



Surface Mount Multilayer Ceramic Capacitors

High Temperature 175°C X7R Dielectric



Why Choose KEMET

KEMET Electronics Corporation is a leading global supplier of electronic components. We offer our customers the broadest selection of capacitor technologies in the industry, along with an expanding range of electromechanical devices, electromagnetic compatibility solutions and supercapacitors. Our vision is to be the preferred supplier of electronic component solutions for customers demanding the highest standards of quality, delivery and service.

Features & Benefits

- Operating temperature range of -55°C to +175°C
- Voltage derating not required
- Lead (Pb)-Free, RoHS and REACH compliant
- Base metal electrode (BME) dielectric system
- Available capacitance tolerances of $\pm 5\%$, $\pm 10\%$ and $\pm 20\%$
- Non-polar device, minimizing installation concerns
- 100% pure matte tin-plated termination finish allowing for excellent solderability
- Flexible termination option available upon request

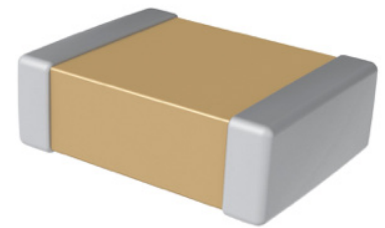
Product Checklist

- What is the end application?
- Is the application temperature above 150°C?
- Are you currently using a solution that requires voltage derating?
- Does your application require a voltage and temperature stable dielectric solution?
- What capacitance is required at operating temperature?
- What is the application voltage at operating temperature?
- Do you require a lead (Pb)-Free, RoHS and REACH compliant solution?
- Does your current solution provide consistent reliability and performance?
- Is mechanical stress, extreme thermal cycling, shock and/or vibration a concern?

For more information, samples and engineering kits, please visit us at www.kemet.com or call 1.877.myKEMET.

Programs Supported

- Down-hole oil and gas exploration
- Aerospace engine compartments
- Geophysical probes
- Heavy commercial and specialty vehicles
- Construction Equipment
- Industrial process control
- Defense
- Medical



Electrical/Physical Characteristics

Case Size	Tolerances	Dielectric	Temperature Range	Voltage Options	Capacitance Values
0402	J	X7R	-55°C to 175°C	16 V	2.7 nF to 3.3 μ F
0603	K			25 V	
0805	M			50 V	
1206				100 V	
1210				200 V	
1812					

Ordering Information

C	1210	R	225	K	3	R	A	C	T050
Ceramic	Case Size (L" x W")	Specification/ Series	Capacitance Code (pF)	Capacitance Tolerance	Rated Voltage (VDC)	Dielectric	Failure Rate/ Design	Termination Finish	Packaging (C-Spec)
	0402 0603 0805 1206 1210 1812	G = 175°C R = 175°C w/ Flexible Termination	First two digits represent significant figures. Third digit specifies number of zeros.	J = $\pm 5\%$ K = $\pm 10\%$ M = $\pm 20\%$	4 = 16 3 = 25 5 = 50 1 = 100 2 = 200	R = X7R	A = N/A	C = 100% Matte Sn	Blank = Bulk 7292 = Waffle pack / Tray TU = 7" Reel - Unmarked (full reel quantity) T050 = 50 pcs / 7" Reel - Unmarked T100 = 100 pcs / 7" Reel - Unmarked T250 = 250 pcs / 7" Reel - Unmarked T500 = 500 pcs / 7" Reel - Unmarked T1K0 = 1,000 pcs / Reel - Unmarked