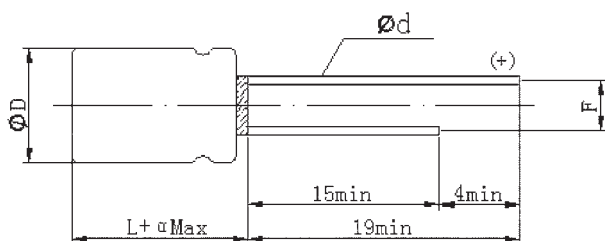
### Specifications

Item	Performance Characteristics	
Operating Temp. Range	-55°C~+105°C	
Rated Voltage Range	2.5~35V DC	
Capacitance Range	22to 2700 μF	
Capacitance Tolerance	±20% ( 120Hz , +20°C )	
Leakage Current	Not to exceed the values shown in Standard Ratings ( Rated voltage applied, after 2 minutes at 20°C )	
Dissipation Factor ( tan δ , at 20°C , 120Hz )	Not to exceed the values shown in Standard Ratings	
ESR ( at 100KHz , 20°C )	Not to exceed the values shown in Standard Ratings	
Endurance 105°C , 5000h , at rated voltage	Capacitance Change	Within ±20% of the value before test
	Leakage current	Not to exceed the value specified
	ESR	Not to exceed 150% of the value specified
	Dissipation Factor	Not to exceed 150% of the value specified
Moisture Resistance Stored at 60°C , RH90~95% , 1000h	Capacitance Change	Within ±20% of the value before test
	Leakage Current	Not to exceed the value specified
	ESR	Not to exceed 150% of the value specified
	Dissipation Factor	Not to exceed 150% of the value specified

### Frequency Coefficient for Ripple Current

Frequency	120Hz ≤ freq. < 1KHz	1KHz ≤ freq. < 10KHz	10KHz ≤ freq. < 100KHz	100KHz ≤ freq. < 300KHz
Coefficient	0.05	0.3	0.7	1

### Diagram of Dimensions:(unit:mm)



φ DxL	ΦD+0.5max.	α	F	Φd±0.05
4x5	4.0	1.0	1.5	0.45
5x8/5x9	5.0	1.0	2.0	0.5
6.3x5.2	6.3	1.0	2.5	0.5
6.3x8	6.3	1.5	2.5	0.6
6.3x11	6.3	1.5	2.5	0.6
8x7/8x8	8.0	1.0	3.5	0.6
8x11.5	8.0	1.5	3.5	0.6
10x12.5	10.0	1.5	5.0	0.6

## Standard Ratings

W.V. (V)	Cap(μF)	Size φ DxL(mm)	L.C. (μA,2min)	tg δ (120Hz,20°C)	ESR (mΩ),100KHz)	Maximum Permissible Ripple Current(mA,r.m.s)
2.5	100	5x8	300	0.08	9	4180
	220	5x8	300	0.08	9	4180
	300	5x9	300	0.08	9	4180
	330	5x8	300	0.08	9	4180
		6.3x8	300	0.08	9	5600
	390	6.3x5.2	300	0.08	15	3100
	470	5x8	300	0.08	9	4180
		6.3x8	300	0.08	9	5600
	560	5x8	300	0.08	9	4180
		6.3x5.2	300	0.08	15	3100
		6.3x8	300	0.08	9	5600
		8x8	300	0.08	9	6100
	820	6.3x8	410	0.08	9	5600
		8x7	410	0.08	10	5000
8x8		410	0.08	9	6100	
1000	8x8	500	0.08	9	6100	
1500	8x11.5	750	0.08	9	6100	
2000	10x12.5	1000	0.08	9	6640	
2700	10x12.5	1350	0.08	9	6640	
4	270	6.3x8	300	0.08	9	5000
	330	5x8	300	0.08	9	4050
	390	6.3x8	312	0.08	9	5000
	560	6.3x8	448	0.08	9	5600
		8x7	448	0.08	15	3900
	680	8x8	542	0.08	9	6100
	820	8x8	656	0.08	9	6100
	1000	8x11.5	800	0.08	9	6100
	1200	10x12.5	960	0.08	9	6640
	1500	10x12.5	1200	0.08	9	6640
	2000	10x12.5	1600	0.08	9	6640
6.3	220	6.3x5.2	300	0.08	18	2980
		6.3x8	300	0.08	10	4500
	270	5x8	340.2	0.08	10	3700
		5x8	415.8	0.08	10	3700
	330	6.3x8	415.8	0.08	9	5000
		8x7	491.4	0.08	15	3900
	390	8x8	491.4	0.08	9	6100
		6.3x8	592.2	0.08	9	5100
	470	8x8	592.2	0.08	9	6100
		6.3x8	705.6	0.08	9	5100
	560	8x8	705.6	0.08	9	6100
		8x8	428	0.08	9	6100
	820	8x8	516.6	0.10	9	6100
		10x12.5	516.6	0.10	9	6640
		8x11.5	630	0.10	9	6100
1200	8x11.5	756	0.10	9	6100	
1500	10x12.5	945	0.10	9	6640	
2000	10x12.5	1260	0.10	9	6640	
10	10	4x5	300	0.08	100	700
	68	6.3x8	300	0.08	10	4500
	100	6.3x8	300	0.08	10	4500
	150	6.3x8	300	0.08	10	4500
	270	8x7	270	0.08	22	3300
8x11.5		270	0.08	9	5600	

