

# SMALL SIGNAL AMPLIFIER

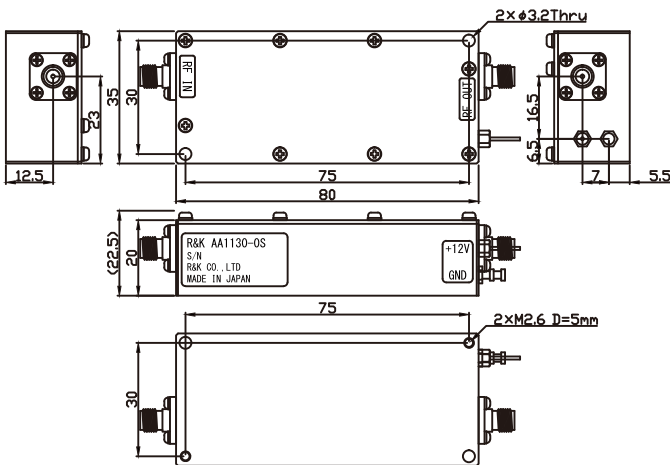


## R&K-AA1130-0S



### OUTLINE DRAWING

※IN MILLIMETERS



- Broadband Frequency : 9kHz ~ 3500MHz
- Output Power : +17dBm @2GHz
- Small Signal Gain : +43dB (typ.) @2GHz
- Gain Flatness :  $\pm 2.0$ dB (max.)
- Low Cost
- RoHS Compliance

### SPECIFICATIONS

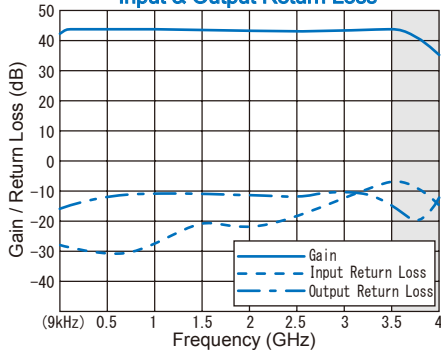
|   |  |
|---|--|
| Frequency Range   | : 9kHz ~ 3500MHz                       |
| Small Signal Gain   | : +43dB (typ.) @2GHz<br>: +39dB (min.) |
| Gain Flatness   | : $\pm 2.0$ dB (max.)                  |
| Output Power@1dB Comp.  | : +17dBm (min.) @2GHz                  |
| Output I.C.P.   | : +31dBm (typ.) @2GHz                  |
| Noise Figure  | : 5.0dB (max.)                         |
| NOTE: N.F.value is only guaranteed in the range of 10MHz ~ 3500MHz. |  |
| Impedance   | : 50 $\Omega$                          |
| Input Return Loss   | : 18dB (typ.)                          |
| Output Return Loss  | : 13dB (typ.)                          |
| DC Supply Input   | : +12V $\pm 0.5$ V<br>: 220mA (max.)   |
| Maximum RF Input Power  | : -15dBm                               |
| Operating Temperature   | : -20°C to +60°C                       |
| Storage Temperature   | : -20°C to +80°C                       |
| Connectors (Standard)   | : SMA-FEMALE                           |
| (Option)  | : BNC-FEMALE<br>: N-FEMALE             |
| Weight (SMA Connector)  | : 120g (typ.)                          |

### HOW TO ORDER

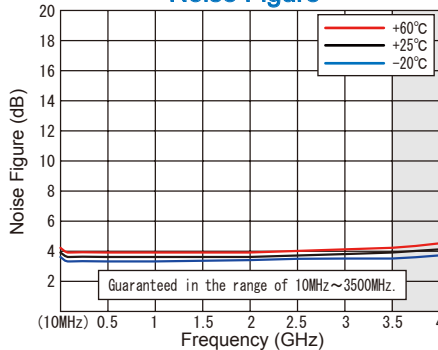
|               |                           |
|---------------|---------------------------|
| Model Name    | S = SMA-FEMALE            |
| R&K-AA1130-0S | B = BNC-FEMALE            |
|               | (BNC Operational to 1GHz) |
|               | N = N-FEMALE              |

### TYPICAL PERFORMANCE (Temp @+25°C)

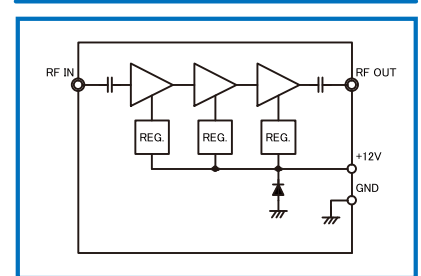
#### Small Signal Gain & Gain Flatness Input & Output Return Loss



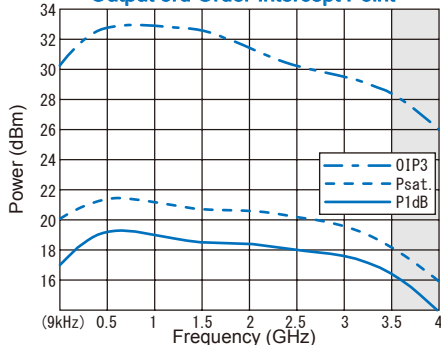
#### Noise Figure



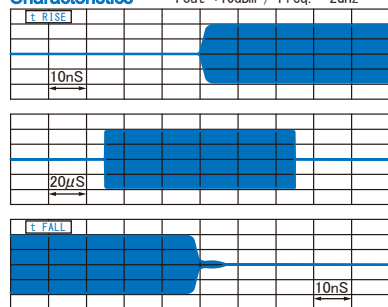
#### SCHEMATIC



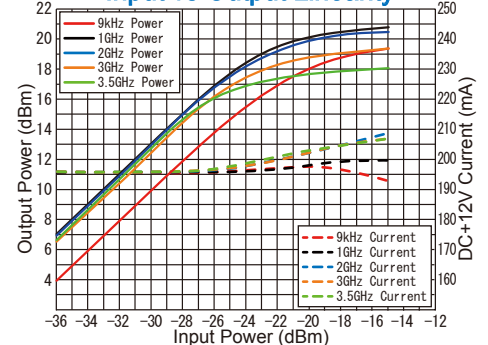
#### Output Power 1dB & Power Saturation Output 3rd Order Intercept Point



#### Pulse Characteristics



#### Input vs Output Linearity



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