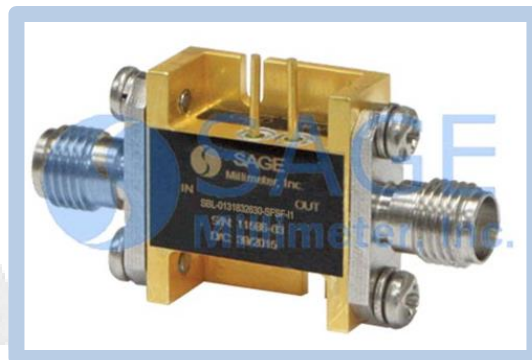


Low Noise Amplifier, 0.3 to 20 GHz, 15dB Gain, 3 dB NF

Description:

Model SBL-0322031530-SFSF-E3-WPC is a low noise amplifier with a typical small signal gain of 15 dB and a nominal noise figure of 3 dB across the frequency range of 0.3 to 20 GHz. The typical port return losses are 10 dB. The DC power requirement for the amplifier is +12 V_{DC}/70 mA. The output P_{1dB} is +10 dBm. The RF connectors are both female SMA connectors. Other port configurations are available under different model numbers.



Features:

- Broadband Performance
- Low Noise Figure
- Good Output P_{1dB} Across the Band

Applications:

- Radar Systems
- Communication Systems
- Low Noise Receivers

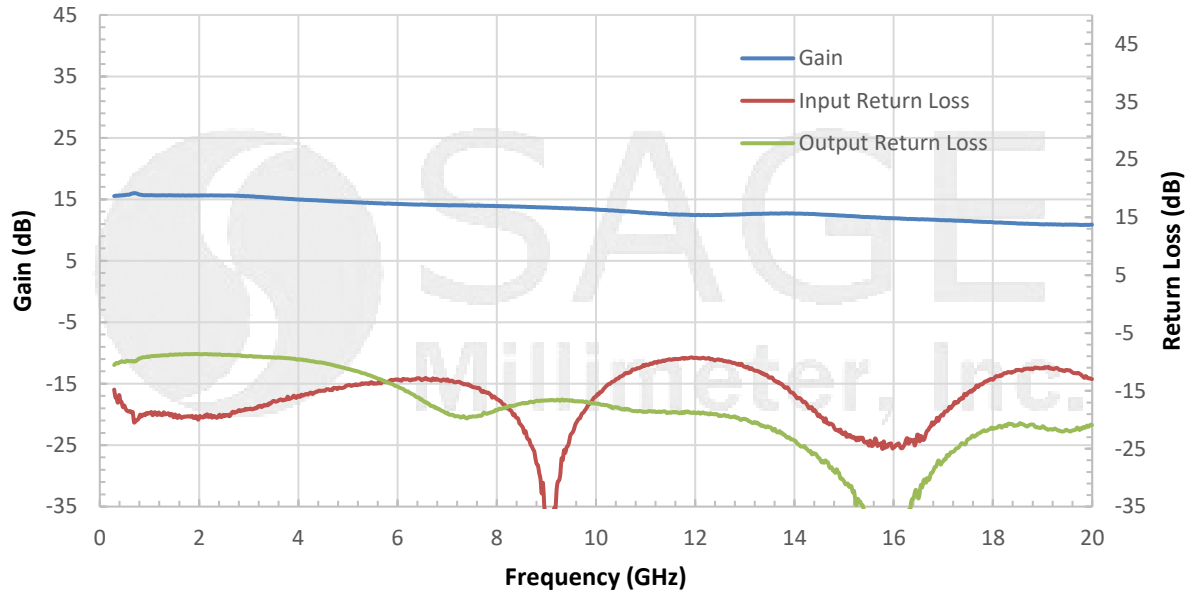
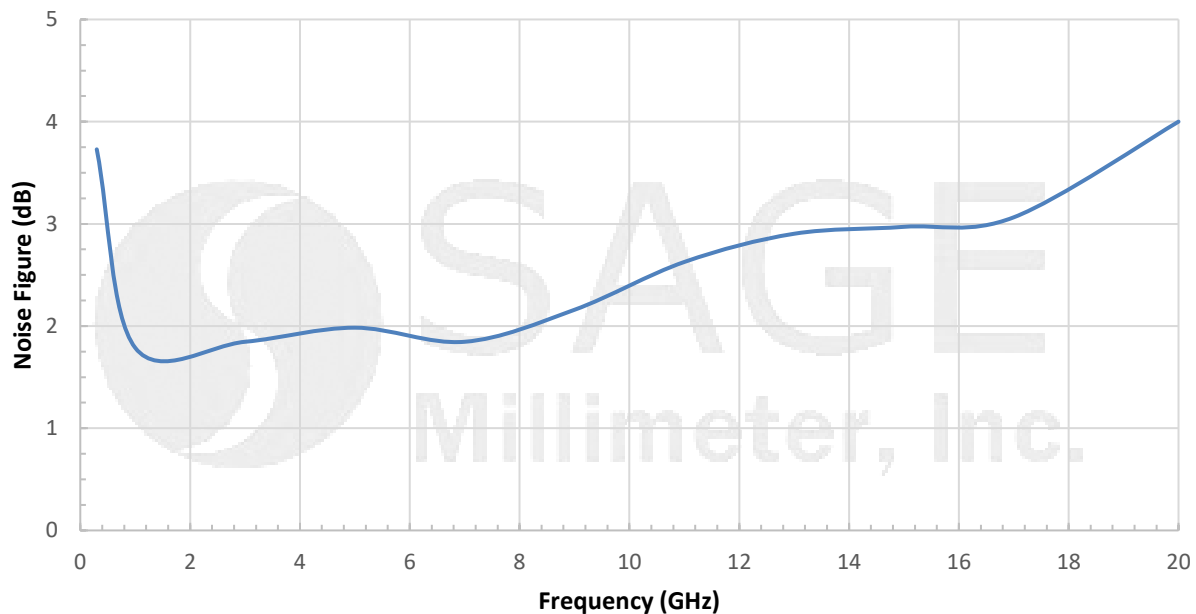
Electrical Specifications:

