

PU series

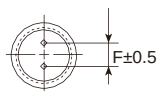
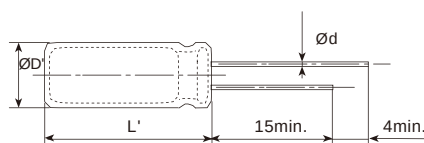
- Endurance: +105°C 2,000 hours
- Ultra-Low ESR
- Recommended Applications: High Order Main Board, Display Card
- RoHS Compliant and lead-free



SPECIFICATIONS

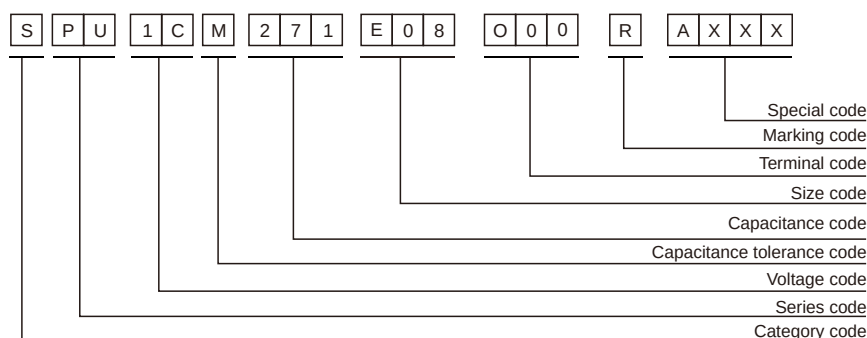
Items	Characteristics								
Category Temperature Range	-55~+105°C								
Rated Working Voltage Range	6.3~25 V _{dc}								
Nominal Capacitance Range	39~5600μF								
Capacitance Tolerance	±20%(M) (at 20°C,120Hz)								
DC Leakage Current	I≤0.2CV or 500μA, whichever is greater. Where, I:Max.leakage current (μA),C:Nominal capacitance (μF),V: Rated voltage (V) (at 20°C after 2 minutes)								
Dissipation Factor (tanδ)	Rated Voltage(V _{dc})	6.3	6.8	7.5	10	16	20	25	(at 20°C,120Hz)
	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 for 2,000 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



