Features

- Broad Frequency Range
- Constant Coupling—Within ± 0.5 dB Max
- VSWR: 1.3:1 Max

Description

Bi-Directional Couplers offer the ability to couple the power in two directions while maintaining directivity.

Electrical Specifications¹: \( T_A = -55°C \) 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>Coupling</td>
<td>Input to Output</td>
<td>1-1000 MHz</td>
<td>dB</td>
<td>19.0</td>
<td>20.0</td>
<td>21.0</td>
</tr>
<tr>
<td>Coupling Flatness</td>
<td>—</td>
<td>10 - 500 MHz 1 - 1000 MHz</td>
<td>dB</td>
<td>—</td>
<td>—</td>
<td>± 0.5</td>
</tr>
<tr>
<td>VSWR</td>
<td>All Ports</td>
<td>10 - 500 MHz 1 - 1000 MHz</td>
<td>Ratio</td>
<td>—</td>
<td>—</td>
<td>1.2:1</td>
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<tr>
<td>Directivity</td>
<td>Both Directions</td>
<td>10 - 500 MHz 1 - 1000 MHz</td>
<td>dB</td>
<td>25</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Main Line Loss²</td>
<td>—</td>
<td>10 - 500 MHz 1 - 1000 MHz</td>
<td>dB</td>
<td>—</td>
<td>—</td>
<td>0.5</td>
</tr>
</tbody>
</table>

1. All specifications apply with 50 ohm source and load impedance.
2. Includes theoretical power split.

This product contains elements protected by United States Patent number 3,426,298.
20 dB, Bi Directional Coupler
1-1000MHz

Functional Diagram

Ordering Information

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Package</th>
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<tbody>
<tr>
<td>CH-132 BNC</td>
<td>Connectorized</td>
</tr>
<tr>
<td>CH-132 N</td>
<td>Connectorized</td>
</tr>
<tr>
<td>CH-132 SMA</td>
<td>Connectorized</td>
</tr>
<tr>
<td>CH-132 TNC</td>
<td>Connectorized</td>
</tr>
</tbody>
</table>

Typical Performance Curves

Mail Line Loss

Directivity

VSWR

Coupling
20 dB, Bi Directional Coupler
1-1000MHz

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