Features
• Highest capacitance in the smallest footprint
• Introducing V80, 0408 case size, 100 nF
• X7R characteristics
• Wire-bondable
• RoHS compliant
• Excellent high frequency response

Applications
• DC blocking
• RF bypassing
• Filtering
• Tuning
• Coupling

Benefits
• High capacitance density
• Can be epoxy or AuSn solder mounted

V80 New Extension Release
Class II dielectric material with X7R characteristics for DC blocking or RF bypass applications in a broad frequency range.

These high frequency, wire bondable single layer capacitors are perfect for GaN and GaAs amplifier applications where small size and microwave performance are key to a well-performing circuit.

### V-Series Single Layer Capacitors

<table>
<thead>
<tr>
<th>CASE SIZE</th>
<th>MATERIAL</th>
<th>CAPACITANCE</th>
<th>TOLERANCE</th>
<th>VOLTAGE RATING</th>
<th>TERMINATION</th>
<th>TEST LEVEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>V30 (0303)</td>
<td>BZ</td>
<td>102 = 1 nF 222 = 2.2 nF 472 = 4.7 nF 682 = 6.8 nF 103 = 10 nF</td>
<td>M = ±20%</td>
<td>5 = 50 V 1 = 100 V 6 = 200 V 8 = 150 V</td>
<td>S = Ni/Au</td>
<td>X = Commercial A = Group A B = Group B</td>
</tr>
<tr>
<td>V80 (0408)</td>
<td>BZ</td>
<td>104 = 100 nF</td>
<td>M = ±20%</td>
<td>2 = 25 V 5 = 50 V</td>
<td>S = Ni/Au</td>
<td>X = Commercial A = Group A B = Group B</td>
</tr>
</tbody>
</table>

Metal Thickness: 100 μ" Min. of Au over 50 μ" Min. of Ni

<table>
<thead>
<tr>
<th>PART</th>
<th>LENGTH, IN (mm)</th>
<th>WIDTH, IN (mm)</th>
<th>THICKNESS, IN (mm)</th>
<th>INSULATION RESISTANCE @ 25 °C</th>
<th>INSULATION RESISTANCE @ +125 °C</th>
<th>DISSIPATION FACTOR @ 1 MHz</th>
</tr>
</thead>
<tbody>
<tr>
<td>V30</td>
<td>0.03”± 0.003” (0.762 mm ± 0.076 mm)</td>
<td>0.03”± 0.003” (0.762 mm ± 0.076 mm)</td>
<td>0.022”± 0.003” (0.559 mm ± 0.076 mm)</td>
<td>10³</td>
<td>10²</td>
<td>2.5%</td>
</tr>
<tr>
<td>V80</td>
<td>0.084”± 0.004” (2.134 mm ± 0.102 mm)</td>
<td>0.042”± 0.004” (1.067 mm ± 0.102 mm)</td>
<td>0.024”± 0.003” (0.610 mm ± 0.076 mm)</td>
<td>10³</td>
<td>10²</td>
<td>2.5%</td>
</tr>
</tbody>
</table>

Packaging Options: Waffle Package.
Attachment Method

- Compatible with epoxy and AuSn solder attachment.
- Bonding can be done with either needle or automatic dispensers.
- For epoxy curing, refer to epoxy manufacturer’s preferred schedule, but it’s typically in the range of 125 to 150 °C.