

SPC Series

Chip Type Specialty Polymer Aluminum Electrolytic Capacitors

Features

Low profile type (1.8mm Height) of D - size

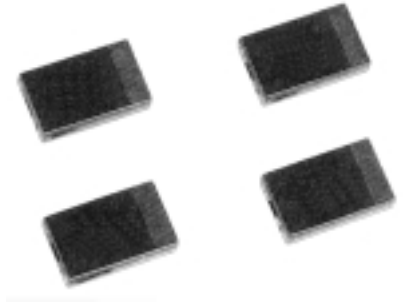
Low impedance at high frequency (10 kHz to 10 MHz) as low as ceramic capacitors
(Reduced ESR due to an applying speciality polymer with high conductivity.)

Excellent Noise-absorbent Characteristics

Surface Mount (Reflow soldering method available)

Very stable capacitance, impedance and ESR against temperature

Excellent endurance characteristics due to adoption of solid electrolyte



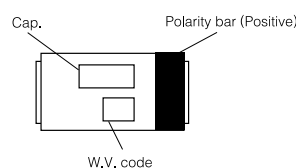
Specifications

Operating Temp. Range	-40 to +105°C	
Rated W.V. Range	4 to 16 V.DC	
Nominal Cap. Range	2.2 to 56 μ F	
Capacitance Tolerance	\pm 20% (120 Hz/+20°C)	
DC Leakage Current	$I \leq 0.04 CV$ or 3 (μ A) after 2 minutes (Whichever is the greater) (4W.V.:1 0.06CV)	
Dissipation Factor	≤ 0.06 (120 Hz/+20°C)	
Surge Voltage	Rated Working Voltage x1.25 Surge Voltage (15 to 35°C)	
Endurance	After applying rated working voltage for 1000 hours at +105°C, and then being stabilized at +20°C, capacitor shall meet the following limits.	
	Capacitance change	\pm 10% of initial measured value
	D.F.	\leq Initial specified value
	DC leakage current	\leq Initial specified value
Moisture resistance	After storing for 500 hours at +60°C, 90% R.H.	
	Capacitance change	+40%, -20% of initial measured value (4W.V.:+60%, -20% 6.3 W.V.: +50%, -20%)
	D.F.	$\leq 200\%$ of initial specified value
	DC leakage current	\leq Initial specified value

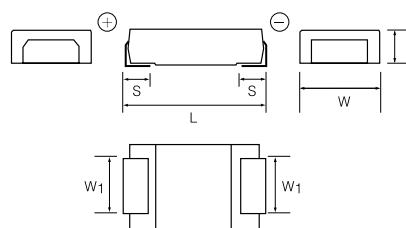
Explanation of Part Numbers

SPC	106	M	04	T
Series	Capacitance	Tolerance M=20%	Voltage Expressed in Volts (dc)	Packaging T = Tape and Reel B = Bulk
	Expressed in pF. First two digits are significant figures. Third digit denotes number of zeros. ie. 106=10000pF or 10uF			

Marking



Dimensions in mm (not to scale)



(V)	4	6.3	8	12.5	16
(W.V. code)	g	j	k	B	C

Size code	L ±0.2	W±0.2	W ₁ ±0.1	H±0.1	S±0.3
D	7.3	4.3	2.4	1.8	1.3

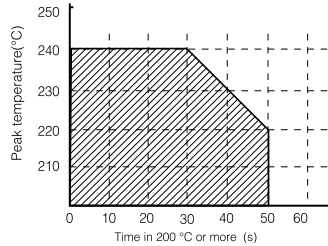
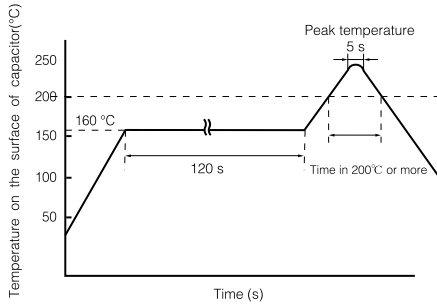
Standard Product

