

# SURFACE MOUNT MULTILAYER CERAMIC

## SMC (Surface Mount) SERIES

The SMC Series are ideally suited for thick-film hybrid circuit and automated surface mounting on any printed circuit board. The nickel barrier terminations consist of a nickel barrier layer over a silver metallization and then finished by an electroplated solder layer to ensure the terminations have good solderability.

### RATINGS

**Capacitance Range:** 1.0pf to 1.0μf

**Voltage:** 50VDC

### PERFORMANCE SPECIFICATIONS

**Operating Temperature Range:**

NPO – -55° to +125°C

X7R – -55° to +125°C

Z5U – +10° to +85°C

Y5V – -25° to +85°C

**Tolerance Range:**

C – ±0.25pF

J – ±5%

K – ±10%

Z – +80%, -20%

**Temperature Coefficient:**

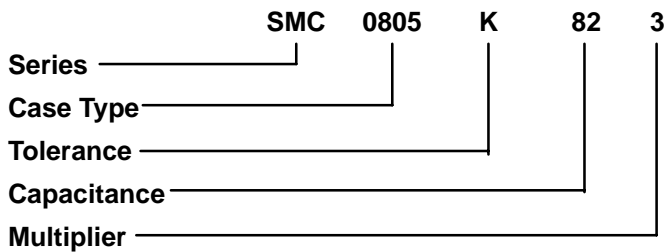
NPO – Stable

X7R – ±15%

Z5U – +22%, -56%

Y5V – +22%, -82%

### ORDERING INFORMATION



### CAPACITANCE RANGE:

#### Capacitance

Cap	Temp. Coeff.	Cap	Temp. Coeff.	Cap	Temp. Coeff.
1.0pF	NPO	68.0pF	NPO	4700.0pF	X7R
1.2pF	NPO	82.0pF	NPO	5600.0pF	X7R
1.5pF	NPO	100.0pF	NPO	6800.0pF	X7R
1.8pF	NPO	120.0pF	NPO	8200.0pF	X7R
2.2pF	NPO	150.0pF	NPO	0.010μF	X7R
2.7pF	NPO	180.0pF	NPO	0.012μF	X7R
3.3pF	NPO	220.0pF	NPO	0.015μF	X7R
3.9pF	NPO	270.0pF	NPO	0.018μF	X7R
4.7pF	NPO	330.0pF	NPO	0.022μF	X7R
5.6pF	NPO	390.0pF	NPO	0.027μF	X7R
6.8pF	NPO	470.0pF	NPO	0.033μF	X7R
8.3pF	NPO	560.0pF	NPO	0.039μF	X7R
10.0pF	NPO	680.0pF	NPO	0.047μF	X7R
12.0pF	NPO	820.0pF	NPO	0.056μF	X7R
15.0pF	NPO	1000.0pF	NPO	0.068μF	X7R
18.0pF	NPO	1000.0pF	X7R	0.082μF	X7R
22.0pF	NPO	1200.0pF	X7R	0.1μF	X7R
27.0pF	NPO	1500.0pF	X7R	0.1μF	Z5U
30.0pF	NPO	1800.0pF	X7R	0.22μF	Z5U
33.0pF	NPO	2200.0pF	X7R	0.33μF	Y5V
39.0pF	NPO	2700.0pF	X7R	0.47μF	Y5V
47.0pF	NPO	3300.0pF	X7R	1.0μF	Y5V
56.0pF	NPO	3900.0pF	X7R	2.2μF	Y5V

### MECHANICAL SPECIFICATIONS (Figure 1)

#### Dimensions in (mm)

Case	L	W	H	tw
0805	.080 (2.0)	.050 (1.2)	.051 (1.3)	.020 (0.5)
1206	.126 (3.2)	.063 (1.6)	.031 (0.8)	.020 (0.5)

FIGURE 1

