



# Flex Mitigation Multilayer Ceramic Capacitors

## Mechanical Isolation 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

- Ultimate flex protection by isolating the ceramic body from the circuit board
- Provides up to 10 mm of board flex capability
- Reliable and robust termination system
- Higher capacitance in the same footprint
- Potential board space savings
- Advanced protection against thermal and mechanical stress
- Reduces audible, microphonic noise
- Pb-Free and RoHS compliant
- Capable of Pb-Free reflow profiles
- Non-polar device, minimizing installation concerns

### Product Checklist

- What is your application temperature?
- Is your circuit board subject to high levels of board flexure during assembly, mounting or depanelization?
- Does your application require higher capacitance in the same footprint (KPS)?
- Are there high levels of thermal and/or mechanical stress in your application?
- Is audible, microphonics noise a concern in your application?
- Is there a height restriction in your application?

For more information, samples and engineering kits, please visit us at [www.kemet.com](http://www.kemet.com) or call 1.877.myKEMET.

### Programs Supported

- Commercial
- Automotive

### KEMET Electrical/Physical Characteristics

Product	Form Factor	Tolerances	Temperature Range	Voltage Options	Capacitance Values
<b>KPS (KEMET POWER SOLUTIONS) – Commercial and Automotive Grades</b>					
KPS	Stacked MLCC (Surface mount)	± 10%, ± 20%	- 55°C to + 125°C	10 – 630	0.10 – 47 μF
KPS Auto KPS HT (X8L), KPS HV X7R, KPS HV X7R Auto	SMD Stacked (Leadframe)	± 10%, ± 20%	- 55°C to + 125°C	10 – 630	0.10 nF – 47 μF
<b>GOLDMAX - Commercial and Automotive Grades</b>					
X7R 300 Series	Radial (Through-hole)	± 5%, ± 10%, ± 20%, + 80%/- 20%	- 55°C to + 125°C	25 – 250	100 pF – 10 μF
COG 300 Series	Through-hole (Radial leaded)	± 0.5 pF, ± 1%, ± 2%, ± 5%, ± 10%	- 55°C to + 125°C	50 – 200	1 pF – 0.15 μF
Z5U 300 Series (Commercial only)	Through-hole (Radial leaded)	± 20%, + 100/- 0, + 80%/- 20%	+ 10°C to + 85°C	50 – 200	1,000 pF – 6.8 μF
X7R 600 Series	Through-hole (Radial leaded)	± 5%, ± 10%, ± 20%, + 80%/- 20%	- 55°C to + 125°C	500 – 3,000	820 pF – 2.9 μF
COG 600 Series	Through-hole (Radial leaded)	± 0.25 pF, ± 0.50 pF, ± 5%, ± 10%, ± 20%	- 55°C to + 125°C	500 – 3,000	12 pF – 0.068 μF
<b>AXIMAX – Commercial and Automotive Grades</b>					
X7R 400 Series	Through-hole (Axial leaded)	± 5%, ± 10%, ± 20%	- 55°C to + 125°C	25 – 250	100 pF – 4.7 μF
COG 400 Series	Through-hole (Axial leaded)	± 0.25 pF, ± 0.5 pF, ± 1%, ± 2%, ± 5%, ± 10%	- 55°C to + 125°C	50 – 200	1 pF – 0.015 μF
Z5U 400 Series (Commercial only)	Through-hole (Axial leaded)	± 20%, + 80%/- 20%	+ 10°C to + 85°C	50 – 200	6,800 pF – 2.2 μF

KPS



Goldmax



Aximax

