DOUBLE BALANCED MIXER

R&K-MX080-1S

OUTLINE DRAWING

IN MILLIMETERS

R&K-MX080-1S

SPECIFICATIONS

- **LO&RF Frequency**: 0.01 ~ 100MHz
- **IF Frequency**: DC ~ 100MHz
- **Lo Drive Level**: +20dBm
- **Low Cost**
- **RoHS Compliance**

<table>
<thead>
<tr>
<th>Frequency Range</th>
<th>Conversion Loss Max. (LO Drive Level +20dBm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LO&amp;RF</td>
<td>Typ. 5.0dB, 0.1 ~ 0.1MHz</td>
</tr>
<tr>
<td></td>
<td>Max. 11.0dB, 0.1 ~ 0.1MHz</td>
</tr>
<tr>
<td>LO - IF</td>
<td>Typ. 4.5dB, 0.1 ~ 0.1MHz</td>
</tr>
<tr>
<td></td>
<td>Max. 6.0dB, 0.1 ~ 0.1MHz</td>
</tr>
<tr>
<td>RF - IF</td>
<td>Typ. 5.5dB, 0.1 ~ 0.1MHz</td>
</tr>
<tr>
<td></td>
<td>Max. 7.0dB, 0.1 ~ 0.1MHz</td>
</tr>
</tbody>
</table>

Isolation (min.)

<table>
<thead>
<tr>
<th>Frequency Range</th>
<th>LO - RF</th>
<th>LO - IF</th>
<th>RF - IF</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.01 ~ 0.1MHz</td>
<td>45dB</td>
<td>40dB</td>
<td>30dB</td>
</tr>
<tr>
<td>0.1 ~ 50MHz</td>
<td>30dB</td>
<td>20dB</td>
<td>15dB</td>
</tr>
<tr>
<td>50 ~ 100MHz</td>
<td>20dB</td>
<td>15dB</td>
<td>8dB</td>
</tr>
</tbody>
</table>

Input IP3 @Center Band: +25dBm (typ.)
Input 1dB Comp. Point: +14dBm (typ.)
Impedance (All Ports): 50Ω
Maximum RF Input Power: 500mW
Maximum Peak IF Current: 50mA
Operating Temperature: -40°C to +85°C
Storage Temperature: -40°C to +100°C
Connectors (Standard): SMA-Female
Connectors (Option): BNC-Female
Weight (SMA Connector): 65g (typ.)

HOW TO ORDER

- **Model Name**: R&K-MX080-1S
- **S = SMA - FEMALE**
- **B = BNC - FEMALE**

TYPICAL PERFORMANCE (Temp @+25°C)

- **Conversion Loss**
- **Conversion Loss vs LO Drive Level**
- **Isolation**
- **Input IP3**

R&K reserves the right to make changes in the specifications of or discontinue products at any time without notice. R&K products shall not be used for or in connection with equipment that requires an extremely high level of reliability and safety such as aerospace uses or medical life support equipment. Further, R&K cannot export products to any country for use in military or defense applications.