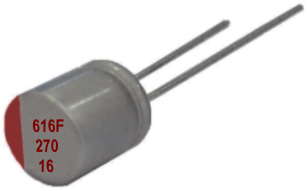
PF series

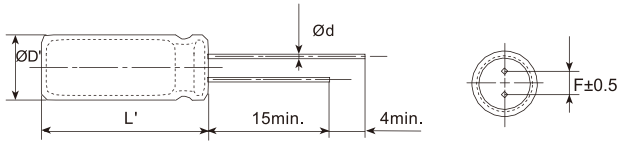
- Endurance: +105°C 3,000~5,000 hours
- Long life time
- Recommended Applications: System Board, Display Card, Small Charger and intelligent TV
- **RoHS Compliant and lead-free**



SPECIFICATIONS

Items	Characteristics									
Category Temperature Range	-55~+105°C									
Rated Working Voltage Range	6.3~100 Vdc									
Nominal Capacitance Range	4.7~5600μF									
Capacitance Tolerance	±20%(M)									(at 20°C,120Hz)
DC Leakage Current	I 0.2CV or 500μA, whichever is greater. Where, I:Max.leakage current (μA),C:Nominal capacitance (μF),V: Rated voltage (V)									(at 20°C after 2 minutes)
DissipationFactor (tanδ)	Rated Voltage(Vdc)	6.3	6.8	7.5	10	16	63	80	100	(at 20°C,120Hz)
	tanδ (max.)	0.08			0.12				0.15	
ESR(100kHz,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									
Endurance	After applying rated voltage for 3,000 to 5,000 hours at 105°C, the capacitors shall meet the following requirements.									
	Appearance	No significant damage								
	Capacitance Change	≤±20% of the initial value								
	D.F. (tanδ)	≤150% of the initial specified value								
	ESR	≤150% of the initial specified value								
	Leakage Current	≤The initial specified value								
Humidity Test	After subjecting to 90~95%RH for 2,000 hours at 60°C without voltage applied, the capacitors shall meet the specified values for the Endurance characteristics listed above.									
Surge Test	After subjecting to 1,000 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.									
	Appearance	No significant damage								
	Capacitance Change	≤±20% of the initial value								
	D.F. (tanδ)	≤150% of the initial specified value								
	ESR	≤150% of the initial specified value								
	Leakage Current	≤The initial specified value								

DIMENSIONS[mm]



ØD	5	5.5	6.3	8	10
Ød	0.5	0.5	0.5	0.6	0.6
F	2.0	2.5	2.5	3.5	5.0
ØD'	ØD-0.1~+0.5				
L'	L+1.0max.			L-0.5~+1	

PART NUMBERING SYSTEM

S	P	F	1	C	M	2	7	1	E	0	8	O	0	0	R	A	X	X	X

- Special code
- Marking code
- Terminal code
- Size code
- Capacitance code
- Capacitance tolerance code
- Voltage code
- Series code
- Category code

