QPSK MODULATOR

R&K-QM950IFH-0S

OUTLINE DRAWING

※IN MILLIMETERS

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.

SPECIFICATIONS

- **RF Center Frequency**: 950MHz
- **Good Amplitude and Phase Balance**
- **Small Size**
- **RoHS Compliance**

**RF Frequency Range**: 950MHz (Bandwidth 10%)
**IF Frequency Range**: DC - 50MHz
**RF Input Level**: +10dBm ±0.5dB
**Insertion Loss**: 12dB (max.)
**Amplitude Balance**: 0.6dB (max.)
**Phase Balance**: 5° (max.)
**VSWR (All Ports)**: 2.0:1 (max.)
**Input 1dB Compression Point** (@IF1&2 Port each)
**Impedance**: 50Ω
**Maximum RF Input Power**: 100mW
**Operating Temperature**: -40°C to +85°C
**Storage Temperature**: -40°C to +100°C
**Connectors (Standard)**: SMA-MALE
**Connectors (Option)**: BNC-MALE
**Weight (SMA Connector)**: 90g (typ.)

HOW TO ORDER

Model Name
R&K-QM950IFH-0S

S = SMA - FEMALE
B = BNC - FEMALE
N = N - FEMALE

TYPICAL PERFORMANCE (Temp @+25°C)

**Output Phase States**

**Amplitude Balance**

**Insertion Loss**

**Phase Balance**

*PHASE SHIFT VS. CONTROL CURRENT*

<table>
<thead>
<tr>
<th>IF 1 (mA)</th>
<th>IF 2 (mA)</th>
<th>PHASE (deg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>+20</td>
<td>+20</td>
<td>0 (REF)</td>
</tr>
<tr>
<td>-20</td>
<td>-20</td>
<td>180</td>
</tr>
<tr>
<td>-20</td>
<td>+20</td>
<td>270</td>
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NOTE: IF ports drive with 50Ω source.

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