DC - 60GHz 1W AlN Chip Termination
TV0404ZZ-50R0JN-2Q

TV0404 Features:
• Solder, Epoxy or Wirebondable Terminals
• RoHS Compliant
• Customer Defined Testing Available
• ±5% Resistor Tolerance
• Tape & Reel and Waffle Pack Available
(Standard is Bulk)

TV0404 Parameters:

Operating Frequency: DC - 60GHz
Rated Power: 1W*
Return Loss (Typical)**: 18.5dB or Better
Impedance: 50Ω ±5%***
Resistor Construction: Thick Film on AlN
Operating Temperature: -55 to +150°C

* Rating based on ≤100°C constant baseplate temperature
** In a matched, continuous 50Ω system with proper workmanship
*** Other values and tolerances available. Contact factory.

TV0404 Dimensions:

Dimensions in inches [mm]
Tolerance is ± 0.010 [0.254] unless otherwise stated

TV0404 Power Derating Curve

Part Number Example: TV0404CT-50R0JN-2QTR

TV0404 Ordering Information

<table>
<thead>
<tr>
<th>TV</th>
<th>0404</th>
<th>ZZ</th>
<th>50R0</th>
<th>J</th>
<th>N</th>
<th>2Q</th>
<th>UU</th>
</tr>
</thead>
</table>

Terminal Metallization
- BA - Palladium Silver
- CT - Matte Tin over Nickel over Silver
- GA - Gold
- EA - Gold Input with Palladium Silver Ground
- FA - Gold Input with Platinum Palladium Gold Ground

RoHS | Magnetic | Solder | Epoxy | Wirebond
--- | --- | --- | --- | ---
Yes | No | Yes | Yes | No
Yes | Yes | Yes | No | No
Yes | No | No | Yes | Yes
Yes | No | Yes (GND Only) | Yes (GND Only) | Yes (IN Only)
Yes | No | Yes (GND Only) | Yes (GND Only) | Yes (IN Only)

Barry Industries reserves the right to change part number and/or process without notification.

Barry Industries maintains an ISO9001 Certified Quality Management System and is an ITAR Registered company.
### TV0404ZZ-50R0JN-2Q Reliability Specifications:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Test Condition</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short Time Overload</td>
<td>Apply 1.1x Rated Power for 5 Seconds.</td>
<td>≤ 5.0% Resistance Shift</td>
</tr>
<tr>
<td>Rated Load Life</td>
<td>Apply 1/2 Power Under 40°C ±2°C 90 Minutes on/ 30 Minutes off. Repeat for 100 hours</td>
<td>≤ 5.0% Resistance Shift</td>
</tr>
<tr>
<td>Moisture Resistance</td>
<td>MIL-PRF-55342 para 4.8.9 95% RH, 25°C - 65°C</td>
<td>≤ 5.0% Resistance Shift</td>
</tr>
<tr>
<td>Resistance to Bonding Exposure</td>
<td>MIL-PRF-55342 Para 4.8.8.2</td>
<td>≤ 5.0% Resistance Shift</td>
</tr>
<tr>
<td>Solderability</td>
<td>MIL-PRF-55342 Para 4.8.12</td>
<td>&gt;95% Covered</td>
</tr>
<tr>
<td>High Temperature Storage</td>
<td>125°C ±2°C for 500 Hours</td>
<td>1.) ≤ 5.0% Resistance Shift 2.) No Significant Abnormality (Visual)</td>
</tr>
<tr>
<td>Thermal Shock</td>
<td>-65°C to +150°C 30 Minutes Dwell, 5 Cycles</td>
<td>1.) ≤ 5.0% Resistance Shift 2.) No Significant Abnormality (Visual)</td>
</tr>
</tbody>
</table>