Ultra-Small Ceramic
Power Splitter/Combiner

2 Way-0° 50Ω 1850 to 2200 MHz

Maximum Ratings
- Operating Temperature: -55°C to 100°C
- Storage Temperature: -55°C to 100°C
- Power Input (as a splitter): 20W max.

Features
- Isolation resistor, external 100 ohms
- Low insertion loss, 0.5 dB typ.
- Excellent amplitude unbalance, 0.2 dB typ.
- Good phase unbalance, 2.0 deg. typ.
- High isolation, 24 dB typ.
- Excellent power handling, 20W as splitter
- Small size, 0.12"x0.08"x0.035"
- ESD non-sensitive
- Temperature stable LTC technology
- Arched ground terminations for excellent solderability
- Low cost
- Protected by US patent 6,967,544

Electrical Specifications

<table>
<thead>
<tr>
<th>FREQUENCY (MHz)</th>
<th>INSERTION LOSS (dB) ABOVE 3.0 db</th>
<th>ISOLATION (dB)</th>
<th>PHASE UNBALANCE (Degrees)</th>
<th>AMPLITUDE UNBALANCE (dB)</th>
<th>RETURN LOSS (dB)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1850-2200</td>
<td>0.5 0.9</td>
<td>22 17</td>
<td>2.0 5.0</td>
<td>0.25 0.4</td>
<td>16 19</td>
</tr>
<tr>
<td>1900-2100</td>
<td>0.5 0.9</td>
<td>24 20</td>
<td>2.0 5.0</td>
<td>0.2 0.4</td>
<td>16 19</td>
</tr>
</tbody>
</table>

Features
- PCS
- DCS
- UMTS

Applications
- UMTS
- DCS
- PCS

Available Tape and Reel at no extra cost
- Available Tape and Reel at no extra cost
- Reel Size Devices/Reel
- 7" 20, 50, 100, 200, 500, 1000, 3000

Outline Drawing

Outline Dimensions (inch)

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
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</thead>
<tbody>
<tr>
<td>0.126</td>
<td>0.063</td>
<td>0.035</td>
<td>0.024</td>
<td>0.022</td>
<td>0.011</td>
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<tr>
<td>3.20</td>
<td>1.60</td>
<td>0.89</td>
<td>0.61</td>
<td>0.56</td>
<td>0.28</td>
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<tr>
<td>G</td>
<td>H</td>
<td>J</td>
<td>K</td>
<td>wt</td>
<td></td>
</tr>
<tr>
<td>0.039</td>
<td>0.024</td>
<td>0.042</td>
<td>0.123</td>
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<tr>
<td>0.99</td>
<td>0.61</td>
<td>1.07</td>
<td>3.12</td>
<td>0.020</td>
<td></td>
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</tbody>
</table>

Demo Board MCL P/N: TB-252
Suggested PCB Layout (PL-129)

Notes
A. Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
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