MY88H / MY88HC

Triple-Balanced Mixer

Features
- LO 2 TO 18 GHz
- RF 2 TO 18 GHz
- IF 2 TO 8 GHz
- LO DRIVE +21 dBm (nominal)
- WIDE BANDWIDTH
- HIGH THIRD-ORDER I.P. +24 dBm (TYP.)

Description

Ordering Information

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Package</th>
</tr>
</thead>
<tbody>
<tr>
<td>MY88H</td>
<td>Versapac</td>
</tr>
<tr>
<td>MY88HC</td>
<td>SMA Connectorized</td>
</tr>
</tbody>
</table>

Electrical Specifications:  $Z_0 = 50\Omega$  $Lo = +21$ dBm (Downconverter Application only)

| Parameter                      | Test Conditions                      | Units | Typical | Guaranteed
<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>+25°C</td>
<td>-54° to +85°C</td>
</tr>
<tr>
<td>SSB Conversion Loss (max) &amp; SSB Noise Figure (max)</td>
<td>$f_R = 2$ to 10 GHz, $f_L = 2$ to 18 GHz, $f_I = 2$ to 8 GHz</td>
<td>dB</td>
<td>7.5</td>
<td>10.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>8.0</td>
</tr>
<tr>
<td>Isolation, L to R (min)</td>
<td>$f_L = 2$ to 18 GHz</td>
<td>dB</td>
<td>28</td>
<td>15</td>
</tr>
<tr>
<td>Isolation, L to I (min)</td>
<td>$f_L = 2$ to 18 GHz</td>
<td>dB</td>
<td>32</td>
<td>17</td>
</tr>
<tr>
<td>1 dB Conversion Comp.</td>
<td>$f_L = +24$ dBm</td>
<td>dBm</td>
<td>+17</td>
<td></td>
</tr>
<tr>
<td>Input IP3</td>
<td>$IR1 = 6$ GHz at 0 dBm, $IR2 = 6.01$ GHz at 0 dBm, $f_L = 8$ GHz at +21 dBm</td>
<td>dBm</td>
<td>+26</td>
<td></td>
</tr>
</tbody>
</table>
Typical Performance Curves

**Conversion Loss vs Lo Drive Power**

**R-Port VSWR Lo @ +21 dBm**

*Drive Level: The maximum recommended drive level is ~24 dBm.*

**Conversion Loss vs Input Frequency**

- **Lo @ +21 dBm**
- **F1 = 1.0 GHz**
- **F1 = 4.0 GHz**
- **F1 = 8.0 GHz**

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### Absolute Maximum Ratings

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Absolute Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Temperature</td>
<td>-54°C to +100°C</td>
</tr>
<tr>
<td>Storage Temperature</td>
<td>-65°C to +100°C</td>
</tr>
<tr>
<td>Peak Input Power</td>
<td>+27 dBm max @ +25°C</td>
</tr>
<tr>
<td></td>
<td>+24 dBm max @ +100°C</td>
</tr>
<tr>
<td>Peak Input Current</td>
<td>100 mA DC</td>
</tr>
</tbody>
</table>

### Isolation vs Frequency

- **Isolation vs LO Frequency**
- **Isolation vs RF Frequency**

### Outline Drawing: Versapac *

- Weight: 6 grams (0.21 oz.) max

### Outline Drawing: SMA Connectorized *

- Weight: 12 grams (0.42 oz.) max

* Dimensions are inches (millimeters) ±0.015 (0.38) unless otherwise specified.

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