Ripple Current(mA,rms)at 105°C,100KHz

W.V. (V)	Cap(μF)	Size φ DxL(mm)	L.C. (μA,2min)	tg δ (120Hz,20°C)	ESR (mΩ),100KHz)	Maximum Permissible Ripple Current(mA,r.m.s)
10	330	8x11.5	330	0.08	9	5600
	390	8x8	390	0.08	9	6100
	470	8x8	470	0.08	9	6100
		10x12.5	470	0.08	9	6100
	560	8x8	560	0.10	9	6100
		10x12.5	560	0.10	9	6100
	680	8x11.5	680	0.10	9	6100
	820	10x12.5	820	0.10	9	6640
1000	10x12.5	1000	0.10	9	6640	
16	100	6.3x5.2	300	0.08	24	2490
		6.3x8	300	0.08	15	3500
		6.3x11	300	0.08	12	4800
	150	6.3x5.2	300	0.08	24	3200
		8x7	300	0.08	22	3300
	180	6.3x11	288	0.08	12	5600
		8x8	288	0.08	10	5100
	220	10x12.5	288	0.08	10	5600
		8x7	352	0.08	22	3300
	270	8x8	352	0.08	10	5100
		8x7	432	0.08	22	3300
	330	8x8	432	0.08	10	5100
		10x12.5	432	0.08	10	5600
	390	8x8	528	0.10	10	4700
		8x11.5	528	0.08	10	5600
	470	10x12.5	624	0.08	10	6100
		8x11.5	752	0.10	10	5400
	560	10x12.5	752	0.10	10	6100
		8x11.5	896	0.10	10	6100
	1000	10x12.5	896	0.10	10	6100
1000	10x12.5	1600	0.10	12	5400	
20	120	6.3x5.2	480	0.12	25	3200
	150	10x12.5	600	0.12	14	5000
	180	8x7	720	0.12	25	3200
	330	10x12.5	1320	0.12	14	5000
	390	8x11.5	1560	0.12	14	4950
	560	10x12.5	2240	0.12	12	5400
	680	10x12.5	2720	0.12	12	5400
	1000	10x12.5	2720	0.12	12	5400
25	56	6.3x5.2	280	0.12	30	2800
	68	8x11.5	340	0.12	20	4100
		6.3x8	410	0.12	28	2780
	82	8x7	410	0.12	28	3000
		8x11.5	500	0.12	20	4100
	100	10x12.5	500	0.12	18	4650
		8x8	900	0.12	18	3770
	180	8x11.5	900	0.12	18	4200
		8x11.5	1100	0.12	18	4200
	270	10x12.5	1350	0.12	18	4650
	330	10x12.5	1650	0.12	14	5000
	390	10x12.5	1950	0.12	14	5000
35	22	6.3x5.2	300	0.12	35	2600
	33	10x12.5	231	0.12	25	3100
	39	8x7	273	0.12	32	2800
	68	8x11.5	476	0.12	20	3600
	82	8x11.5	574	0.12	20	3600
	120	10x12.5	840	0.12	18	4000
	150	10x12.5	1050	0.12	18	4000

Ripple Current(mA,rms)at 105°C, 100KHz