PU series

■ STANDARD RATINGS

VDC (SV)	Cap (μF)	Size ΦD×L(mm)	ESR (mΩ, 20°C, 100kHz) (max.)	Rated ripple current (mA rms/105°C, 100kHz)	Leakage Current (μA)(max.)	Part Number
6.3 (7.2)	220	5×7	14	3800	500	SPU0JM221D07000RAXXX
	270	5×7	14	4100	500	SPU0JM271D07000RAXXX
	330	5×8	14	4400	500	SPU0JM331D08000RAXXX
		6.3×5	17	3400	500	SPU0JM331E05000RAXXX
		6.3×8	10	4400	500	SPU0JM331E08000RAXXX
	390	5×9	14	4500	500	SPU0JM391D09000RAXXX
		5×10	14	4700	592	SPU0JM471D10000RAXXX
	470	5.5×9	14	4500	592	SPU0JM471B09000RAXXX
		6.3×7	14	4200	592	SPU0JM471E07000RAXXX
		6.3×8	10	4800	592	SPU0JM471E08000RAXXX
		6.3×7	14	4600	706	SPU0JM561E07000RAXXX
	560	6.3×8	8	5200	706	SPU0JM561E08000RAXXX
		5.5×9	14	4700	706	SPU0JM561B09000RAXXX
		6.3×9	14	5500	857	SPU0JM681E09000RAXXX
	680	5.5×9	14	5200	857	SPU0JM681B09000RAXXX
		8×9	14	5000	857	SPU0JM681F09000RAXXX
	820	6.3×9	14	5500	1033	SPU0JM821E09000RAXXX
		8×9	10	5100	1033	SPU0JM821F09000RAXXX
	1000	6.3×10	8	5600	1260	SPU0JM102E10000RAXXX
		8×9	8	5200	1260	SPU0JM102F09000RAXXX
		8×11	8	5700	1260	SPU0JM102F11000RAXXX
	1200	8×11	8	5800	1512	SPU0JM122F11000RAXXX
	1500	8×11	8	5900	1890	SPU0JM152F11000RAXXX
	1800	10×12	8	6000	1890	SPU0JM152G12000RAXXX
		10×10	8	6100	2268	SPU0JM182G10000RAXXX
	2200	8×14	8	6200	2772	SPU0JM222F14000RAXXX
		10×12	8	6300	2772	SPU0JM222G12000RAXXX
	3300	10×14	8	6400	4158	SPU0JM332G14000RAXXX
	4700	10×17	8	6700	5000	SPU0JM472G17000RAXXX
	5600	10×18	8	6900	5000	SPU0JM562G18000RAXXX
6.8 (7.8)	220	5×7	15	3630	500	SPU0CM221D07000RAXXX
	270	5×7	15	3960	500	SPU0CM271D07000RAXXX
	330	5×8	15	4180	500	SPU0CM331D08000RAXXX
		6.3×5	20	3410	500	SPU0CM331E05000RAXXX
	390	5×9	15	4290	530	SPU0CM391D09000RAXXX
		5×9	15	4510	639	SPU0CM471D09000RAXXX
	470	6.3×7	15	4070	639	SPU0CM471E07000RAXXX
		6.3×8	15	4950	762	SPU0CM561E08000RAXXX
	680	6.3×9	15	5280	925	SPU0CM681E09000RAXXX
	820	6.3×9	15	5390	1115	SPU0CM821E09000RAXXX
7 (8.1)	1000	6.3×11	10	5610	1360	SPU0CM102E11000RAXXX
		8×11	8	5665	1360	SPU0CM102F11000RAXXX
	220	5×7	18	3520	500	SPU0QM221D07000RAXXX
	270	5×8	18	3740	500	SPU0QM271D08000RAXXX
	330	5×9	18	3960	500	SPU0QM331D09000RAXXX
	470	6.3×8	18	4180	658	SPU0QM471E08000RAXXX
		5.5×9	18	3960	658	SPU0QM471B09000RAXXX
	560	6.3×8	18	4400	784	SPU0QM561E08000RAXXX
	680	6.3×9	11	4620	952	SPU0QM681E09000RAXXX
	820	6.3×10	11	4950	1148	SPU0QM821E10000RAXXX
		8×9	11	5060	1148	SPU0QM821F09000RAXXX
7.5 (8.6)	220	5×7	18	3410	500	SPU0AM221D07000RAXXX
	270	5×8	18	3630	500	SPU0AM271D08000RAXXX
	330	5×9	18	3850	500	SPU0AM331D09000RAXXX
	390	5×9	18	3850	585	SPU0AM391D09000RAXXX
		6.3×7	23	3520	705	SPU0AM471E07000RAXXX
	470	5.5×9	18	3905	705	SPU0AM471B09000RAXXX
		5.5×9	18	3960	750	SPU0AM501B09000RAXXX
	560	6.3×8	18	4290	840	SPU0AM561E08000RAXXX
	680	6.3×9	11	4510	1020	SPU0AM681E09000RAXXX
	820	6.3×10	11	4840	1230	SPU0AM821E10000RAXXX
		8×9	11	5005	1230	SPU0AM821F09000RAXXX
	1200	8×11	11	5280	1800	SPU0AM122F11000RAXXX
10 (11.5)	47	5×7	24	2400	500	SPU1AM470D07000RAXXX
	56	5×7	24	2400	500	SPU1AM560D07000RAXXX
	68	5×7	24	2500	500	SPU1AM680D07000RAXXX
	82	5×7	24	2500	500	SPU1AM820D07000RAXXX
	100	5×7	24	2600	500	SPU1AM101D07000RAXXX
	120	5×7	14	2600	500	SPU1AM121D07000RAXXX
	150	5×7	14	2700	500	SPU1AM151D07000RAXXX
	220	5×9	14	3100	500	SPU1AM221D09000RAXXX
		6.3×8	10	3400	500	SPU1AM221E08000RAXXX

