Surface Mount
Power Splitter/Combiner

3 Way-0°  50Ω  5 to 300 MHz

Maximum Ratings
Operating Temperature  -40°C to 85°C
Storage Temperature  -55°C to 100°C
Power Input (as a splitter)  1W max.
Internal Dissipation  0.375W max.

Features
- wideband, 5 to 300 MHz
- high isolation, 33 dB typ.
- low insertion loss, 0.3 dB typ.

Applications
- VHF
- defense & federal communications
- amateur & FM radio

Electrical Specifications

<table>
<thead>
<tr>
<th>FREQUENCY (MHz)</th>
<th>ISOLATION (dB)</th>
<th>INSERTION LOSS (dB) ABOVE 4.8 dB</th>
<th>PHASE UNBALANCE (Degrees)</th>
<th>AMPLITUDE UNBALANCE (dB)</th>
</tr>
</thead>
<tbody>
<tr>
<td>l to f&lt;sub&gt;1&lt;/sub&gt;</td>
<td>L</td>
<td>M</td>
<td>U</td>
<td>L</td>
</tr>
<tr>
<td>5-300</td>
<td>34</td>
<td>25</td>
<td>33</td>
<td>23</td>
</tr>
<tr>
<td>L = low range (l to f&lt;sub&gt;1&lt;/sub&gt;)</td>
<td>M = mid range (10 l to f&lt;sub&gt;1&lt;/sub&gt;/2)</td>
<td>U = upper range (f&lt;sub&gt;1&lt;/sub&gt;/2 to f&lt;sub&gt;1&lt;/sub&gt;)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Typical Performance Data

- Total Loss = Insertion Loss + 4.8 dB splitter loss.

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-Circuits’ applicable established test performance criteria and measurement instructions.
C. The parts covered by this specification document are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, “Standard Terms”); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits’ website at www.minicircuits.com/MCLStore/terms.jsp.

Demo Board MCL P/N: TB-211
Suggested PCB Layout (PL-097)

Outline Dimensions (inch/mm)

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
</tr>
</thead>
<tbody>
<tr>
<td>.280</td>
<td>.310</td>
<td>-.110</td>
<td>.225</td>
<td>.055</td>
<td>.100</td>
<td></td>
</tr>
<tr>
<td>7.11</td>
<td>7.87</td>
<td>2.54</td>
<td>5.72</td>
<td>1.40</td>
<td>2.54</td>
<td></td>
</tr>
</tbody>
</table>

1. Total Loss = Insertion Loss + 4.8dB splitter loss.

Notes:
1. Trace Width is shown for Rogers RO4003 with dielectric thickness of .030". .020" copper, 1/2 oz. each side. For other materials, trace width may need to be modified.
2. Bottom side of the PCB is continuous ground plane. Denotes PCB copper layer with SWG (solder mask over bare copper).

CASE STYLE: BH292
+RoHS Compliant

The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.

The Mini-Circuits logo and www.minicircuits.com are trademarks of Mini-Circuits. All other product names are trademarks of their respective owners. All products are sold subject to the terms of Mini-Circuits’ Standard Terms, available at www.minicircuits.com/MCLStore/terms.jsp.