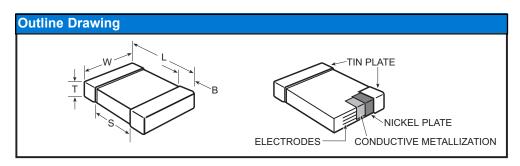


# **Product Bulletin**

## Surface Mount Ceramic Chip Capacitors - C0201 Series - X5R Dielectric



Dimensions – Millimeters (Inches)									
EIA Size Code	Metric Size Code	L Length	W Width	B Bandwidth	S Separation				
0201	0603	0.6 (.024) ± 0.03 (.001)	0.3 (.012) ± 0.03 (.001)	0.15 (.006) ± 0.05 (.002)	-				

See Capacitance Value Table below for thickness dimension.

Capacitance Value									
Capacitance Value (uF)	KEMET Part Number	Voltage	Capacitance Tolerance	Thickness	Qty 7" Reel				
0.01	C0201C103K4PAC	16	K,M	0.3 (.012) ± 0.03 (.001)	15,000				
0.10	C0201C104K9PAC	6.3	K,M	0.3 (.012) ± 0.03 (.001)	15,000				

#### **Capacitor Ordering Information** 0201 P C 104 K <u>9</u> <u>A</u> Style . \_ End Metallization C - Ceramic C = Standard (Tin-plate nickel barrier) Size Code . See dimension table **Failure Rate Level** A = Not Applicable Specification C - Standard **Temperature Characteristic** Designated by Capacitance Capacitance Code, pF\_ Change Over Temperature Range First two digits represent significant figures. Third digit specifies number of zeros. 100 pF = 101. $P = X5R (\pm 15\%) (-55^{\circ}C + 85^{\circ}C)$ (Use "9" for 1.0 through 9.9 pF) (Use "8" for 0.1 through .99 pF) Voltage 9 = 6.3VCapacitance Tolerance 4 = 16V $K = \pm 10\%$ $M = \pm 20\%$



#### **Electrical Parameters**

As detailed in the KEMET Surface Mount Catalog F3102 for X5R, with following specific requirements based on room temperature (25°C) parameters:

- Operating Range: -55°C to +85°C, with no-bias capacitance shift limited to ± 15% over that range.
- Insulation Resistance (IR) measured after 2 minutes at rated voltage @ 25°C: Limit is 500 megohm microfarads or 10000MΩ, whichever of the two is smaller.
- Capacitance and Dissipation Factor (DF) measured at 1 kHz and 1 Vrms. DF Limit is 10% max.\*\*
  \*\* Please refer to individual specifications.

### **Soldering Process**

These components are suitable for reflow only. All parts incorporate the standard KEMET barrier layer of pure nickel, with an overplate of pure tin to provide excellent solderability as well as resistance to leaching.

#### **Marking**

These chips will be supplied unmarked.

In general, the information in the KEMET Surface Mount catalog F3102 applies to these capacitors. The information in this bulletin supplements that in the catalog.



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