DOUBLE BALANCED MIXER

R&K-MX170-0S

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.

OUTLINE DRAWING ※IN MILLIMETERS

TYPICAL PERFORMANCE (Temp @+25°C)

CONVERSION LOSS

CONVERSION LOSS VS LO DRIVE LEVEL

ISOLATION

INPUT IP3

SCHEMATIC

SPECIFICATIONS

<table>
<thead>
<tr>
<th>LO&amp;RF Frequency</th>
<th>: 5 ~ 1500MHz</th>
</tr>
</thead>
<tbody>
<tr>
<td>IF Frequency</td>
<td>: DC ~ 1500MHz</td>
</tr>
<tr>
<td>Lo Drive Level</td>
<td>: +7dBm</td>
</tr>
<tr>
<td>Low Cost</td>
<td></td>
</tr>
<tr>
<td>RoHS Compliance</td>
<td></td>
</tr>
</tbody>
</table>

Frequency Range [LO&RF] : 5 - 1500MHz
[IF] : DC - 1500MHz

Conversion Loss Max. (LO Drive Level +7dBm)

<table>
<thead>
<tr>
<th></th>
<th>5 - 600MHz</th>
<th>90 - 400MHz</th>
<th>750 - 1500MHz</th>
</tr>
</thead>
<tbody>
<tr>
<td>Typ.</td>
<td>6.0dB</td>
<td>7.0dB</td>
<td>7.0dB</td>
</tr>
<tr>
<td>Max.</td>
<td>10.5dB</td>
<td>6.5dB</td>
<td>10.0dB</td>
</tr>
</tbody>
</table>

Isolation (min.)

<table>
<thead>
<tr>
<th></th>
<th>5 - 500MHz</th>
<th>50 - 750MHz</th>
<th>750 - 1500MHz</th>
</tr>
</thead>
<tbody>
<tr>
<td>LO - RF</td>
<td>45dB</td>
<td>25dB</td>
<td>20dB</td>
</tr>
<tr>
<td>LO - IF</td>
<td>40dB</td>
<td>20dB</td>
<td>15dB</td>
</tr>
<tr>
<td>RF - IF</td>
<td>30dB</td>
<td>15dB</td>
<td>8dB</td>
</tr>
</tbody>
</table>

Input IP3 @Center Band : +12dBm (typ.)
Input 1dB Comp. Point : + 2dBm (typ.)
Impedance (All Ports) : 50Ω
Maximum RF Input Power : 50mW
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) : N-Female
                      : BNC-Female
Weight (SMA Connector) : 30g (typ.)

HOW TO ORDER

Model Name
R&K-MX170-0S

S = SMA - FEMALE
B = BNC - FEMALE
N = N - FEMALE
※BNC Operational to 1GHz

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