Surface Mount Multilayer Ceramic Capacitors for High Power Applications
HiQ-CBR Series (RF & Microwave)

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
• Ultra high Q
• Base metal electrode (BME) dielectric system
• Pb-free and RoHS compliant
• No piezoelectric noise
• Low ESR
• High thermal stability
• No capacitance change with respect to applied rated DC voltage
• Negligible capacitance change with respect to temperature
• No capacitance decay with time
• Non-polar device, minimizing installation concerns
• 100% pure matte tin-plated termination finish allowing for excellent solderability

Product Checklist
• Do you have a radio frequency or microwave application?
• Is low loss performance (high Q) required?
• Is stability of capacitance required?
• Do you require high self-resonance frequency characteristics?
• Do you require a capacitor that is well suited for resonant circuit applications?

Applications
Field applications:
• Wireless and cellular base stations
• Wireless LAN
• Subscriber-based wireless services
• Wireless broadcast equipment
• Satellite communications
• RF power amplifier (PA) modules
• Filters
• Voltage-controlled oscillators (VCOs)
• PAs
• Matching networks
• RF modules
• Medical electronics

Typical applications:
• Critical timing
• Tuning
• Bypass
• Coupling
• Feedback
• Filtering
• Impedance matching
• DC blocking

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

KEMET Electrical/Physical Characteristics

<table>
<thead>
<tr>
<th>Case Size</th>
<th>Typical ESR Ω (10 pF at 1 GHz)</th>
<th>Dielectric</th>
<th>Operating Frequency Range</th>
<th>Operating Temperature Range</th>
<th>Temp Coefficient (TCC)</th>
<th>Capacitance Range</th>
<th>Max Voltage (VDC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0402</td>
<td>&lt; 0.095</td>
<td>CDG</td>
<td>1 MHz – 50 GHz</td>
<td>–55°C to + 125°C</td>
<td>0 ± 30 ppm/°C</td>
<td>0.1 – 100 pF</td>
<td>200</td>
</tr>
<tr>
<td>0403</td>
<td>&lt; 0.100</td>
<td>CDG</td>
<td>1 MHz – 50 GHz</td>
<td>–55°C to + 125°C</td>
<td>0 ± 30 ppm/°C</td>
<td>0.3 – 100 pF</td>
<td>250</td>
</tr>
<tr>
<td>0405</td>
<td>&lt; 0.085</td>
<td>CDG</td>
<td>1 MHz – 50 GHz</td>
<td>–55°C to + 125°C</td>
<td>0 ± 30 ppm/°C</td>
<td>0.1 – 100 pF</td>
<td>200</td>
</tr>
</tbody>
</table>

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