**Product Features**

<table>
<thead>
<tr>
<th>Case Size</th>
<th>Std. Resistance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1209</td>
<td>50Ω</td>
</tr>
</tbody>
</table>

**Mechanical Dimensions**

- L = 0.012” ± 0.001” (0.305mm ± 0.051mm)
- W = 0.009” ± 0.001” (0.229mm ± 0.051mm)
- H = 0.005” ± 0.001” (0.127mm ± 0.025mm)

**Specifications**

- **Operating Frequency**: DC to 67 GHz
- **Operating Temperature Range**: -55°C to +150°C
- **Resistive Material**: Tantalum Nitride (TaN)
- **Temperature Coefficient**: ±150 ppm/°C standard
- **Resistance Tolerance**: ±1% standard
- **Substrate**: Alumina (Al₂O₃)
- **Metallization**:
  - A = Tantalum/Palladium/Gold (TaN/Pd/Au)
  - R = Titanium/Platinum/Gold (Ti/Pt/Au)
- **Power Derating**
  - Full power up to 70°C
  - Derated linearly to zero power at 150°C

*All PPI Thin Film parts are Non-Magnetic*

**Part Numbering**

- **Resistor**
- **Case Size**: (0.012” x 0.009”)
- **Broadband**: BB
- **Tolerance**: F = ±1%
- **Metallization**:
  - A = For soldering
  - R = For wirebonding
- **Power Handling**: C = 50mW
- **Resistance Value**: 50Ω = 50R00
- **Style**: 1 or 2
- **TCR**: Q = ±150ppm/°C

*Digits 1-4 are significant; Digit 5 is number of zeros to follow*

*Both styles Flip Chip Configuration compatible*

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**R35-1209BB50R00FxxQC**

[Power Derating Curve Image]
Performance Curves - S21 and S11

Simulated Test Conditions / Pad Dimensions / Dielectric
Modelithics calculated data for 50 Ohm and 100 Ohm resistors from 0.1 to 6.7 GHz on 4 mil Rogers 4350B, Dielectric constant = 4.15. The pad dimensions used to develop the datasheet plots were: Length = 4.0 (0.102), Width = 10.0 (0.254), Gap = 13.0 (0.330). Units in mil (mm). Reference planes were at the pad edges.

Packaging
Parts are delivered in Waffle Packs.
Contact PPI for additional packaging options.

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