Rated W.V. (V.DC)	Capacitance (µF)	Part number	Impedance (W) (400kHz/+20°C)	Ripple current (A r.m.s.) (100kHz/ +20°C ~ +105°C)
4(04)	56	SPC566M04T	0.04	1.6
6.3 (06)	10	SPC106M06T	0.13	1
	22	SPC226M06T	0.09	1.3
	33	SPC336M06T	0.06	1.6
	47	SPC476M06T	0.05	1.6
8 (08)	8.2	SPC825M08T	0.14	1
	15	SPC156M08T	0.11	1.3
	22	SPC226M08T	0.09	1.6
	33	SPC336M08T	0.06	1.6
12.5 (12)	4.7	SPC475M12T	0.18	1
	10	SPC106M12T	0.13	1
	15	SPC156M12T	0.11	1.3
	22	SPC226M12T	0.09	1.3
16 (16)	2.2	SPC225M16T	0.38	1
	4.7	SPC475M16T	0.18	1
	6.8	SPC685M16T	0.15	1
	8.2	SPC825M16T	0.14	1

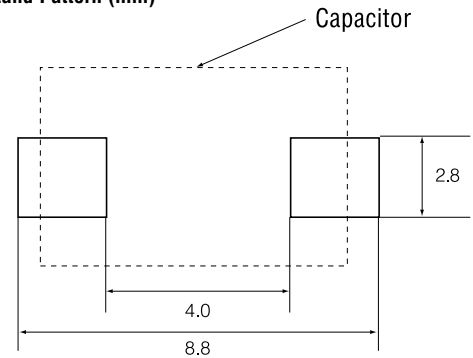
() shows W.V. and capacitance code.

Mounting Specifications

Recommendable Reflow Soldering Temperature

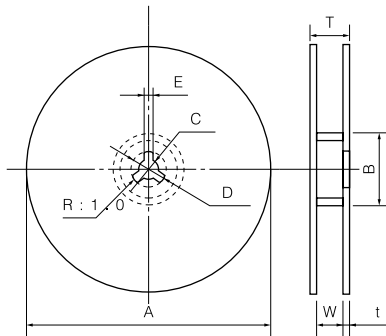


Typical Land Pattern (mm)

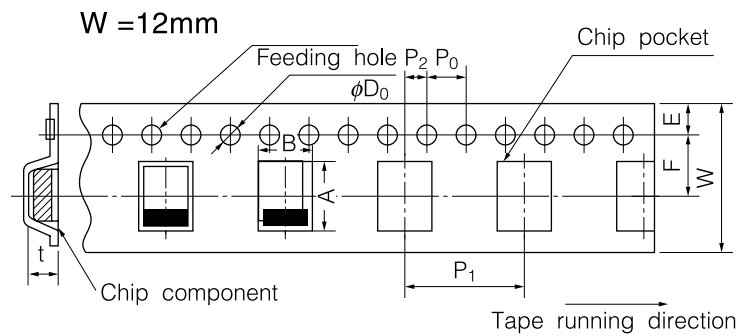


Packaging Specifications

Reel Dimensions (mm)



Embossed Taping (mm)



A	B	C	D	E	W	T	t
330±2	50 min.	13.0±0.5	21.0±0.8	2.0±0.5	14±1	20±1	3.0

A±0.2	B±0.2	W±0.3	F±0.1	E±0.1	P ₁ ±0.1
7.7	4.6	12.0	5.5	1.75	8.0
P ₂ ±0.1	P ₀ ±0.1	f D ₀	t±0.2		
2.0	4.0	1.5 ^{+0.1}	2.1		

Packaging Quantity

Embossed taping

3500 pcs./reel, 17500 pcs./box

Packaging Box Dimensions (mm)