Conductive Polymer
Radial Type

PU 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
10 (11.5)	270	6.3×8	14	3400	540	SPU1AM271E08O00RAXXX
	330	6.3×8	14	3600	660	SPU1AM331E08O00RAXXX
		8×9	10	3700	660	SPU1AM331F09O00RAXXX
		6.3×10	8	3800	660	SPU1AM331E10O00RAXXX
	390	6.3×8	14	3700	780	SPU1AM391E08O00RAXXX
	470	5.5×9	14	3700	940	SPU1AM471B09O00RAXXX
		6.3×8	14	3800	940	SPU1AM471E08O00RAXXX
		8×9	10	3900	940	SPU1AM471F09O00RAXXX
		8×11	8	6200	940	SPU1AM471F11O00RAXXX
		6.3×10	9	3900	1120	SPU1AM561E10O00RAXXX
	560	8×9	10	3900	1120	SPU1AM561F09O00RAXXX
	680	8×11	8	4200	1360	SPU1AM681F11O00RAXXX
	820	8×11	8	4400	1640	SPU1AM821F11O00RAXXX
	1000	8×11	8	4600	2000	SPU1AM102F11O00RAXXX
		10×12	8	5800	2000	SPU1AM102G12O00RAXXX
	1200	8×12	8	4900	2400	SPU1AM122F12O00RAXXX
		10×12	8	5900	2400	SPU1AM122G12O00RAXXX
	1500	10×12	8	6000	3000	SPU1AM152G12O00RAXXX
	1800	10×13	8	6300	3600	SPU1AM182G13O00RAXXX
	2200	10×15	8	6700	4400	SPU1AM222G15O00RAXXX
	3300	10×18	8	6800	5000	SPU1AM332G18O00RAXXX
12 (13.8)	330	5.5×9	18	3410	792	SPU1TM331B09O00RAXXX
	470	5.5×9	18	3520	1128	SPU1TM471B09O00RAXXX
		6.3×9	18	3795	1128	SPU1TM471E09O00RAXXX
	560	6.3×10	14	3740	1344	SPU1TM561E10O00RAXXX
	680	6.3×11	14	3960	1632	SPU1TM681E11O00RAXXX
		8×10	14	4070	1632	SPU1TM681F10O00RAXXX
	820	8×11	11	4180	1968	SPU1TM821F11O00RAXXX
	1000	8×12	11	4400	2400	SPU1TM102F12O00RAXXX
	1200	8×14	11	4840	2880	SPU1TM122F14O00RAXXX
16 (18.4)	1500	8×16	11	5280	3600	SPU1TM152F16O00RAXXX
	47	5×7	14	2200	500	SPU1CM470D07O00RAXXX
	56	5×7	14	2300	500	SPU1CM560D07O00RAXXX
	68	5×7	14	2300	500	SPU1CM680D07O00RAXXX
	82	5×8	14	2400	500	SPU1CM820D08O00RAXXX
	100	5×7	14	2400	500	SPU1CM101D07O00RAXXX
		6.3×5	17	2300	500	SPU1CM101E05O00RAXXX
		6.3×8	14	3000	500	SPU1CM101E08O00RAXXX
	120	5×8	14	2500	500	SPU1CM121D08O00RAXXX
	150	5×8	14	2600	500	SPU1CM151D08O00RAXXX
	180	5×8	14	2600	576	SPU1CM181D08O00RAXXX
		6.3×7	11	2700	576	SPU1CM181E07O00RAXXX
		5×10	14	2800	704	SPU1CM221D10O00RAXXX
	220	6.3×8	14	2900	704	SPU1CM221E08O00RAXXX
		6.3×10	10	3100	704	SPU1CM221E10O00RAXXX
		5.5×9	14	3000	864	SPU1CM271B09O00RAXXX
	270	6.3×8	14	3000	864	SPU1CM271E08O00RAXXX
		8×9	14	3100	864	SPU1CM271F09O00RAXXX
		5.5×9	14	3100	1056	SPU1CM331B09O00RAXXX
	330	6.3×9	14	3100	1056	SPU1CM331E09O00RAXXX
		6.3×10	10	3400	1056	SPU1CM331E10O00RAXXX
		6.3×11	10	3500	1504	SPU1CM471E11O00RAXXX
	470	8×11	10	5000	1504	SPU1CM471F11O00RAXXX
		8×11	10	3500	1792	SPU1CM561F11O00RAXXX
		8×13	10	3600	1792	SPU1CM561F13O00RAXXX
	560	10×12	8	3800	1792	SPU1CM561G12O00RAXXX
		8×11	10	3700	2176	SPU1CM681F11O00RAXXX
		10×12	8	3900	2176	SPU1CM681G12O00RAXXX
	680	8×13	8	3800	2624	SPU1CM821F13O00RAXXX
		10×12	8	4100	2624	SPU1CM821G12O00RAXXX
		10×12	8	4400	3200	SPU1CM102G12O00RAXXX
	1000	8×14	8	3900	3200	SPU1CM102F14O00RAXXX
		10×15	8	4700	3840	SPU1CM122G15O00RAXXX
		10×18	8	6000	4800	SPU1CM152G18O00RAXXX
	1200	10×15	9	5900	5000	SPU1CM182G15O00RAXXX
	1800	10×15	9	5900	5000	SPU1CM182G15O00RAXXX
	2200	10×18	8	6300	5000	SPU1CM222G18O00RAXXX
20 (23.0)	39	5×8	36	2145	500	SPU1DM390D08O00RAXXX
	47	5×8	36	2420	500	SPU1DM470D08O00RAXXX
	56	5×9	36	2310	500	SPU1DM560D09O00RAXXX
	68	6.3×8	27	2310	500	SPU1DM680E08O00RAXXX
	82	6.3×8	27	2365	500	SPU1DM820E08O00RAXXX

