Eight-Way Power Divider,
2 - 500 MHz

Features
- Low Loss: 1 dB Typical
- High Isolation: 30 dB Typical
- Low VSWR: 1.3:1 Typical
- Impedance: 50 Ohms Nominal
- Maximum Power Rating or Input Power: 2 Watt Max.
- Internal Load Dissipation: 0.25 Watts Max.
- MIL-STD-202 Screening Available

Description
A Power Divider is ideally a lossless reciprocal device which can also perform vector summation of two or more signals and thus is sometimes called a power combiner or summer.

Ordering Information

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Package</th>
</tr>
</thead>
<tbody>
<tr>
<td>DS-309 BNC</td>
<td>C-18</td>
</tr>
<tr>
<td>DS-309 SMA</td>
<td>C-18</td>
</tr>
<tr>
<td>DS-309 TNC</td>
<td>C-18</td>
</tr>
<tr>
<td>DS-309 N</td>
<td>C-18</td>
</tr>
</tbody>
</table>

1. All specifications apply with 50 ohm source and load impedance.
2. This product contains elements protected by United States Patent Number 3,428,920.

For further information and support please visit:
https://www.macom.com/support
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### 2 - 500 MHz

#### Electrical Specifications\(^1\): \( T_A = -55°C \) to \(+85°C\)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Test Conditions</th>
<th>Frequency</th>
<th>Units</th>
<th>Min</th>
<th>Typ</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insertion Loss</td>
<td>Less Coupling</td>
<td>2 - 500 MHz</td>
<td>dB</td>
<td>—</td>
<td>—</td>
<td>1.2</td>
</tr>
<tr>
<td>Isolation</td>
<td>—</td>
<td>2 - 100 MHz, 100 - 500 MHz</td>
<td>dB</td>
<td>30</td>
<td>25</td>
<td>—</td>
</tr>
<tr>
<td>Amplitude Balance</td>
<td>—</td>
<td>2 - 100 MHz, 100 - 500 MHz</td>
<td>dB</td>
<td>—</td>
<td>—</td>
<td>0.15</td>
</tr>
<tr>
<td>Phase Balance</td>
<td>—</td>
<td>2 - 100 MHz, 100 - 500 MHz</td>
<td>°</td>
<td>—</td>
<td>—</td>
<td>2.0</td>
</tr>
<tr>
<td>VSWR</td>
<td>All Ports</td>
<td>2 - 100 MHz, 100 - 500 MHz</td>
<td>Ratio</td>
<td>—</td>
<td>—</td>
<td>1.6:1</td>
</tr>
</tbody>
</table>

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Typical Performance Curves

**Insertion Loss**

**Isolation**

**VSWR**
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