

# Flex Mitigation Multilayer **Ceramic Capacitors**



Hybrid 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

- · Fail open electrode designs
- · Low to high capacitance flex mitigation
- · Flex mitigation technology inside the chip and in the termination area
- Provides protection against a low IR or short circuit condition
- Superior flex performance (up to 5 mm)
- · 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 are your capacitance requirements?

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

#### **Programs Supported**

- Commercial
- Automotive

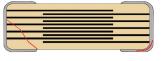


# **KEMET Electrical/Physical Characteristics**

| Dielectric                                | Case<br>Sizes | Tolerances                     | Temperature<br>Range                            | Voltage<br>Options | Capacitance<br>Values |  |  |  |  |  |  |  |
|---|---------------|--------------------------------|---|--------------------|-----------------------|--|--|--|--|--|--|--|
| Flexible Termination + Open Mode (FO-CAP) |               |                                |   |                    |                       |  |  |  |  |  |  |  |
| X7R                                       | 0805 - 1812   | ± 5%, ±10%, ± 20%              | $\pm$ 5%, $\pm$ 10%, $\pm$ 20% - 55°C to +125°C |                    | 1,000 pF – 6.8 µF     |  |  |  |  |  |  |  |
|   |               | g Electrode (FF-CAP)           |   |                    |                       |  |  |  |  |  |  |  |
| X7R                                       | 0603 - 1812   | $\pm$ 5%, $\pm$ 10%, $\pm$ 20% | - 55°C to $+125°C$                              | 6.3 – 250 V        | 180 pF – 0.22 μF      |  |  |  |  |  |  |  |

## Flexible Termination + **Open Mode (FO-CAP)**

# Flexible Termination + Floating Electrode (FF-CAP)



# **Ordering Information**

| Ceramic | Case Size<br>(L" x W")               | Specification/<br>Series  | Capacitance<br>Code (pF)                        | Capacitance<br>Tolerance                               | Rated<br>Voltage<br>(VDC)   | Dielectric | Failure<br>Rate/Design |  | Packaging/Grade<br>(C-Spec)²  |
|---------|--------------------------------------|---|---|--|---|------------|------------------------|--|---|
| C       | 1210                                 | F   | 685   | К  | 3   | R          | A                      | C  | TU  |
|         | 0805<br>1206<br>1210<br>1812         | J = Flexible<br>Termination<br>with Open<br>Mode                | 2 Significant<br>Digits +<br>Number of<br>Zeros | $M = \pm 20\%$   | $\begin{array}{l} 4 = 16 \ V \\ 3 = 25 \ V \\ 5 = 50 \ V \\ 1 = 100 \ V \\ 2 = 200 \ V \end{array}$   | :          | A = N/A                | C = 100%<br>Matte Sn<br>L = SnPb<br>(5% min) | Blank = Bulk<br>TU = 7" Reel<br>Unmarked<br>TM = 7" Reel<br>Marked<br>AUTO =<br>Automotive Grade<br>7"Reel Unmarked |
| С       | 0805                                 | Y   | 104   | к  | 5   | R          | Α                      | C  | TU  |
|         | 0603<br>0805<br>1206<br>1210<br>1812 | Y =<br>Flexible<br>Termination<br>with<br>Floating<br>Electrode | 2 Signicant<br>Digits +<br>Number of<br>Zeros   | $\begin{array}{l} K=\pm 10\%\\ M=\pm 20\% \end{array}$ | $\begin{array}{l} 9 = 6.3 \ V \\ 8 = 10 \ V \\ 4 = 16 \ V \\ 3 = 25 \ V \\ 5 = 50 \ V \\ 1 = 100 \ V \\ 2 = 200 \ V \\ A = 250 \ V \end{array}$ |            | A = N/A                | C = 100%<br>Matte Sn<br>L = SnPb<br>(5% min) | Blank = Bulk<br>TU = 7" Reel<br>Unmarked<br>TM = 7" Reel<br>Marked  |

Additional termination finish options may be available. Contact KEMET for details.
<sup>12</sup> SnPb termination finish option is not available on Automotive Grade product.
<sup>2</sup> Additional reeling or packaging options may be available. Contact KEMET for details.