RESISTIVE POWER DIVIDER

Features
- DC to 30 GHz In-phase Power Splitting
- 1 dB Typical Insertion Loss
- Miniature Surface Mount Package
- Reflow Solderable
- Microwave Power Dividers & Couplers App Note

Electrical Specifications – Specifications guaranteed from -55 to +100°C, measured in a 50Ω system.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Frequency Range</th>
<th>Min</th>
<th>Typ</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal Power Splitting (dB)</td>
<td>DC to 30 GHz</td>
<td>6</td>
<td>3</td>
<td></td>
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<tr>
<td>Excess Insertion Loss (dB)¹</td>
<td></td>
<td>1</td>
<td>3</td>
<td></td>
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<tr>
<td>Nominal Phase Shift (Degrees)</td>
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<tr>
<td>Amplitude Balance (dB)</td>
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<td>±0.25</td>
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<td></td>
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<tr>
<td>Phase Balance (Degrees)</td>
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<td>±3</td>
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<td>VSWR</td>
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<tr>
<td>Input Power (Watt)</td>
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</tbody>
</table>

¹Excess Insertion Loss = (Common Port to Output Port Insertion Loss) – 6 dB.

Model Number | Description                                | Frequency Range |
-------------|--------------------------------------------|-----------------|
PD-0030SM (EOL) | DC to 30 GHz Power Divider, Surface Mount |                 |

Connectorized test fixtures available. Consult factory.

Substrate material is 10-mil thick Rogers 5880 or Taconic TLY-5, ½ Oz Electrodeposited Cu.
Lead and Ground Plane Finish is 100-300 µ-inches 60/40 Pb/Sn Solder Plate over Cu.
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PD-0030SM

Page 2

Circuit Schematic

16.7 Ohm 16.7 Ohm

16.7 Ohm

Typical Performance

Fig. 1. Common port to output port insertion loss.

Fig. 2. Return loss for output and common ports.

Fig. 3. Amplitude balance between output ports.

Fig. 4. Phase balance between output ports.

NOTE:
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