PF series

■ STANDARD RATINGS

VDC (SV)	Cap (μF)	Size DxL(mm)	ESR (mΩ,20°C,100kHz) (max.)	Rated ripple current (mArms/105°C,100kHz)	Leakage Current (μA)(max.)	Part Number
6.3 (7.2)	220	5×7	22	3100	500	SPF0JM221D07O00RAXXX
	270	5×7	22	3400	500	SPF0JM271D07O00RAXXX
	330	5×8	22	3600	500	SPF0JM331D08O00RAXXX
		6.3×5	27	2800	500	SPF0JM331E05O00RAXXX
		6.3×8	16	3600	500	SPF0JM331E08O00RAXXX
	390	5×9	22	3600	500	SPF0JM391D09O00RAXXX
	470	5×10	22	3800	592	SPF0JM471D10O00RAXXX
		5.5×9	22	3600	592	SPF0JM471B09O00RAXXX
		6.3×7	22	3500	592	SPF0JM471E07O00RAXXX
		6.3×8	16	3900	592	SPF0JM471E08O00RAXXX
	560	6.3×7	22	3700	706	SPF0JM561E07O00RAXXX
		6.3×8	22	4300	706	SPF0JM561E08O00RAXXX
		5.5×9	22	3800	706	SPF0JM561B09O00RAXXX
	680	6.3×9	22	4500	857	SPF0JM681E09O00RAXXX
		5.5×9	22	4300	857	SPF0JM681B09O00RAXXX
		8×9	22	4100	857	SPF0JM681F09O00RAXXX
	820	6.3×9	22	4500	1033	SPF0JM821E09O00RAXXX
		8×9	16	4200	1033	SPF0JM821F09O00RAXXX
	1000	6.3×10	11	4600	1260	SPF0JM102E10O00RAXXX
		8×9	13	4300	1260	SPF0JM102F09O00RAXXX
		8×11	11	4600	1260	SPF0JM102F11O00RAXXX
	1200	8×11	11	4700	1512	SPF0JM122F11O00RAXXX
	1500	8×11	11	4800	1890	SPF0JM152F11O00RAXXX
		10×12	11	4900	1890	SPF0JM152G12O00RAXXX
	1800	10×10	11	5000	2268	SPF0JM182G10O00RAXXX
	2200	8×14	11	5100	2772	SPF0JM222F14O00RAXXX
		10×12	11	5200	2772	SPF0JM222G12O00RAXXX
	3300	10×14	11	5300	4158	SPF0JM332G14O00RAXXX
	4700	10×17	11	5400	5000	SPF0JM472G17O00RAXXX
	5600	10×18	11	5600	5000	SPF0JM562G18O00RAXXX
6.8 (7.8)	220	5×7	22	2970	500	SPF0CM221D07O00RAXXX
	270	5×7	22	3240	500	SPF0CM271D07O00RAXXX
	330	5×8	22	3420	500	SPF0CM331D08O00RAXXX
	390	5×9	22	3510	530	SPF0CM391D09O00RAXXX
	470	5×9	22	3690	639	SPF0CM471D09O00RAXXX
