



Flex Mitigation Multilayer Ceramic Capacitors

Fail Open Technology



Why Choose KEMET

KEMET applies world-class service and quality to deliver industry-leading, high performance capacitance solutions worldwide. With 95% of possible dielectric solutions, KEMET offers the world's most complete line of surface mount and through-hole capacitor technologies across tantalum, ceramic, film, aluminum and paper dielectrics. One world. One KEMET.

Features & Benefits

- 2 mm minimum flex capability
- Fail open electrode designs
- Low to high capacitance flex mitigation
- Provides protection against a low IR or short circuit condition
- Pb-Free and RoHS compliant

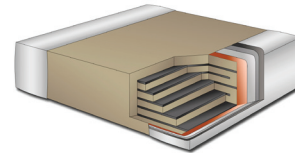
Product Checklist

- Is this a critical and safety relevant circuit?
- Is your circuit board subject to high levels of board flexure during assembly, mounting or depanelization?
- Are you placing MLCCs close to the edges or corners of your board?
- Are MLCCs being placed near or around connectors or heavy components?
- Do you require a case size smaller than EIA 0603?
- Is mechanical or thermal stress a concern in your application?
- Is your application commercial or automotive?
- What is your capacitance requirement?

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

Programs Supported

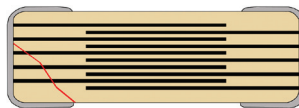
- Commercial
- Automotive



KEMET Electrical/Physical Characteristics

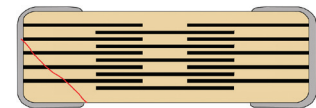
| Dielectric | Case Sizes | Tolerances | Temperature Range | Voltage Options | Capacitance Values |
|---|-------------|-----------------------|-------------------|-----------------|--------------------|
| Open Mode – Commercial and Automotive Grades | | | | | |
| X7R | 0805 – 1812 | ± 5%, ± 10% and ± 20% | - 55°C to + 125°C | 16 – 200 | 1,000 pF – 6.8 μF |
| Floating Electrode (FE-CAP) | | | | | |
| X7R | 0402 – 1812 | ± 5%, ± 10% and ± 20% | - 55°C to + 125°C | 6.3 - 250 | 150 pF – 0.22 μF |

Open Mode



Open Mode creates a safe margin area

Floating Electrode (FE-CAP)



Unique electrode design allows for a fail-open during a flex condition

Ordering Information

| Ceramic | Case Size (L" x W") | Specification Series | Capacitance Code (pF) | Capacitance Tolerance | Rated Voltage (VDC) | Dielectric | Failure Rate/Design | Termination Finish ¹ | Packaging/Grade (C-Spec) ² |
|---------|--|-------------------------------|--|---------------------------------|--|------------|---------------------|--|---|
| C | 1210 | F | 685 | K | 3 | R | A | C | TU |
| | 0805 1206 1210 1812 | F = Open Mode | 2 Significant Digits + Number of Zeros | K = ±10% M = ±20% | 4 = 16 V 3 = 25 V 5 = 50 V 1 = 100 V 2 = 200 V | R = X7R | A = N/A | C = 100% Matte Sn L = SnPb (5% min) | Blank = Bulk TU = 7" Reel Unmarked TM = 7" Reel Marked AUTO = Automotive Grade 7" Reel Unmarked |
| C | 0805 | S | 104 | K | 5 | R | A | C | TU |
| | 0402 0603 0805 1206 1210 1812 | S = Floating Electrode | 2 Significant Digits + Number of Zeros | J = ±5% K = ±10% M = ±20% | 9 = 6.3 V 8 = 10 V 4 = 16 V 3 = 25 V 5 = 50 V 1 = 100 V 2 = 200 V A = 250 V | R = X7R | A = N/A | C = 100% Matte Sn L = SnPb (5% min) | Blank = Bulk TU = 7" Reel Unmarked TM = 7" Reel Marked |

¹ Additional termination finish options may be available. Contact KEMET for details.

² SnPb termination finish option is not available on Automotive Grade product.

² Additional reeling or packaging options may be available. Contact KEMET for details.