Microwave Thick Film Disc Resistors

MECHANICAL SPECIFICATIONS

Substrate: Beryllium Oxide Ceramic
Std. Tolerance: Standard Resistance Tolerance ± 2% at 25°C
Terminals: Proprietary silver terminal material on both sides connected with wrap-around terminals on I.D. and O.D. Resistor on one side only.
Temperature Range: -55°C to +200°C.

<table>
<thead>
<tr>
<th>P/N</th>
<th>Nominal Power</th>
<th>I.D.</th>
<th>O.D.</th>
<th>Width</th>
<th>Inside Terminal</th>
<th>Outside Terminal</th>
</tr>
</thead>
<tbody>
<tr>
<td>C75D250P</td>
<td>5 W</td>
<td>0.066&quot; - 0.074&quot;</td>
<td>0.245&quot; - 0.257&quot;</td>
<td>0.020&quot; - 0.027&quot;</td>
<td>1/64</td>
<td>1/32</td>
</tr>
<tr>
<td>C135D375P</td>
<td>10 W</td>
<td>0.131&quot; - 0.139&quot;</td>
<td>0.372&quot; - 0.380&quot;</td>
<td>0.030&quot; - 0.036&quot;</td>
<td>1/32</td>
<td>1/32</td>
</tr>
</tbody>
</table>
Mechanical Specifications

**Substrate Material:**
Beryllium Oxide Ceramic.
(Note: Letter “P” denotes Beryllium Oxide.)

**Terminals:**
Terminal areas are Proprietary Silver which reduces oxidation thus providing a more solderable terminal.

**Temperature Range:**
-55°C to +200°C.

**Temperature Coefficient:**
Standard Temperature Coefficient is -200 to -300 PPM/°C.

Electrical Specifications

**Resistance Value:**
10 - 500 Ω As required. Other values available upon request.

**Standard Tolerance:**
Standard Tolerance is ±2% at 25 °C. Other Tolerances are available upon request.

**Frequency Range:**
D.C. to 18 GHz dependent upon how the resistors are mounted and the mounting Hardware’s configuration.

**Nominal Power:**
5 W.

**Load Life:**
The maximum anticipated change in resistance is 1% when operated at listed rating for 1,000 hours.

Part Dimensions

- 0.020” (0.508mm) - 0.027” (0.686mm)
- 0.066” (1.676mm) - 0.074” (1.880mm)
- 0.245” (6.223mm) / 0.257” (6.528mm)
- 1/32 (0.793mm)
- 1/64 (0.399mm)
**Mechanical Specifications**

**Substrate Material:**
Beryllium Oxide Ceramic.
(Note: Letter "P" denotes Beryllium Oxide.)

**Terminals:**
Terminal areas are Proprietary Silver which reduces oxidation thus providing a more solderable terminal.

**Temperature Range:**
- -55°C to +200°C.

**Temperature Coefficient:**
Standard Temperature Coefficient is -200 to -300 PPM/°C.

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**Electrical Specifications**

**Resistance Value:**
10 - 500 Ω As required. Other values available upon request.

**Frequency Range:**
D.C. to 18 GHz dependent upon how the resistors are mounted and the mounting Hardware's configuration.

**Standard Tolerance:**
Standard Tolerance is ± 2% at 25 °C. Other Tolerances are available upon request.

**Nominal Power:**
10 W.

**Load Life:**
The maximum anticipated change in resistance is 1 % when operated at listed rating for 1,000 hours.

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**Part Dimensions**

0.030" (0.762mm) - 0.035" (0.914mm) — 0.131" (3.327mm) - 0.139" (3.531mm)

1/64 (0.396mm) — 0.372" (9.449mm) - 0.380 (9.652mm)