GaAs SWITCH SPDT

R&K-SW050-0S

- Frequency Range: 50 ~ 6000MHz
- High Switching Speed
- Internal C-MOS Driver
- Reflective
- RoHS Compliance

**SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency Range</td>
<td>50 ~ 6000MHz</td>
</tr>
<tr>
<td>Insertion Loss (50~3000MHz)</td>
<td>1.5dB (max.)</td>
</tr>
<tr>
<td>Insertion Loss (3~6GHz)</td>
<td>2.5dB (max.)</td>
</tr>
<tr>
<td>Isolation (RF IN~Port1/2)</td>
<td>18dB (min.)</td>
</tr>
<tr>
<td>Impedance</td>
<td>50Ω</td>
</tr>
<tr>
<td>VSWR (RF IN)</td>
<td>1.6:1 (typ.)</td>
</tr>
<tr>
<td>(Port1/Port2)</td>
<td>1.7:1 (typ.)</td>
</tr>
<tr>
<td>Input Power 1dB Comp.Point</td>
<td>+33dBm (typ.)</td>
</tr>
<tr>
<td>Input I.C.P.</td>
<td>+39dBm (typ.).</td>
</tr>
<tr>
<td>Switching Speed</td>
<td>100ns (max.) tRise / tFall</td>
</tr>
<tr>
<td>Switching Control</td>
<td></td>
</tr>
</tbody>
</table>

**CONTROL INPUT**

<table>
<thead>
<tr>
<th>Control Input</th>
<th>RF Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>H</td>
<td>Port1</td>
</tr>
<tr>
<td>L</td>
<td>Port2</td>
</tr>
</tbody>
</table>

H=C-MOS H or Open / L=C-MOS L or GND
Maximum RF Input Power: +29dBm
DC Supply Input: +5V 3mA (max.)
Operating Temperature: -25°C to +85°C
Storage Temperature: -25°C to +85°C
Connectors (Standard): SMA-Female
Connectors (Option): BNC-Female
Weight (SMA Connector): 60g (typ.)

**HOW TO ORDER**

Model Name
R&K-SW050-0S

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

**TYPICAL PERFORMANCE (Temp @+25°C)**

- **Insertion Loss**
  - RF IN~Port1
  - RF IN~Port2
  - Port1~Port2

- **Isolation**
  - RF IN~Port1
  - RF IN~Port2
  - Port1~Port2

- **VSWR (On State)**
  - Input Port
  - Output Port

- **Switching Speed**
  - Rise Time: 100ns / 0dBm
  - Fall Time: 500ns / 0dBm

**SCHEMATIC**

- RF IN
- C-MOS DRIVER
- +5V CONTROL

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.