R&K-AA1090-0S

**Model Name**
R&K-AA1090-0S

**Small Signal Frequency Range**
1MHz ~ 3000MHz

**Output Power**
+29dBm @2GHz

**Small Signal Gain**
+30dB (typ.) @2GHz

**Gain Flatness**
±2.0dB (max.)

**Low Cost**
RoHS Compliance

**Specifications**

- Frequency Range: 1MHz ~ 3000MHz
- Small Signal Gain: +30dB @2GHz
- Gain Flatness: ±2.0dB (max.)
- Output Power@1dB Comp.: +29dBm @2GHz
- Output I.C.P.: +41dBm (typ.) @2GHz
- Noise Figure: 9.0dB (max.)
- Temperature Range: −20℃ to +60℃
- DC Supply Input: +12V ±0.5V
- Maximum RF Input Power: +8dBm
- Connectors (Standard): SMA-FEMALE
- Weight (AA1090-0S): 140g (typ.)

**How to Order**

- Model Name: R&K-AA1090-0S
- S = SMA-FEMALE
- B = BNC-FEMALE
- N = N-FEMALE
- 0 = Module
- 1 = With Heatsink

**Typical Performance (Temp @+25℃)**

- Small Signal Gain & Gain Flatness
- Input & Output Return Loss
- Output Power 1dB & 3dB Comp., Output 3rd Order Intercept Point
- Noise Figure
- Operating Temperature: −20℃ to +60℃
- Storage Temperature: −20℃ to +80℃
- Connectors (Standard): SMA-FEMALE
- Weight (AA1090-0S): 140g (typ.)

**Schematic**

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, the export of R&K products from Japan may be subject to an export license by the government of Japan, based on Japan's "Foreign Exchange and Foreign Trade Law".
## Revision history

<table>
<thead>
<tr>
<th>Date</th>
<th>Version Number</th>
<th>Detailed contents of the change.</th>
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</thead>
<tbody>
<tr>
<td>2017/11/10</td>
<td>1.0</td>
<td>First edition issued.</td>
</tr>
<tr>
<td>2021/01/20</td>
<td>2.0</td>
<td>Specifications change.</td>
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<tr>
<td></td>
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<td>- Small Signal Gain : +29dB (typ.) @2GHz ⇒ +30dB (typ.) @2GHz</td>
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<tr>
<td></td>
<td></td>
<td>- Output Return Loss : 10dB (typ.) ⇒ 8dB (typ.)</td>
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<td></td>
<td></td>
<td>- Maximum RF Input Power : +10dBm ⇒ +8dBm</td>
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