Multilayer Ceramic Capacitors
High Temperature Pulse Discharge Solution

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
• ROHS/REACH compliant
• High current transient pulses
• Discharge pulse width typically of 100 ns (may vary with load conditions)
• Operating temperature up to +200°C
• No capacitance change with voltage
• Negligible capacitance change with temperature
• Discharge voltage up to 3,500 V
• Surface mountable
• BME technology for superior reliability
• Dissipation factor < 0.1%
• 100% enhanced screening for reliable energy delivery

Product Checklist
• Is your application operating in extreme environments?
• Do you require a RoHS compliant solution?
• Do you need a thermally stable solution?
• What is your maximum operating temperature?
• What are your capacitance and voltage requirements?
• Do you have any size constraints?
• Do you require high energy pulses?
• How much pulse energy do you need for your application?

Applications
• Down-hole drilling
• Electronic fuse
• Detonation/munitions
• Fireset circuitry
• High temperature lighting ballasts

KEMET Electrical/Physical Characteristics

<table>
<thead>
<tr>
<th>Case Size</th>
<th>Form Factor</th>
<th>Dielectric</th>
<th>Operating Temperature Range</th>
<th>Temperature Coefficient (TCC)</th>
<th>Capacitance Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>2824</td>
<td>SMD</td>
<td>C0G</td>
<td>–55°C to +200°C</td>
<td>±30 ppm (–55°C to +200°C)</td>
<td>2.2 nF – 56 nF</td>
</tr>
<tr>
<td>3040</td>
<td>SMD</td>
<td>C0G</td>
<td>–55°C to +200°C</td>
<td>±30 ppm (–55°C to +200°C)</td>
<td>3.3 nF – 100 nF</td>
</tr>
<tr>
<td>3640</td>
<td>SMD</td>
<td>C0G</td>
<td>–55°C to +200°C</td>
<td>±30 ppm (–55°C to +200°C)</td>
<td>3.9 nF – 120 nF</td>
</tr>
<tr>
<td>4540</td>
<td>SMD</td>
<td>C0G</td>
<td>–55°C to +200°C</td>
<td>±30 ppm (–55°C to +200°C)</td>
<td>4.7 nF – 150 nF</td>
</tr>
</tbody>
</table>

Ordering Information

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