

## PR series

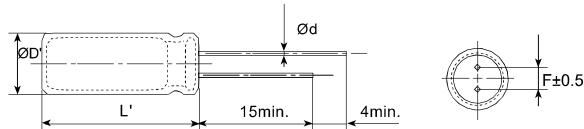
- Endurance: +105°C 5,000 hours
- Low ESR, ripple current resistant
- Recommended Applications: Adaptor
- **RoHS Compliant and lead-free**



### SPECIFICATIONS

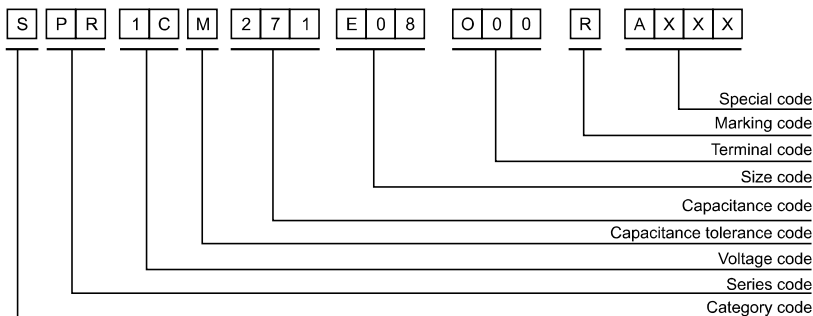
Items	Characteristics						
Category Temperature Range	-55~+105°C						
Rated Working Voltage Range	2.5~35 V <sub>dc</sub>						
Nominal Capacitance Range	47~1500μF						
Capacitance Tolerance	±20%(M) <span style="float: right;">(at 20°C, 120Hz)</span>						
DC Leakage Current	LC=0.2CV or 500μA, whichever is greater. Where, I:Max.leakage current (μA),C:Nominal capacitance (μF),V: Rated voltage (V) <span style="float: right;">(at 20°C after 2 minutes)</span>						
Dissipation Factor (tanδ)	Rated Voltage(V <sub>dc</sub> )	2.5	6.3	10	16	25	35
	tanδ (max.)	0.08		0.12			
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 with rated ripple current for 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 requirement as in surge test.						
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	ØD±0.3	ØD-0.1~+0.5		
L'	L+1.0max.			L-0.5~+1	

### PART NUMBERING SYSTEM



PR series

STANDARD RATINGS

VDC (SV)	Cap (μF)	Size ΦDxL(mm)	ESR (mΩ, 20°C, 100kHz) (max.)	Rated ripple current (mA rms/105°C, 100kHz)	Leakage Current (μA)(max.)	Part Number
2.5 (2.9)	560	6.3×8	12	2000	500	SPR0EM561E08O00RAXXX
	680	6.3×8	12	2000	500	SPR0EM681E08O00RAXXX
	820	6.3×9	12	2000	500	SPR0EM821E09O00RAXXX
	1200	8×9	14	2100	600	SPR0EM122F09O00RAXXX
6.3 (7.2)	330	6.3×8	12	1900	500	SPR0JM331E08O00RAXXX
		6.3×8	12	1900	592	SPR0JM471E08O00RAXXX
	470	8×9	14	2100	592	SPR0JM471F09O00RAXXX
		6.3×8	12	1900	706	SPR0JM561E08O00RAXXX
	680	8×11	12	2200	857	SPR0JM681F11O00RAXXX
	820	8×11	12	2200	1033	SPR0JM821F11O00RAXXX
	1000	8×11	12	2300	1260	SPR0JM102F11O00RAXXX
	1200	8×11	12	2300	1512	SPR0JM122F11O00RAXXX
1500	10×12	12	2500	1890	SPR0JM152G12O00RAXXX	
10 (11.5)	220	6.3×8	12	1700	500	SPR1AM221E08O00RAXXX
	270	6.3×8	12	1700	540	SPR1AM271E08O00RAXXX
	330	6.3×10	12	1800	660	SPR1AM331E10O00RAXXX
	470	8×11	12	2000	940	SPR1AM471F11O00RAXXX
	560	8×11	12	2000	1120	SPR1AM561F11O00RAXXX
	680	8×11	12	2100	1360	SPR1AM681F11O00RAXXX
	820	8×11	12	2100	1640	SPR1AM821F11O00RAXXX
	1000	10×12	12	2200	2000	SPR1AM102G12O00RAXXX
	1200	10×12	12	2200	2400	SPR1AM122G12O00RAXXX
	1500	10×12	12	2400	3000	SPR1AM152G12O00RAXXX
16 (18.4)	100	6.3×8	17	1500	500	SPR1CM101E08O00RAXXX
	180	6.3×8	17	1500	576	SPR1CM181E08O00RAXXX
	220	6.3×10	17	1600	704	SPR1CM221E10O00RAXXX
	270	8×11	14	1700	864	SPR1CM271F11O00RAXXX
	330	6.3×10	14	1600	1056	SPR1CM331E10O00RAXXX
	470	8×11	14	1700	1504	SPR1CM471F11O00RAXXX
	560	10×12	14	2000	1792	SPR1CM561G12O00RAXXX
	680	10×12	14	2000	2176	SPR1CM681G12O00RAXXX
	820	10×12	14	2100	2624	SPR1CM821G12O00RAXXX
	1000	10×12	14	2100	3200	SPR1CM102G12O00RAXXX
25 (28.8)	68	6.3×7	24	1300	500	SPR1EM680E07O00RAXXX
	82	6.3×7	24	1300	500	SPR1EM820E07O00RAXXX
	100	6.3×8	24	1300	500	SPR1EM101E08O00RAXXX
		8×11	22	1500	500	SPR1EM101F11O00RAXXX
	120	6.3×10	22	1400	600	SPR1EM121E10O00RAXXX
	180	8×9	24	1300	900	SPR1EM181F09O00RAXXX
	220	8×11	22	1500	1100	SPR1EM221F11O00RAXXX
		10×12	22	1700	1100	SPR1EM221G12O00RAXXX
	270	8×11	22	1500	1350	SPR1EM271F11O00RAXXX
	330	10×12	22	1700	1650	SPR1EM331G12O00RAXXX
		8×16	22	1700	2350	SPR1EM471F16O00RAXXX
	470	10×12	22	1800	2350	SPR1EM471G12O00RAXXX
560	10×12	22	1800	2800	SPR1EM561G12O00RAXXX	
35 (40.3)	47	6.3×7	52	1100	500	SPR1VM470E07O00RAXXX
	56	6.3×7	52	1100	500	SPR1VM560E07O00RAXXX
	68	6.3×7	52	1100	500	SPR1VM680E07O00RAXXX
	82	6.3×7	52	1100	574	SPR1VM820E07O00RAXXX
	100	6.3×10	42	1200	700	SPR1VM101E10O00RAXXX
	150	10×12	32	1400	1050	SPR1VM151G12O00RAXXX
		8×11	32	1300	1540	SPR1VM221F11O00RAXXX
	220	10×12	32	1400	1540	SPR1VM221G12O00RAXXX
	270	10×12	32	1400	1890	SPR1VM271G12O00RAXXX
	330	10×12	32	1400	2310	SPR1VM331G12O00RAXXX

Conductive Polymer Radial Type