AVX introduces its complete line of High Power Termination Products. All Products are designed and manufactured at our ISO 9001 Facilities.

**ELECTRICAL SPECIFICATIONS**
- **Resistance:** 50 Ω standard (10 Ω - 200 Ω available)
- **Resistance Tolerance:** ±5% standard (±2% available)
- **Power:** 2 Watts through 225 Watts
- **Operating Temperature Range:** -55°C to +150°C
- **Temperature Coefficient:** < 150 ppm/°C
- **Low VSWR**

**MECHANICAL SPECIFICATIONS**
- **Package:** Surface Mount Chips, Chips, Leaded Chips, Flange Mount
- **Substrate Material:** Aluminum Nitride
- **Process:** Thin Film
- **Resistive Material:** Tantalum
- **Terminals:** Silver
- **Cover:** Alumina
- **Mounting Flange:** 100% Cu, Ni or Ag Plated
- **Mechanical Tolerance:** ±0.13 (0.005)
- **RoHS Compliant**
- **SMT and Chip products, supplied on Tape and Reel**

**FLANGE MOUNT TERMINATIONS**

**HOW TO ORDER**

<table>
<thead>
<tr>
<th>RPA</th>
<th>0300</th>
<th>T</th>
<th>0050</th>
<th>J</th>
<th>N</th>
<th>BK</th>
</tr>
</thead>
<tbody>
<tr>
<td>AVX Series</td>
<td>Case Size</td>
<td>Type</td>
<td>Value = 50Ω</td>
<td>Tolerance</td>
<td>Terminal</td>
<td>Packaging</td>
</tr>
<tr>
<td>T = Termination</td>
<td>J = ±5%</td>
<td>N = Silver</td>
<td>BK = Plastic Carrier</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Contact factory for custom ratings and sizes.

**POWER DERATING**

Graph showing the rated safe operating range and power dissipation against heat sink temperature.
SURFACE MOUNT CHIP TERMINATIONS – RP9 SERIES

GENERAL SPECIFICATIONS

Nominal Impedance: 50 Ω
Resistive Tolerance: ±2% standard
Operating Temp Range: -55ºC to +150ºC
Temperature Coefficient: ±150 ppm/ºC
Resistive Elements: Tantalum, Thin Film Processed
Substrate Material: Aluminum Nitride
Terminals: Silver over Nickel
RoHS Compliant

Tape and Reel Specifications: See Page 38

<table>
<thead>
<tr>
<th>AVX Part Number</th>
<th>W ±0.25 (0.010)</th>
<th>L ±0.25 (0.010)</th>
<th>T ±0.13 (0.005)</th>
<th>LT ±0.13 (0.005)</th>
<th>WT ±0.13 (0.005)</th>
<th>LA ±0.13 (0.005)</th>
<th>Frequency Range (GHz)</th>
<th>VSWR (Typ.)</th>
<th>Power Max** (Watts)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RP92010T0050GTTR</td>
<td>2.54 (0.100)</td>
<td>5.08 (0.200)</td>
<td>1.02 (0.040)</td>
<td>1.02 (0.040)</td>
<td>2.29 (0.090)</td>
<td>2.92 (0.115)</td>
<td>DC - 3.0</td>
<td>1.20:1</td>
<td>10W</td>
</tr>
<tr>
<td>RP92525T0050GTTR</td>
<td>6.22 (0.245)</td>
<td>6.22 (0.245)</td>
<td>1.02 (0.040)</td>
<td>0.76 (0.030)</td>
<td>3.18 (0.125)</td>
<td>4.32 (0.170)</td>
<td>DC - 4.0</td>
<td>1.25:1</td>
<td>20W</td>
</tr>
</tbody>
</table>

** Test Condition: Chip soldered to a via patch on a 30-mil-thick Rogers RO4350 board; Land surfaces at 100°C; maximum rated power applied.

HOW TO ORDER

RP9 2010 T 0050 G T TR

AVX Series Case Size Type Value Tolerance Terminal Packaging
See chart above T = Termination 0050 = 50Ω J = ±5% T = Silver over TR = Tape & Reel
G = ±2% Nickel

Contact factory for custom ratings and sizes.

POWER DERATING

Rated Safe Operating Range

Heat Sink Temperature (°C)

Power Dissipation

0 20 40 60 80 100%

-50°C -25°C 0°C +25°C +50°C +75°C +100°C +125°C +150°C
SURFACE MOUNT CHIP TERMINATIONS – RP9 SERIES

GENERAL SPECIFICATIONS

Nominal Impedance: 50 Ω
Resistive Tolerance: ±2% standard
Operating Temp Range: -55ºC to +150ºC
Temperature Coefficient: ±150 ppm/ºC
Resistive Elements: Tantalum, Thin Film Processed
Substrate Material: Aluminum Nitride
Terminals: Silver over Nickel
RoHS Compliant
Tape and Reel Specifications: See Page 38

** Test Condition: Chip soldered to a via patch on a 30-mil-thick Rogers RO4350 board; Land surfaces at 100°C; maximum rated power applied.

<table>
<thead>
<tr>
<th>Part Number</th>
<th>AVX</th>
<th>W (mm)</th>
<th>L (mm)</th>
<th>T (mm)</th>
<th>LT (mm)</th>
<th>WT (mm)</th>
<th>LA (mm)</th>
<th>Frequency Range (GHz)</th>
<th>VSWR (Typ.)</th>
<th>Power Max** (Watts)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RP93725T0050GTTR</td>
<td>6.35 (0.250)</td>
<td>9.53 (0.375)</td>
<td>1.02 (0.040)</td>
<td>1.27 (0.050)</td>
<td>3.18 (0.125)</td>
<td>6.60 (0.260)</td>
<td>DC - 2.2</td>
<td>1.20:1</td>
<td>30W</td>
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</tr>
<tr>
<td>RP93737T0050GTTR</td>
<td>9.40 (0.370)</td>
<td>9.40 (0.370)</td>
<td>1.02 (0.040)</td>
<td>1.27 (0.050)</td>
<td>3.18 (0.125)</td>
<td>6.99 (0.275)</td>
<td>DC - 3.0</td>
<td>1.25:1</td>
<td>40W</td>
<td></td>
</tr>
</tbody>
</table>

** HOW TO ORDER **

<table>
<thead>
<tr>
<th>AVX</th>
<th>RP9</th>
<th>2010</th>
<th>T</th>
<th>0050</th>
<th>G</th>
<th>T</th>
<th>TR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case Size</td>
<td>T = Termination</td>
<td>Value</td>
<td>Tolerance</td>
<td>Terminal</td>
<td>Packaging</td>
<td></td>
<td></td>
</tr>
<tr>
<td>See chart above</td>
<td>0050 = 50Ω</td>
<td>J = ±5%</td>
<td>T = Silver over Nickel</td>
<td>TR = Tape &amp; Reel</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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POWER DERATING