		6.3×7	22	3330	639	SPF0CM471E07O00RAXXX
	560	6.3×8	22	4050	762	SPF0CM561E08O00RAXXX
	680	6.3×9	22	4320	925	SPF0CM681E09O00RAXXX
	820	6.3×9	22	4410	1115	SPF0CM821E09O00RAXXX
	1000	6.3×11	13	4590	1360	SPF0CM102E11O00RAXXX
		8×11	11	4635	1360	SPF0CM102F11O00RAXXX
7 (8.1)	220	5×7	22	2880	500	SPF0QM221D07O00RAXXX
	270	5×8	22	3060	500	SPF0QM271D08O00RAXXX
	330	5×9	22	3240	500	SPF0QM331D09O00RAXXX
	470	6.3×8	22	3420	658	SPF0QM471E08O00RAXXX
		5.5×9	22	3240	658	SPF0QM471B09O00RAXXX
	560	6.3×8	22	3600	784	SPF0QM561E08O00RAXXX
	680	6.3×9	13	3780	952	SPF0QM681E09O00RAXXX
	820	6.3×10	13	4050	1148	SPF0QM821E10O00RAXXX
		8×9	13	4140	1148	SPF0QM821F09O00RAXXX
7.5 (8.6)	220	5×7	22	2790	500	SPF0AM221D07O00RAXXX
	270	5×8	22	2970	500	SPF0AM271D08O00RAXXX
	330	5×9	22	3150	500	SPF0AM331D09O00RAXXX
	470	6.3×7	28	2880	705	SPF0AM471E07O00RAXXX
		5.5×9	22	3195	705	SPF0AM471B09O00RAXXX
	500	5.5×9	22	3240	750	SPF0AM501B09O00RAXXX
	560	6.3×8	22	3510	840	SPF0AM561E08O00RAXXX
	680	6.3×9	13	3690	1020	SPF0AM681E09O00RAXXX
	820	6.3×10	13	3960	1230	SPF0AM821E10O00RAXXX
		8×9	13	4095	1230	SPF0AM821F09O00RAXXX
	1200	8×11	13	4320	1800	SPF0AM122F11O00RAXXX
10 (11.5)	47	5×7	38	1900	500	SPF1AM470D07O00RAXXX
	56	5×7	38	2000	500	SPF1AM560D07O00RAXXX
	68	5×7	38	2000	500	SPF1AM680D07O00RAXXX
	82	5×7	38	2100	500	SPF1AM820D07O00RAXXX
	100	5×7	38	2100	500	SPF1AM101D07O00RAXXX
	120	5×7	22	2200	500	SPF1AM121D07O00RAXXX
	150	5×7	22	2200	500	SPF1AM151D07O00RAXXX
	220	5×9	22	2500	500	SPF1AM221D09O00RAXXX
		6.3×8	16	2800	500	SPF1AM221E08O00RAXXX
	270	6.3×8	22	2700	540	SPF1AM271E08O00RAXXX
	330	6.3×8	22	2900	660	SPF1AM331E08O00RAXXX
		8×9	16	3000	660	SPF1AM331F09O00RAXXX
	390	6.3×8	22	3000	780	SPF1AM391E08O00RAXXX

