

# SG Soft Termination Capacitors

- MLCC's TERMINATIONS BUILT WITH A SOFT & FLEXIBLE POLYMER TO WITHSTAND HIGH BENDING STRESS IN SMT LINES



## GENERAL SPECIFICATION

	X7R
Capacitance Range	100pF ~ 47μF
Capacitance Tolerance	J, K, M
Temperature Characteristic	±15 %
Available Sizes	0402, 0603, 0805, 1206
Operating Temperature	-55°C ~ +125°C
Rated Voltage (WVDC)	6.3V, 10V, 16V, 25V, 50V, 100V, 200V, 250V, 500V, 630V, 1KV, 2KV, 3KV
Termination	Ni/Sn (Lead-free Termination)

### 0402, 0603

	NPO	Case
10V	100 ~ 0.22μF	s
16V	100 ~ 0.220μF	s
25V	100 ~ 0.10μF	s
	0.12uf ~ 0.22μF	x
50V	100 ~ 27,000	s
	33,000 ~ 0.10μF	x
100V	100 ~ 10,000	s
	12,000 ~ 0.10μF	x
200V	100 ~ 10,000	x
250V	100 ~ 10,000	x

### 0805

	NPO	Case
10V	100 ~ 0.22μF	D
	0.27μF ~ 0.82μF	I
16V	100 ~ 0.22μF	D
	0.27μF ~ 0.82μF	I
25V	100 ~ 0.22μF	D
	0.27μF ~ 0.82μF	I
50V	100 ~ 0.22μF	D
	0.27μF ~ 0.47μF	I
100V	100 ~ 0.10μF	D
	0.12μF ~ 0.22μF	I
200V	100 ~ 0.10μF	D
250V	100 ~ 68,000	D
500V	100 ~ 3,900	B
	4,700 ~ 33,000	D
630V	100 ~ 3,900	B
	4,700 ~ 27,000	D
1000V	100 ~ 1,200	B
	1,800 ~ 2,200	D

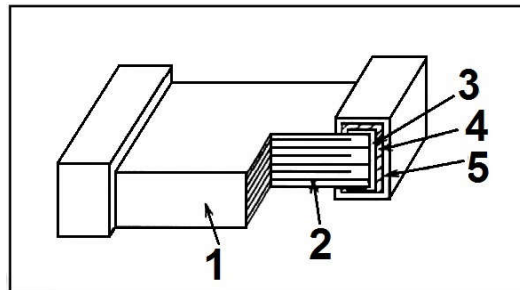
### 1206

	NPO	Case
10V	100 ~ 0.12μF	D
	0.15μF ~ 0.39μF	C
	0.47μF ~ 1.0μF	J
16V	100 ~ 0.12μF	D
	0.15μF ~ 0.39μF	C
	0.47μF ~ 1.0μF	J
25V	100 ~ 0.12μF	D
	0.15μF ~ 0.33μF	C
	0.39μF ~ 1.0μF	J
50V	100 ~ 0.12μF	D
	0.15μF ~ 0.22μF	C
	0.27μF ~ 0.33μF	D
	0.39μF ~ 1.0μF	P
100V	100 ~ 0.10μF	D
	0.15μF ~ 0.47μF	G
	0.56μF ~ 0.82μF	P
200V	100 ~ 27,000	D
	33,000 ~ 0.1μF	G
250V	100 ~ 27,000	D
	33,000 ~ 0.1μF	G
400V	68,000 ~ 0.1μF	G
450V	68,000 ~ 0.1μF	G
500V	100 ~ 18,000	D
	22,000 ~ 56,000	G
630V	100 ~ 18,000	D
	22,000 ~ 56,000	G
1000V	100 ~ 10,000	D
	12,000 ~ 15,000	G
1500V	100 ~ 680	D
	820 ~ 10,000	G
2000V	100 ~ 680	D
	820 ~ 3,300	G

All vales in pF unless noted otherwise.

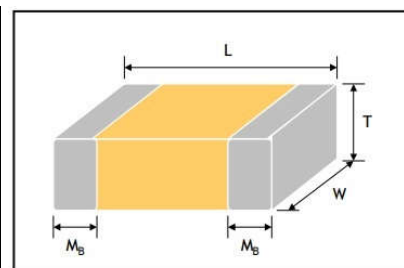
### CONSTRUCTION

No.	Name	X7R	
1	Ceramic Material	BaTiO <sub>3</sub> based	
2	Inner Electrode	Ni	
3	Inner Layer	Cu + Cu Polymer	
4	Termination	Middle Layer	Ni
5		Outer Layer	Sn



### DIMENSIONS & PACKAGING - T&R - 7"

Size	L	W	T / Symbol	Rmk.	M <sub>B</sub>	Qty T&R - 7"
0603	1.60 ±0.20	0.80 ±0.10	0.80 ±0.70	S	0.40 ±0.15	4,000
	1.60 ±0.30	0.80 ±0.30	0.80 ±0.30	X		4,000
0805	2.00 ±0.20	1.25 ±0.10	0.80 ±0.10	B	0.50 ±0.20	4,000
			1.25 ±0.10	D #		3,000
	2.00 ±0.30	1.25 ±0.30	1.25 ±0.13	I #		3,000
1206	3.20 +0.4/-0.1	1.60 ±0.15	0.80 ±0.10	B	0.60 ±0.20 (0.50 ±0.25)*	4,000
			0.95 ±0.10	C #		3,000
			1.15 ±0.15	J #		3,000
			1.25 ±0.10	D #		3,000
	3.20 +0.4/-0.1	1.60 ±0.20	1.60 ±0.20	G #		2,000
	3.20 ±0.50	1.60 ±0.50	1.60 ±0.50	P #		2,000



All dimensions in mm.  
 # Reflow soldering only is recommended.  
 \* For 1206 ≥ 1000v products.

### PART NUMBER

**SG 0805 B 331 J 202 C T**

Series	Size Code	Material	Value	Tolerance	Voltage	Termination	Packaging
SG	0603 0805 1206	B = X7R	101 = 100pF 562 = 5,600pF 333 = 0.033µF 104 = 0.1µF 105 = 1.0µF	J = 5% K = 10% M = 20%	100 = 10V 160 = 16V 500 = 50V 101 = 100V 501 = 500V 631 = 630V 102 = 1000V 152 = 1500V 202 = 2000V	C = Cu/Ni/Sn	T = T&R 7" reel

SG Series parts are  
RoHS & REACH Compliant