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

Contact factory for custom ratings and sizes.

**POWER DERATING**

![Power Derating Graph](image)
CHIP TERMINATIONS – RP8 SERIES

GENERAL SPECIFICATIONS

Nominal Impedance: 50 Ω

Resistive Tolerance: ±5% standard, ±2% available

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>A ±0.25 (0.010)</th>
<th>B (Typ.)</th>
<th>Frequency (GHz)</th>
<th>VSWR (Typ.)</th>
<th>Power Max** (Watts)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RP81020T0050JTTR</td>
<td>5.08 (0.200)</td>
<td>2.54 (0.100)</td>
<td>0.64 (0.025)</td>
<td>0.86 (0.034)</td>
<td>0.51 (0.020)</td>
<td>DC to 18.0</td>
<td>1.25:1</td>
<td>20W</td>
</tr>
<tr>
<td>RP82010T0050JTTR</td>
<td>2.54 (0.100)</td>
<td>5.08 (0.200)</td>
<td>1.02 (0.040)</td>
<td>1.27 (0.050)</td>
<td>1.52 (0.060)</td>
<td>DC to 4.0</td>
<td>1.20:1</td>
<td>30W</td>
</tr>
<tr>
<td>RP82525T0050JTTR</td>
<td>6.22 (0.245)</td>
<td>6.22 (0.245)</td>
<td>1.02 (0.040)</td>
<td>2.29 (0.090)</td>
<td>0.51 (0.020)</td>
<td>DC to 4.0</td>
<td>1.15:1</td>
<td>60W</td>
</tr>
<tr>
<td>RP83355T0050JTTR</td>
<td>8.89 (0.350)</td>
<td>5.84 (0.230)</td>
<td>1.02 (0.040)</td>
<td>2.54 (0.100)</td>
<td>0.76 (0.030)</td>
<td>DC to 4.0</td>
<td>1.15:1</td>
<td>100W</td>
</tr>
<tr>
<td>RP83725T0050JTTR</td>
<td>6.35 (0.250)</td>
<td>9.53 (0.375)</td>
<td>1.02 (0.040)</td>
<td>2.29 (0.090)</td>
<td>0.64 (0.025)</td>
<td>DC to 4.0</td>
<td>1.20:1</td>
<td>125W</td>
</tr>
<tr>
<td>RP83737T0050JTTR</td>
<td>9.40 (0.370)</td>
<td>9.40 (0.370)</td>
<td>1.02 (0.040)</td>
<td>3.05 (0.120)</td>
<td>0.64 (0.025)</td>
<td>DC to 2.0</td>
<td>1.25:1</td>
<td>150W</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

RP8 Series

Case Size

See chart above

Type

T = Termination

Value

0050 = 50Ω

Tolerance

J = ±5%

G = ±2%

Terminal

T = Silver over Nickel

Packaging

TR = Tape & Reel

RoHS COMPLIANT

Contact factory for custom ratings and sizes.

POWER DERATING

Power Dissipation vs. Heat Sink Temperature

Rated Safe Operating Range:

-55°C to +150°C