Surface Mount
Power Splitter/Combiner

4 Way-0° 50Ω 300 to 3000 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: 0.20W max.

Permanent damage may occur if any of these limits are exceeded.

**Pin Connections**
- SUM PORT: 10
- PORT 1: 1
- PORT 2: 2
- PORT 3: 3
- PORT 4: 4
- GROUND: ALL OTHER

**Outline Drawing**

**Electrical Specifications at 25°C**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Frequency (MHz)</th>
<th>Min.</th>
<th>Typ.</th>
<th>Max.</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>VSWR (Port 1-4)</td>
<td>300 - 3000 MHz</td>
<td>2.1</td>
<td>3</td>
<td>3</td>
<td>dB</td>
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<tr>
<td>VSWR (Port S)</td>
<td>300 - 3000 MHz</td>
<td>1.6</td>
<td>3.1</td>
<td>3.8</td>
<td>dB</td>
</tr>
<tr>
<td>Phase Unbalance</td>
<td>300 - 2700 MHz</td>
<td>3</td>
<td>15</td>
<td>20</td>
<td>Degree</td>
</tr>
<tr>
<td>Amplitude Unbalance</td>
<td>300 - 3000 MHz</td>
<td>0.4</td>
<td>0.9</td>
<td>1.2</td>
<td>dB</td>
</tr>
</tbody>
</table>

**Features**
- Wideband, 300 to 3000 MHz, useable from 100 to 3600 MHz
- Low insertion loss, 1.6 dB typ.
- Good isolation, 17 dB typ.
- Good amplitude unbalance, 0.4 dB typ.

**Applications**
- Communication systems
- CATV
- Cellular, GPS, PCS
- VHF/UHF/receivers/transmitters

**Typical Performance Data**

<table>
<thead>
<tr>
<th>Freq. (MHz)</th>
<th>Total Loss1 (dB)</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>
<th>VSWR 4</th>
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<tr>
<td>300.0</td>
<td>7.20</td>
<td>7.22</td>
<td>7.09</td>
<td>0.13</td>
<td>15.56</td>
<td>19.89</td>
<td>16.67</td>
<td>1.15</td>
<td>2.46</td>
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<td>500.0</td>
<td>7.18</td>
<td>7.20</td>
<td>7.06</td>
<td>0.17</td>
<td>15.90</td>
<td>21.83</td>
<td>17.28</td>
<td>1.71</td>
<td>2.32</td>
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<td>700.0</td>
<td>7.26</td>
<td>7.28</td>
<td>7.11</td>
<td>0.21</td>
<td>16.14</td>
<td>24.40</td>
<td>17.66</td>
<td>2.06</td>
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<tr>
<td>900.0</td>
<td>7.43</td>
<td>7.44</td>
<td>7.27</td>
<td>0.23</td>
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<td>7.42</td>
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<td>30.54</td>
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<td>7.58</td>
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<td>35.91</td>
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<td>0.46</td>
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<td>7.89</td>
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<td>15.86</td>
<td>17.91</td>
<td>13.44</td>
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</table>

**Notes**
- All performance and quality attributes and conditions not expressly stated in 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/MCL/Store/terms.jsp

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**Design and Manufacturing**
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- CASE STYLE: CK1704
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