PF series

STANDARD RATINGS

VDC (SV)	Cap (μF)	Size DxL(mm)	ESR (mΩ,20°C,100kHz) (max.)	Rated ripple current (mArms/105°C,100kHz)	Leakage Current (μA)(max.)	Part Number
10 (11.5)	470	5.5×9	22	3000	940	SPF1AM471B09O00RAXXX
		6.3×8	22	3100	940	SPF1AM471E08O00RAXXX
		8×9	16	3100	940	SPF1AM471F09O00RAXXX
		8×11	13	5000	940	SPF1AM471F11O00RAXXX
	560	6.3×10	14	3200	1120	SPF1AM561E10O00RAXXX
		8×9	16	3200	1120	SPF1AM561F09O00RAXXX
	680	8×11	13	3500	1360	SPF1AM681F11O00RAXXX
	820	8×11	13	3600	1640	SPF1AM821F11O00RAXXX
	1000	8×11	13	3700	2000	SPF1AM102F11O00RAXXX
		10×12	11	4700	2000	SPF1AM102G12O00RAXXX
	1200	8×12	11	4000	2400	SPF1AM122F12O00RAXXX
		10×12	11	4900	2400	SPF1AM122G12O00RAXXX
	1500	10×12	11	4900	3000	SPF1AM152G12O00RAXXX
	1800	10×13	11	5200	3600	SPF1AM182G13O00RAXXX
	2200	10×15	11	5400	4400	SPF1AM222G15O00RAXXX
	3300	10×18	11	5500	5000	SPF1AM332G18O00RAXXX
12 (13.8)	330	5.5×9	22	2790	792	SPF1TM331B09O00RAXXX
	470	5.5×9	22	2880	1128	SPF1TM471B09O00RAXXX
		6.3×9	22	3105	1128	SPF1TM471E09O00RAXXX
		6.3×10	17	3060	1128	SPF1TM471E10O00RAXXX
	680	6.3×11	17	3240	1632	SPF1TM681E11O00RAXXX
		8×10	17	3330	1632	SPF1TM681F10O00RAXXX
	820	8×11	13	3420	1968	SPF1TM821F11O00RAXXX
	1000	8×12	13	3600	2400	SPF1TM102F12O00RAXXX
	1200	8×14	13	3960	2880	SPF1TM122F14O00RAXXX
	1500	8×16	13	4320	3600	SPF1TM152F16O00RAXXX
16 (18.4)	47	5×7	22	1800	500	SPF1CM470D07O00RAXXX
	56	5×7	22	1800	500	SPF1CM560D07O00RAXXX
	68	5×7	22	1900	500	SPF1CM680D07O00RAXXX
	82	5×8	22	1900	500	SPF1CM820D08O00RAXXX
	100	5×7	22	2000	500	SPF1CM101D07O00RAXXX
		6.3×5	27	1800	500	SPF1CM101E05O00RAXXX
	120	5×8	22	2100	500	SPF1CM121D08O00RAXXX
	150	5×8	22	2100	500	SPF1CM151D08O00RAXXX
	180	5×8	22	2200	576	SPF1CM181D08O00RAXXX
		6.3×7	17	2200	576	SPF1CM181E07O00RAXXX
	220	5×10	22	2300	704	SPF1CM221D10O00RAXXX
		6.3×8	22	2400	704	SPF1CM221E08O00RAXXX
		6.3×10	16	2600	704	SPF1CM221E10O00RAXXX
	270	5.5×9	22	2400	864	SPF1CM271B09O00RAXXX
		6.3×8	22	2500	864	SPF1CM271E08O00RAXXX
		8×9	22	2600	864	SPF1CM271F09O00RAXXX
	330	5.5×9	22	2600	1056	SPF1CM331B09O00RAXXX
		6.3×9	22	2600	1056	SPF1CM331E09O00RAXXX
		6.3×10	16	2700	1056	SPF1CM331E10O00RAXXX
	470	6.3×11	16	2800	1504	SPF1CM471E11O00RAXXX
		8×11	16	4100	1504	SPF1CM471F11O00RAXXX
	560	8×11	16	2800	1792	SPF1CM561F11O00RAXXX
		8×13	16	2800	1792	SPF1CM561F13O00RAXXX
	680	8×11	16	3000	2176	SPF1CM681F11O00RAXXX
		10×12	13	3200	2176	SPF1CM681G12O00RAXXX
	820	8×13	12	3100	2624	SPF1CM821F13O00RAXXX
		10×12	13	3400	2624	SPF1CM821G12O00RAXXX
	1000	10×12	13	3600	3200	SPF1CM102G12O00RAXXX
		8×14	13	3200	3200	SPF1CM102F14O00RAXXX
	1200	10×15	13	3800	3840	SPF1CM122G15O00RAXXX
		10×12	13	3700	3840	SPF1CM122G12O00RAXXX
	1500	10×18	13	4900	4800	SPF1CM152G18O00RAXXX
	1800	10×14	13	4800	5000	SPF1CM182G14O00RAXXX
	2200	10×17	13	5200	5000	SPF1CM222G17O00RAXXX
		10×15	13	4900	5000	SPF1CM222G15O00RAXXX
20 (23.0)	33	5×8	44	1710	500	SPF1DM330D08O00RAXXX
	39	5×8	44	1755	500	SPF1DM390D08O00RAXXX
	47	5×8	44	1980	500	SPF1DM470D08O00RAXXX
	56	5×9	44	1890	500	SPF1DM560D09O00RAXXX
	68	6.3×8	33	1890	500	SPF1DM680E08O00RAXXX
	82	6.3×8	33	1935	500	SPF1DM820E08O00RAXXX
	100	6.3×8	33	1980	500	SPF1DM101E08O00RAXXX
	120	6.3×8	33	2070	500	SPF1DM121E08O00RAXXX
	150	6.3×10	22	2115	600	SPF1DM151E10O00RAXXX
	220	8×9	33	2205	880	SPF1DM221F09O00RAXXX
		8×11	22	2295	880	SPF1DM221F11O00RAXXX
	270	8×11	22	2430	1080	SPF1DM271F11O00RAXXX
	330	8×11	22	2520	1320	SPF1DM331F11O00RAXXX

