18-20GHz 2-way Wilkinson Power Divider
PDW07691

DESCRIPTION

DLI’s 18-20GHz 4-way power divider / combiner offers unmatched size and performance in a surface mount configuration. This power divider utilizes DLI’s low loss temperature stable materials which offer small size and minimal performance variation over temperature.

FEATURES

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

SPECIFICATIONS*

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Frequency Range (GHz)</th>
<th>Min</th>
<th>Typ.</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal Power Splitting (dB)</td>
<td>18-20</td>
<td></td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>Nominal Phase Shift (Deg)</td>
<td></td>
<td></td>
<td>0.0</td>
<td></td>
</tr>
<tr>
<td>Amplitude Balance (dB)</td>
<td></td>
<td></td>
<td>± .25</td>
<td></td>
</tr>
<tr>
<td>Phase Balance (Deg)</td>
<td></td>
<td></td>
<td>± 5.0</td>
<td></td>
</tr>
<tr>
<td>Excess Insertion Loss (dB)</td>
<td></td>
<td></td>
<td>0.5</td>
<td></td>
</tr>
<tr>
<td>Return Loss (dB)</td>
<td>18-20</td>
<td></td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Isolation (dB)</td>
<td></td>
<td>15</td>
<td>20</td>
<td>TBD</td>
</tr>
<tr>
<td>Input Power (W)</td>
<td></td>
<td></td>
<td>TBD</td>
<td></td>
</tr>
</tbody>
</table>

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

Typical Measured Performance

![Typical Measured Performance Graph]

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

September 2018
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Physical Dimensions

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

Recommended PCB Layout