**Features**

- 1.5 dB Typical Midband Insertion Loss
- 30 dB Typical Midband Isolation
- 1.3:1 Typical Midband VSWR
- MIL-STD-202 Screening Available

**Description**

3 dB Hybrids are ideal for dividing a signal into two signals of equal amplitude and a constant 90° or 180° phase differential and for Quadrature combining or performing summation/differential combining.

**Pin Configuration**

<table>
<thead>
<tr>
<th>Pin No.</th>
<th>Function</th>
<th>Pin No.</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>C</td>
<td>6</td>
<td>A</td>
</tr>
<tr>
<td>2</td>
<td>GND</td>
<td>7</td>
<td>GND</td>
</tr>
<tr>
<td>3</td>
<td>GND</td>
<td>8</td>
<td>GND</td>
</tr>
<tr>
<td>4</td>
<td>GND</td>
<td>9</td>
<td>GND</td>
</tr>
<tr>
<td>5</td>
<td>D</td>
<td>10</td>
<td>B</td>
</tr>
</tbody>
</table>

**Electrical Specifications**

1. All specifications apply with 50 ohm source and load impedance. This product contains elements protected by United States Patent number 3,508,171
HH-128-PIN

Flatpack Hybrid Junction, 20 - 2000 MHz

Ordering Information

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Package</th>
</tr>
</thead>
<tbody>
<tr>
<td>HH-128 PIN</td>
<td>FP-3</td>
</tr>
</tbody>
</table>

Typical Performance Curves

**Insertion Loss**

- Frequency (MHz) vs. Insertion Loss (dB)
  - Frequency (10.0 to 2000.0 MHz)
  - Insertion Loss (10 dB to 3.0 dB)

**Isolation**

- Frequency (MHz) vs. Isolation (dB)
  - Frequency (10.0 to 2000.0 MHz)
  - Isolation (50 dB to 60 dB)

**VSWR**

- Frequency (GHz) vs. VSWR
  - Frequency (10.0 to 2000.0 GHz)
  - VSWR (100 to 2.20)

For further information and support, please visit https://www.macom.com/support