AiSHi 更多规格书点击这里查看 服务热线：0755-88852201 +VX:13410723853

PF series

STANDARD RATINGS

VDC (SV)	Cap (μF)	Size DxL(mm)	ESR (mΩ,20°C,100kHz) (max.)	Rated ripple current (mArms/105°C,100kHz)	Leakage Current (μA)(max.)	Part Number
20 (23.0)	470	10×12	22	2610	1880	SPF1DM471G12O00RAXXX
		10×13	22	2790	1880	SPF1DM471G13O00RAXXX
	680	10×15	22	2970	2720	SPF1DM681G15O00RAXXX
		10×12	22	2700	2720	SPF1DM681G12O00RAXXX
	820	10×18	22	3060	3280	SPF1DM821G18O00RAXXX
	1000	10×18	22	3510	4000	SPF1DM102G18O00RAXXX
25 (28.8)	33	5×9	66	1600	500	SPF1EM330D09O00RAXXX
	39	5×8	66	1700	500	SPF1EM390D08O00RAXXX
	47	5×9	66	1700	500	SPF1EM470D09O00RAXXX
	56	5×9	66	1800	500	SPF1EM560D09O00RAXXX
	82	6.3×7	33	1900	500	SPF1EM820E07O00RAXXX
	100	6.3×8	33	2200	500	SPF1EM101E08O00RAXXX
		6.3×10	22	2500	500	SPF1EM101E10O00RAXXX
		8×11	22	2700	500	SPF1EM101F11O00RAXXX
	120	6.3×8	33	2200	600	SPF1EM121E08O00RAXXX
	150	6.3×10	22	2500	750	SPF1EM151E10O00RAXXX
	180	8×9	33	2200	900	SPF1EM181F09O00RAXXX
	220	8×11	22	2700	1100	SPF1EM221F11O00RAXXX
	270	8×11	22	2700	1350	SPF1EM271F11O00RAXXX
	330	8×11	22	2700	1650	SPF1EM331F11O00RAXXX
		10×12	22	2500	1650	SPF1EM331G12O00RAXXX
	470	10×12	22	3600	2350	SPF1EM471G12O00RAXXX
		8×11	22	2700	2350	SPF1EM471F11O00RAXXX
	680	10×15	22	3800	3400	SPF1EM681G15O00RAXXX
	820	10×18	22	4000	4100	SPF1EM821G18O00RAXXX
		8×16	22	3200	4100	SPF1EM821F16O00RAXXX
	1000	10×18	22	4000	5000	SPF1EM102G18O00RAXXX
35 (40.3)	4.7	5×8	66	1500	500	SPF1VM4R7D08O00RAXXX
	10	5×8	66	1600	500	SPF1VM100D08O00RAXXX
	15	5×8	66	1600	500	SPF1VM150D08O00RAXXX
	22	5×9	110	1700	500	SPF1VM220D09O00RAXXX
	33	5×9	55	1800	500	SPF1VM330D09O00RAXXX
	39	5×9	55	1800	500	SPF1VM390D09O00RAXXX
	47	6.3×7	55	1800	500	SPF1VM470E07O00RAXXX
	56	6.3×7	55	1900	500	SPF1VM560E07O00RAXXX
	68	6.3×7	55	1900	500	SPF1VM680E07O00RAXXX
	82	6.3×7	55	2000	574	SPF1VM820E07O00RAXXX
	100	6.3×8	55	2100	700	SPF1VM101E08O00RAXXX
		6.3×10	44	2100	700	SPF1VM101E10O00RAXXX
		8×11	44	2300	700	SPF1VM101F11O00RAXXX
	120	6.3×10	44	2200	840	SPF1VM121E10O00RAXXX
	150	6.3×10	44	2200	1050	SPF1VM151E10O00RAXXX
	220	8×11	44	2500	1540	SPF1VM221F11O00RAXXX
		10×12	33	2600	1540	SPF1VM221G12O00RAXXX
	270	10×12	33	2700	1890	SPF1VM271G12O00RAXXX
	330	10×12	33	2700	2310	SPF1VM331G12O00RAXXX
	470	10×13	22	2800	3290	SPF1VM471G13O00RAXXX
	680	10×16	22	3000	4760	SPF1VM681G16O00RAXXX
	820	10×18	22	3100	5000	SPF1VM821G18O00RAXXX
	1000	10×18	22	3300	5000	SPF1VM102G18O00RAXXX
50 (57.5)	4.7	5×8	66	1300	500	SPF1HM4R7D08O00RAXXX
	10	6.3×7	38	1600	500	SPF1HM100E07O00RAXXX
		5×8	77	1400	500	SPF1HM100D08O00RAXXX
	15	5×8	77	1400	500	SPF1HM150D08O00RAXXX
	22	6.3×7	44	1700	500	SPF1HM220E07O00RAXXX
	33	6.3×7	44	1800	500	SPF1HM330E07O00RAXXX
	47	6.3×8	38	1800	500	SPF1HM470E08O00RAXXX
	56	6.3×8	38	1900	560	SPF1HM560E08O00RAXXX
	68	6.3×10	33	1900	680	SPF1HM680E10O00RAXXX
	100	8×11	33	2000	1000	SPF1HM101F11O00RAXXX
	120	8×11	33	2100	1200	SPF1HM121F11O00RAXXX
	150	10×12	33	2200	1500	SPF1HM151G12O00RAXXX
	220	10×12	33	2400	2200	SPF1HM221G12O00RAXXX
	270	10×13	22	2600	2700	SPF1HM271G13O00RAXXX
	330	10×15	22	2700	3300	SPF1HM331G15O00RAXXX
	440	10×18	22	2700	4400	SPF1HM441G18O00RAXXX
	470	10×18	22	2800	4700	SPF1HM471G18O00RAXXX
63 (72.5)	4.7	6.3×8	66	1400	500	SPF1JM4R7E08O00RAXXX
	6.8	6.3×8	66	1400	500	SPF1JM6R8E08O00RAXXX
	10	6.3×5	66	1400	500	SPF1JM100E05O00RAXXX
	33	6.3×8	33	1500	500	SPF1JM330E08O00RAXXX
	39	6.3×8	33	1500	500	SPF1JM390E08O00RAXXX

