High-Level Double-Balanced Mixer
5 - 4000 MHz
MD-525-4

Features
- Broadband Frequency Range
- +17 dBm Typical Third Order Intercept Point

Guaranteed Specifications*
(From −55°C to +85°C)

<table>
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<tr>
<th>Frequency Range</th>
<th>RF, LO Ports</th>
<th>IF Port</th>
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</thead>
<tbody>
<tr>
<td>5-2000 MHz</td>
<td>5-4000 MHz</td>
<td>5-1900 MHz</td>
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<tr>
<td>2000-4000 MHz</td>
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</tbody>
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Conversion Loss
- 5-2000 MHz: 9 dB Max
- 2000-4000 MHz: 10 dB Max

Isolation
- LO to IF
  - (5-50 MHz): 20 dB Min
  - (50-2000 MHz): 20 dB Min
  - (200-4000 MHz): 20 dB Min
- LO to RF
  - (5-50 MHz): 20 dB Min
  - (50-2000 MHz): 30 dB Min
  - (200-4000 MHz): 25 dB Min
- RF to IF
  - (5-50 MHz): 20 dB Min
  - (50-2000 MHz): 25 dB Min
  - (200-4000 MHz): 20 dB Min

Operating Characteristics
- Impedance: 50 Ohms Nominal
- Maximum Input
  - Total Power: 600 mW Max @ 25°C
  - Dissipated to 85°C @ 3.2 mW/°C
- IF Port Current: 50 mA Max
- DC Polarity: Negative
- DC Offset: ≤5 mV Typical
- RF Input
  - 1 dB Compression: +6 dBm Typical
  - 1 dB Desensitization: +0 dBm Typical
- SSB Noise Figure: Within 1 dB of Conversion Loss Max

Typical Two-Tone IM Ratio: (with −10 dBm input, each input, 60 MHz and 70 MHz IF)

Environmental

Ordering Information
- Model No.: MD-525-4 SMA
- Package: Connectorized

Typical Performance

Conversion Loss

Isolation

Conversion Loss vs LO Power

IF Port Response