Power Splitters & Dividers

Model 1506A
Broadband Resistive Power Divider
Precision N Connectors

Features

- **Accurate Division and Low Frequency Sensitivity** - The symmetry of output power between the two arms is excellent across the frequency range.
- **High Stability** - Low temperature and power coefficients ensure attenuation stability.
- **Test Data** - Each divider is calibrated at four frequencies, and the data is supplied on a permanently attached test data plate.
- **Matched Ports** - Symmetrical 6 dB division permits any port to be used as input.

Specifications

- **Nominal Impedance**: 50 Ω
- **Frequency Range**: dc to 18.0 GHz
- **Maximum Input Power**: 1 watt CW, 1 kilowatt peak (5 µsec pulse width, 0.05 % duty cycle)
- **Insertion Loss (between input & one output arm)**: 6 dB nominal, -0.2, +1.2 dB maximum to 10.0 GHz; +1.5 dB maximum to 18.0 GHz.
- **Number of Ports**: 3, interchangeable for input and output
- **Phase Tracking**: 5° maximum between ports (J2 & J3) with input connector (J1).

**Amplitude Tracking (Maximum):**

<table>
<thead>
<tr>
<th>Frequency (GHz)</th>
<th>Tracking</th>
</tr>
</thead>
<tbody>
<tr>
<td>dc - 4</td>
<td>0.2 dB</td>
</tr>
<tr>
<td>4 - 10</td>
<td>0.4 dB</td>
</tr>
<tr>
<td>10 - 18</td>
<td>0.5 dB</td>
</tr>
</tbody>
</table>

**Maximum SWR:**

<table>
<thead>
<tr>
<th>Frequency (GHz)</th>
<th>SWR</th>
</tr>
</thead>
<tbody>
<tr>
<td>dc - 10</td>
<td>1.25</td>
</tr>
<tr>
<td>10 - 18</td>
<td>1.35</td>
</tr>
</tbody>
</table>

- **Power Coefficient**: < 0.005 dB/dB/watt
- **Temperature Coefficient**: < 0.0004 dB/dB/°C
- **Temperature Range**: -55°C to +125°C
- **Construction**: Nickel plated brass body; stainless steel connectors; gold plated beryllium copper contacts.
- **Test Data**: Insertion loss data supplied at 50 MHz, 6.0, 12.0, and 18.0 GHz on nameplate only. No paper data supplied. Other test data can be provided at additional cost.
- **Connectors**: Type N connectors per MIL-STD-348 interface dimensions - mate nondestructively with MIL-C-39012 connectors.
- **Weight**: Net 140 g (5 oz)
- **Physical Dimensions**: 

![Diagram]

**Note**: All dimensions are given in mm (inches) and are maximum, unless otherwise specified.