DESCRIPTION

D LI introduces a wide band surface mountable catalog coupler with a built-in-termination. Constructed on DLI’s high dielectric ceramic provides a small footprint and minimal performance variation over temperature.

FEATURES

- Small Size
- Built-In Termination
- Solder Surface Mount Package
- Moisture Sensitivity Level: MSL1
- Frequency Stable over Temperature
- Operating & Storage Temp: -55°C to +85°C
- Characteristic Impedance: 50Ω

Typical Measured Performance

*Typical performance mounted on RO4350B test board at room temperature. Insertion loss shall vary ±0.5dB over temperature.

SPECIFICATIONS

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Frequency (GHz)</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Passband Excess Insertion Loss* (&lt;0.5)</td>
<td>20-40</td>
<td>0.5</td>
<td></td>
</tr>
<tr>
<td>Passband Return Loss (dB)</td>
<td></td>
<td>10</td>
<td></td>
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<tr>
<td>Coupling (dB)</td>
<td></td>
<td>18.5</td>
<td>21.5</td>
</tr>
<tr>
<td>Directivity (dB)</td>
<td></td>
<td>10</td>
<td>TBD</td>
</tr>
<tr>
<td>Input Power (W)</td>
<td></td>
<td>TBD</td>
<td></td>
</tr>
<tr>
<td>Size (LxWxH)</td>
<td>0.065 x 0.050 x 0.010 in</td>
<td>1.651 x 1.27 x 0.254 mm</td>
<td></td>
</tr>
</tbody>
</table>

*Electrical specifications based on typical mounted performance at room temperature. Insertion loss shall vary ±0.5dB over temperature.
20 to 40GHz 20dB Directional Coupler with Built-In Termination
FPC08035

Physical dimension

Port Configuration
Recommended PWB Layout

unit = in [mm]

- 50Ω trace dimensions are application specific
- Ensure adequate grounding beneath the part

- Ground Via
- Coupler Bottom Metallization
- PWB Top Metallization