PU series

■ STANDARD RATINGS

VDC (SV)	Cap (μF)	Size φD×L(mm)	ESR (mΩ, 20°C, 100kHz) (max.)	Rated ripple current (mA _{rms} /105°C, 100kHz)	Leakage Current (μA)(max.)	Part Number
20 (23.0)	100	6.3×8	27	2420	500	SPU1DM101E08O00RAXXX
	120	6.3×8	27	2530	500	SPU1DM121E08O00RAXXX
	150	6.3×10	18	2585	600	SPU1DM151E10O00RAXXX
	180	8×9	27	2695	720	SPU1DM181F09O00RAXXX
	220	8×11	15	4100	880	SPU1DM221F11O00RAXXX
	270	8×11	15	3500	1080	SPU1DM271F11O00RAXXX
	330	8×11	15	3600	1320	SPU1DM331F11O00RAXXX
	470	10×12	15	3700	1880	SPU1DM471G12O00RAXXX
	560	10×13	15	3800	2240	SPU1DM561G13O00RAXXX
	680	10×15	15	3900	2720	SPU1DM681G15O00RAXXX
	820	10×18	15	4000	3280	SPU1DM821G18O00RAXXX
	1000	10×18	15	4300	4000	SPU1DM102G18O00RAXXX
25 (28.8)	39	5×8	42	2000	500	SPU1EM390D08O00RAXXX
	47	5×9	42	2100	500	SPU1EM470D09O00RAXXX
	56	5×9	42	2200	500	SPU1EM560D09O00RAXXX
	68	6.3×7	21	2300	500	SPU1EM680E07O00RAXXX
	82	6.3×7	21	2300	500	SPU1EM820E07O00RAXXX
	100	6.3×8	21	2700	500	SPU1EM101E08O00RAXXX
		6.3×10	14	3000	500	SPU1EM101E10O00RAXXX
		8×11	14	3300	500	SPU1EM101F11O00RAXXX
	120	6.3×8	21	2700	600	SPU1EM121E08O00RAXXX
	150	6.3×10	14	3000	750	SPU1EM151E10O00RAXXX
	180	8×9	21	2700	900	SPU1EM181F09O00RAXXX
	220	8×11	14	3300	1100	SPU1EM221F11O00RAXXX
		10×12	14	3800	1100	SPU1EM221G12O00RAXXX
	270	8×11	14	3300	1350	SPU1EM271F11O00RAXXX
	330	8×11	14	3400	1650	SPU1EM331F11O00RAXXX
		10×12	14	4100	1650	SPU1EM331G12O00RAXXX
		10×12	14	4400	2350	SPU1EM471G12O00RAXXX
	470	8×16	14	3700	2350	SPU1EM471F16O00RAXXX
		10×12	14	4400	2800	SPU1EM561G12O00RAXXX
	560	10×12	14	4400	2800	SPU1EM561G12O00RAXXX
	680	10×15	14	4700	3400	SPU1EM681G15O00RAXXX
	820	10×18	14	4900	4100	SPU1EM821G18O00RAXXX
	1000	10×18	14	4900	5000	SPU1EM102G18O00RAXXX

Specifications subject to change without notice.

Conductive Polymer
Radial Type