SOLUTIONS

Flex Mitigation Multilayer Ceramic Capacitors

Flexible Termination Technology (FT-CAP)

Electronic Components
KEMET
CHARGED.

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 com patibility 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

- Provides superior flex performance over standard termination systems
- Directs board stress away from the ceramic body and into the termination area
- Reduces likelihood of low IR or short circuits failures due to board flex
- Superior flex performance (up to 5 mm)
- Pb-Free and RoHS compliant
- Ideal for high thermal stress applications (thermal cycling)

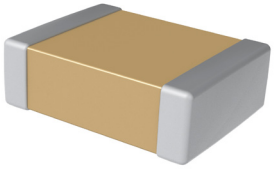
Product Checklist

- Does your application have a direct battery or power source connection?
- Is this a critical and safety relevant circuit?
- Is there an integrated current limitation?
- 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?

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

Applications

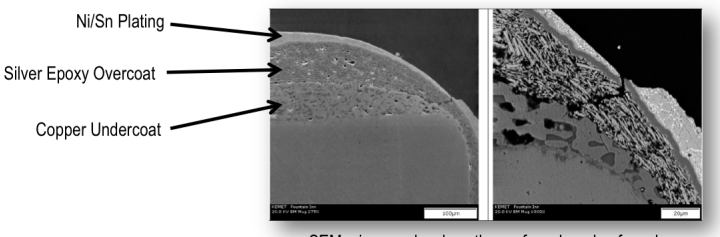
- Commercial
- Automotive



KEMET Electrical/Physical Characteristics

Dielectric	Case Sizes	Tolerances	Temperature Range	Voltage Options	Capacitance Values
FT-CAP (6.3 – 250 VDC) - Commercial and Automotive Grades					
C0G	0603 – 2225	± 0.25 pF, ± 0.5 pF, ± 1%, ± 2%, ± 5%, ± 10% and ± 20%	- 55°C to +125°C	10 – 200	0.5 pF – 0.47 µF
X7R	0603 – 2225	± 5%, ± 10% and ± 20%	- 55°C to +125°C	6.3 – 250	180 pF – 22 µF
Ultra Stable X8R	0603 – 1812	± 1%, ± 2%, ± 5%, ± 10% and ± 20%	- 55°C to +150°C	25 – 200	430 pF – 220 nF
X8L	0603 – 1210	± 5%, ± 10% and ± 20%	- 55°C to +150°C	10 – 50	0.012 µF – 10µF
High Voltage FT - CAP (500 – 3,000 VDC) - Commercial and Automotive Grades					
X7R	0603 – 2225	± 5%, ± 10% and ± 20%	- 55°C to +125°C	500 – 3,000	10 pF – 560 nF
C0G	0805 – 2225	± 0.10 pF, ± 0.25 pF, ± 0.5 pF, ± 1%, ± 2%, ± 5%, ± 10% and ± 20%	- 55°C to +125°C	500 – 3,000	1 pF – 39 nF
ArcShield (500 – 1,000 VDC) - Commercial and Automotive Grades					
X7R	0603 – 2225	± 5%, ± 10% and ± 20%	- 55°C to +125°C	500 – 1,000	1,000 pF – 560 nF

Flexible Termination (FT-CAP)



SEM micrographs show the preferred mode of crack propagation along the interface between the copper/glass and silver epoxy termination layers.