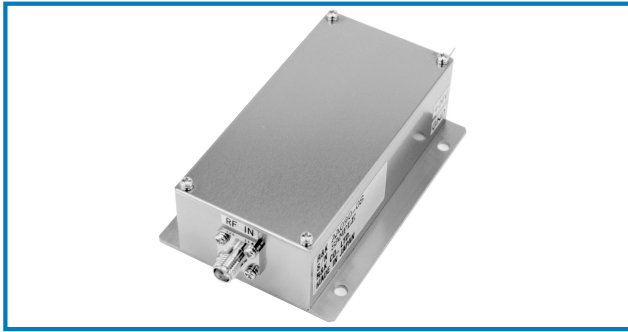


# SMALL SIGNAL AMPLIFIER

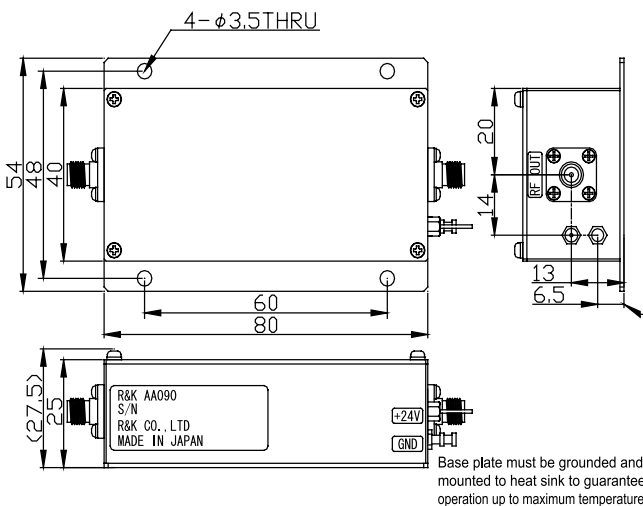


## R&K-AA090-0S



### OUTLINE DRAWING

※IN MILLIMETERS



- Broadband Frequency : 5 ~ 300MHz
- Output Power : +30dBm @150MHz
- Gain Flatness :  $\pm 1.0$ dB (max.)
- Low Cost
- RoHS Compliance

### SPECIFICATIONS

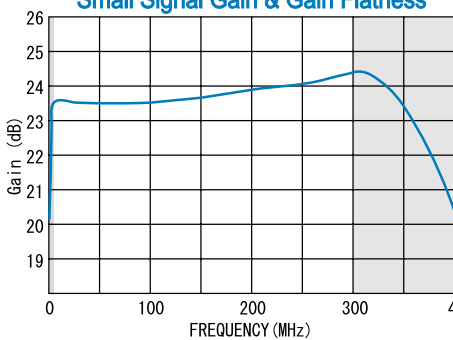
|   |  |
|---|--|
| Frequency Range                           | : 5 - 300MHz                               |
| Small Signal Gain                         | : +23.5dB (typ.) @150MHz<br>: +22dB (min.) |
| Gain Flatness                             | : $\pm 1.0$ dB (max.)                      |
| Output Power@1dB Comp.                    | : +30dBm (min.) @150MHz                    |
| Output I.C.P.                             | : +42dBm (typ.) @150MHz                    |
| Noise Figure                              | : 6.0dB (max.)                             |
| Impedance                                 | : 50 $\Omega$                              |
| Input VSWR                                | : 1.2 : 1 (typ.)                           |
| Output VSWR                               | : 1.6 : 1 (typ.)                           |
| DC Supply Input                           | : +24V $\pm 1$ V<br>: 235mA (max.)         |
| Maximum RF Input Power                    | : +13dBm                                   |
| Operating Temperature (@Base Plate Temp.) | : -20°C to +60°C                           |
| Storage Temperature                       | : -20°C to +80°C                           |
| Connectors (Standard)                     | : SMA-FEMALE                               |
| Connectors (Option)                       | : BNC-FEMALE<br>: N-FEMALE                 |
| Weight (SMA Connector)                    | : 145g (typ.)                              |

### HOW TO ORDER

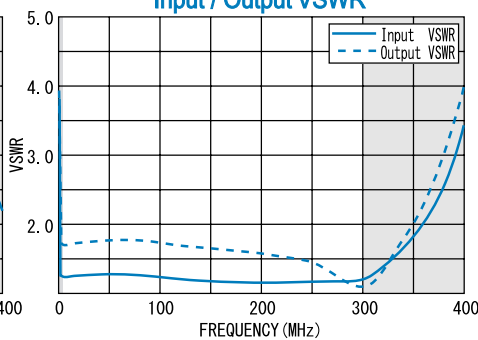
|              |                    |
|--------------|--------------------|
| Model Name   | S = SMA - FEMALE   |
| R&K-AA090-0S | B = BNC - FEMALE   |
|              | N = N - FEMALE     |
|              | 0 = Module         |
|              | 1 = With Heat Sink |

### TYPICAL PERFORMANCE (Temp @+25°C)

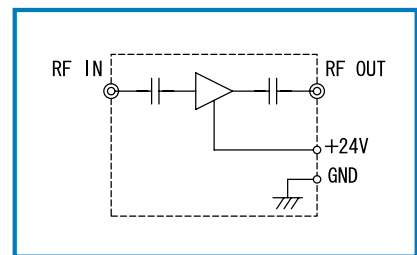
Small Signal Gain & Gain Flatness



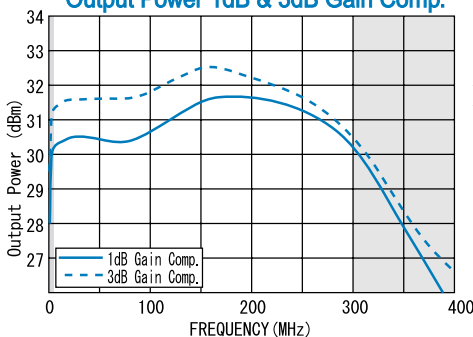
Input / Output VSWR



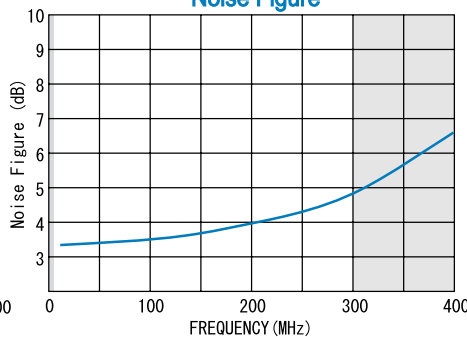
SCHEMATIC



Output Power 1dB & 3dB Gain Comp.



Noise Figure



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.

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