DESCRIPTION

DLI introduces its new high frequency surface mountable catalog direction couplers. These couplers incorporate DLI’s high dielectric ceramic materials which provide small size and minimal performance variation over temperature. The components are well matched for monitoring incident and reflected power.

FEATURES

- Small Size
- Fully Shielded Component
- Solder Surface Mount Package
- Moisture Sensitivity Level: MSL1
- Frequency Stable over Temperature
- Operating & Storage Temp: -55°C to +125°C
- Characteristic Impedance: 50Ω

SPECIFICATIONS*

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Frequency (GHz)</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Passband Insertion Loss* (dB)</td>
<td></td>
<td></td>
<td>0.3</td>
</tr>
<tr>
<td>Min Passband Return Loss (dB)</td>
<td></td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Coupling (dB)</td>
<td>8 - 12</td>
<td>19</td>
<td>22</td>
</tr>
<tr>
<td>Directivity (dB)</td>
<td></td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Input Power (W)</td>
<td></td>
<td>TBD</td>
<td></td>
</tr>
<tr>
<td>Size (LxWxH)</td>
<td>0.120 x .080 x .015 in</td>
<td></td>
<td>3.048 x 2.032 x .381mm</td>
</tr>
</tbody>
</table>

*Electrical specifications based on typical mounted performance at room temperature. Insertion loss shall vary ±0.5dB over temperature.

Typical Measured Performance

*Typical measured performance mounted on RO4350B test board with SMA connectors at 25°C.

2777 Route 20 East, Cazenovia, NY 13035 | Ph.: (315)655-8710 | KCCSales@knowles.com

April 2018
8 to 12GHz 20dB Directional Coupler

FPC06302

Directivity

Coupling

Physical Dimensions

50Ω trace dimensions are application specific.

Ensure adequate grounding beneath the part.

Recommended PCB Layout