Coaxial
High Power Combiner
ZA3CS-400-3W+
3 Way-0°  50Ω  2 to 400 MHz

Maximum Ratings
Operating Temperature  -55°C to 90°C
Storage Temperature  -55°C to 100°C
Permanent damage may occur if any of these limits are exceeded.

Coaxial Connections
SUM PORT  S
PORT 1  1
PORT 2  2
PORT 3  3

Features
• wideband, 2 to 400 MHz
• low insertion loss, 0.5 dB typ.
• good isolation, 25 dB typ.
• very low amplitude, 0.15 dB typ. and phase unbalance, 0.2 deg. typ.

Applications
• VHF/UHF
• communication receivers & transmitters

Electrical Specifications and Performance Data

<table>
<thead>
<tr>
<th>FREQUENCY (MHz)</th>
<th>INSERTION LOSS (dB)</th>
<th>ISOLATION (dB)</th>
<th>PHASE UNBALANCE (Degrees)</th>
<th>AMPLITUDE UNBALANCE (dB)</th>
<th>POWER INPUT1 (W)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-200</td>
<td>0.5</td>
<td>1.2</td>
<td>0.2</td>
<td>3.0</td>
<td>0.15</td>
</tr>
<tr>
<td>200-400</td>
<td>0.2</td>
<td>1.2</td>
<td>0.2</td>
<td>3.0</td>
<td>0.15</td>
</tr>
</tbody>
</table>

1. Over -55°C to +55°C. Derate linearly to 20% of rating at 90°C. 2. As a combiner of non-coherent signals, max. power per port is power rating divided by number of ports.

Typical Performance Data

<table>
<thead>
<tr>
<th>Freq. (MHz)</th>
<th>Total Loss1</th>
<th>Amp. Unbal. (dB)</th>
<th>Isolation (dB)</th>
<th>Phase Unbal. (deg.)</th>
<th>VSWR S</th>
<th>VSWR 1</th>
<th>VSWR 2</th>
<th>VSWR 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.00</td>
<td>4.99</td>
<td>4.98</td>
<td>0.01</td>
<td>23.18</td>
<td>23.18</td>
<td>23.02</td>
<td>1.37</td>
<td>1.10</td>
</tr>
<tr>
<td>6.00</td>
<td>4.99</td>
<td>4.99</td>
<td>0.00</td>
<td>23.80</td>
<td>23.80</td>
<td>23.77</td>
<td>1.16</td>
<td>1.04</td>
</tr>
<tr>
<td>16.00</td>
<td>4.98</td>
<td>4.98</td>
<td>0.00</td>
<td>23.73</td>
<td>23.73</td>
<td>23.73</td>
<td>0.05</td>
<td>1.02</td>
</tr>
<tr>
<td>40.00</td>
<td>4.97</td>
<td>4.97</td>
<td>0.00</td>
<td>23.41</td>
<td>23.41</td>
<td>23.41</td>
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</tr>
<tr>
<td>100.00</td>
<td>5.05</td>
<td>5.04</td>
<td>0.00</td>
<td>22.63</td>
<td>22.63</td>
<td>22.63</td>
<td>0.50</td>
<td>1.03</td>
</tr>
</tbody>
</table>

1. Total Loss = Insertion Loss + 4.8dB 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-Circuit’s applicable established test performance criteria and measurement instructions.
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