PF series

STANDARD RATINGS

VDC (SV)	Cap (μF)	Size DxL(mm)	ESR (mΩ,20°C,100kHz) (max.)	Rated ripple current (mArms/105°C,100kHz)	Leakage Current (μA)(max.)	Part Number
63 (72.5)	47	6.3×9	33	1700	592	SPF1JM470E09O00RAXXX
	56	8×9	33	1600	706	SPF1JM560F09O00RAXXX
	68	8×11	33	1800	857	SPF1JM680F11O00RAXXX
	82	8×11	33	1800	1033	SPF1JM820F11O00RAXXX
	100	10×12	33	1900	1260	SPF1JM101G12O00RAXXX
	150	10×12	33	2200	1890	SPF1JM151G12O00RAXXX
	220	10×15	22	2300	2772	SPF1JM221G15O00RAXXX
	270	10×17	22	2500	3402	SPF1JM271G17O00RAXXX
	330	10×18	22	2600	4158	SPF1JM331G18O00RAXXX
80 (92.0)	4.7	6.3×8	66	1300	500	SPF1BM4R7E08O00RAXXX
	6.8	6.3×8	66	1300	500	SPF1BM6R8E08O00RAXXX
	22	6.3×10	66	1400	500	SPF1BM220E10O00RAXXX
	33	8×11	38	1500	528	SPF1BM330F11O00RAXXX
	47	10×12	38	1600	752	SPF1BM470G12O00RAXXX
	68	10×12	38	1700	1088	SPF1BM680G12O00RAXXX
	100	10×14	38	1800	1600	SPF1BM101G14O00RAXXX
100 (115.0)	4.7	6.3×8	132	1200	500	SPF1KM4R7E08O00RAXXX
	6.8	6.3×8	132	1300	500	SPF1KM6R8E08O00RAXXX
	10	6.3×10	55	1300	500	SPF1KM100E10O00RAXXX
		8×11	55	1300	500	SPF1KM100F11O00RAXXX
	15	8×11	55	1300	500	SPF1KM150F11O00RAXXX
	22	10×12	38	1400	500	SPF1KM220G12O00RAXXX
	33	10×14	38	1400	660	SPF1KM330G14O00RAXXX
	47	10×16	38	1600	940	SPF1KM470G16O00RAXXX

※ Specifications subject to change without notice.

AiSHi 更多规格书点击这里查看 服务热线：0755-88852201 +VX:13410723853