| Parameter | Minimum | Typical | Maximum |
|---------------------------|---------------------|---------------------|---------------------|
| Frequency | 0.3 GHz | | 20.0 GHz |
| Gain | | 15 dB | |
| Gain Flatness | | ±2.5 dB | |
| Noise Figure | | 3.0 dB | 3.8 dB |
| P _{1dB} | | +10 dBm | |
| P _{in} | | | +10 dBm |
| Input Return Loss | | 10 dB | |
| Output Return Loss | | 10 dB | |
| DC Voltage | +10 V _{DC} | +12 V _{DC} | +16 V _{DC} |
| DC Supply Current | | 70 mA | |
| Specification Temperature | | +25 °C | |
| Operating Temperature | -40 °C | | +85 °C |

Mechanical Specifications:

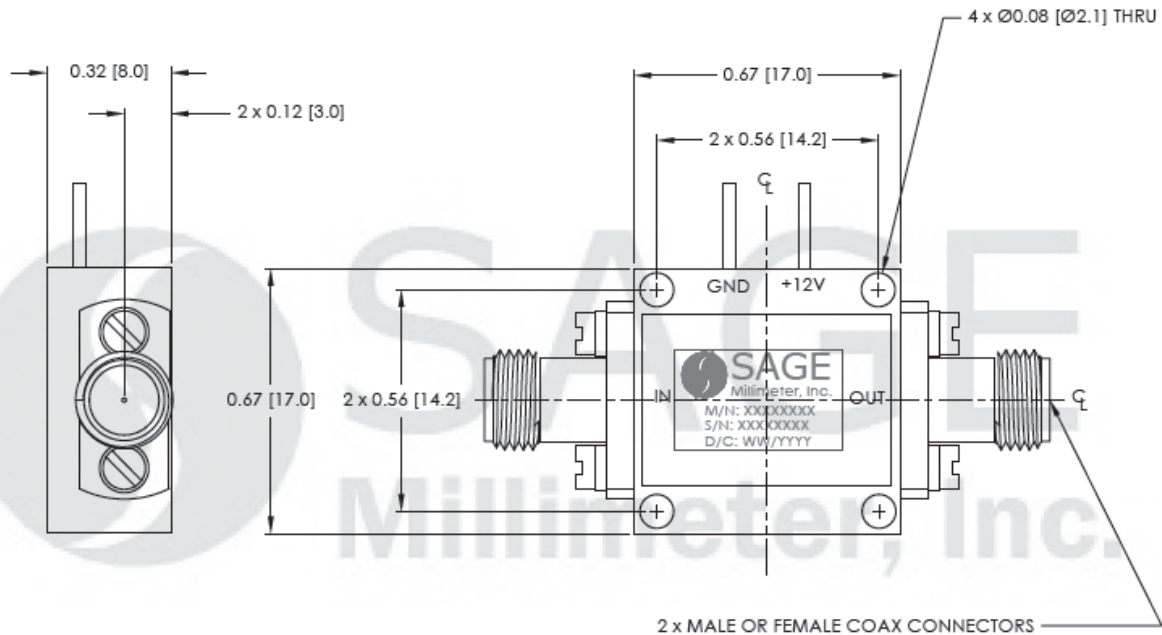
| Item | Specification |
|---------------|-----------------------------------|
| Input Port | SMA (F) |
| Output Port | SMA (F) |
| Bias Port | Solder Pin |
| Case Material | Aluminum |
| Finish | Gold Plated |
| Weight | 0.35 Oz |
| Size | 0.67" (W) X 0.67" (L) X 0.32" (H) |
| Outline | BL-ZC-7 |



**Low Noise Amplifier, 0.3 to 20 GHz, 15dB Gain, 3 dB NF****Gain and Return Loss vs. Frequency**Bias: +12 V_{DC}/91 mA**Noise Figure vs. Frequency**Bias: +12V_{DC}/91 mA

Low Noise Amplifier, 0.3 to 20 GHz, 15dB Gain, 3 dB NF

Mechanical Outline: (Unless otherwise specified, all dimensions are in inches [millimeters])



Note:

- Eravant reserves the right to change the information presented without notice.
- Other mechanical configurations are available under different model numbers.

Caution:

- Exceeding absolute maximum ratings shown will damage the device.
- The device is static sensitive. Always follow ESD rules when working with the device.
- The case temperature of the device shall never exceed +50 °C. Use proper heatsink or fan if necessary.
- Proper torque, 8.0 ± 0.15 inch-pounds (0.92 ± 0.05 Nm), should be applied. **Eravant torque wrench, model SCH-08008-S1, is highly recommended.**

