

Broadband Amplifier, 0.01 to 40 GHz, 32 dB Gain, +18 dBm P_{1dB}, 6.0 dB NF**Description:**

Model SBB-0114033218-2F2F-E3-WP is a broadband amplifier with a typical small signal gain of 32 dB, a nominal P_{1dB} of +18 dBm, and a typical noise figure of 6.0 dB across the frequency range of 0.01 to 40 GHz. The DC power requirement for the amplifier is +12 V_{DC} at 450 mA. The use of a heat sink is advised to assist in cooling the device. The RF connectors are female 2.4 mm connectors. Other port configurations are available under different model numbers.

**Features:**

- Broadband Coverage
- Good Gain Flatness

Applications:

- RF Microwave & VSAT
- Wireless Infrastructure
- Test Equipment

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	0.01 GHz		40 GHz
Gain		32 dB	
P _{1dB}		+18 dBm	
P _{sat}		+19 dBm	
Noise Figure		6.0 dB	
Input Max Power (No Damage)			0 dBm
Input Return Loss		10 dB	
Output Return Loss		10 dB	
DC Voltage		+12 V _{DC}	
DC Supply Current		450 mA	500 mA
Specification Temperature		+25 °C	
Operating Temperature	0 °C		+50 °C

Mechanical Specifications:

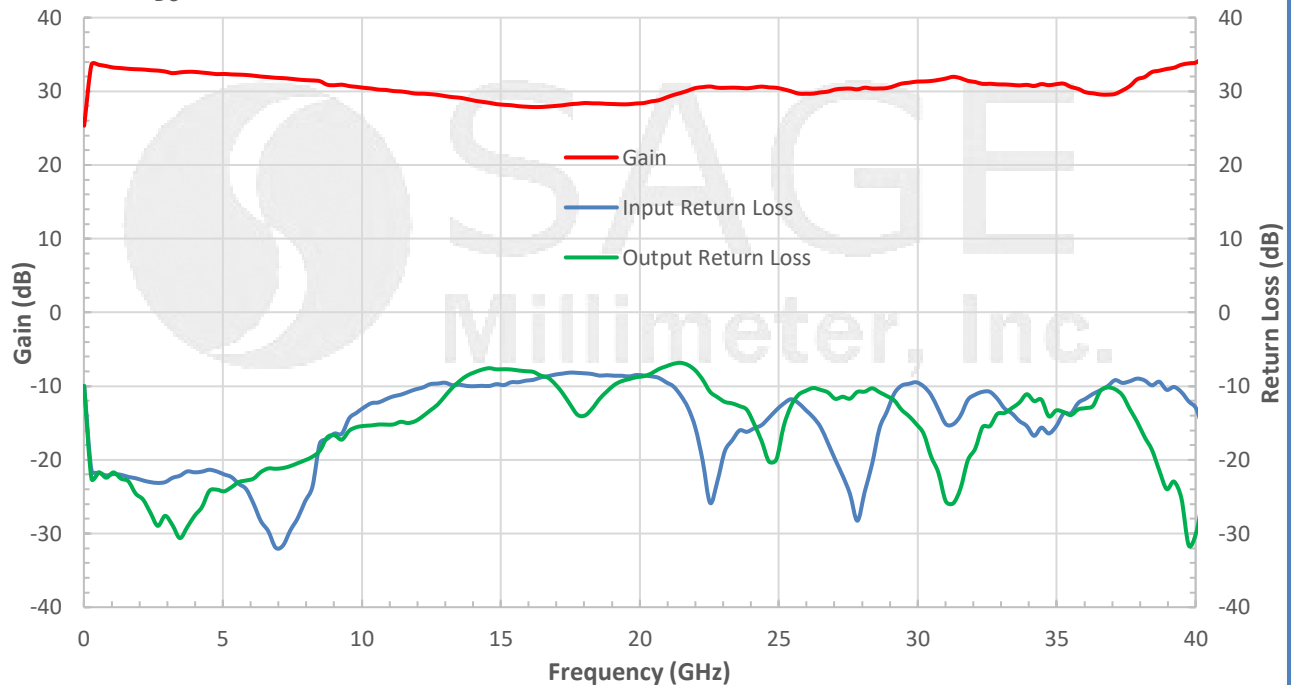
Item	Specification
Input	2.4 mm (F)
Output	2.4 mm (F)
Bias	Solder Pin
Case Material	Aluminum
Finish	Gold Plated
Weight	1.06 Oz
Size	1.38" (L) x 1.58" (W) x 0.47" (H)
Outline	BG-ZC-1



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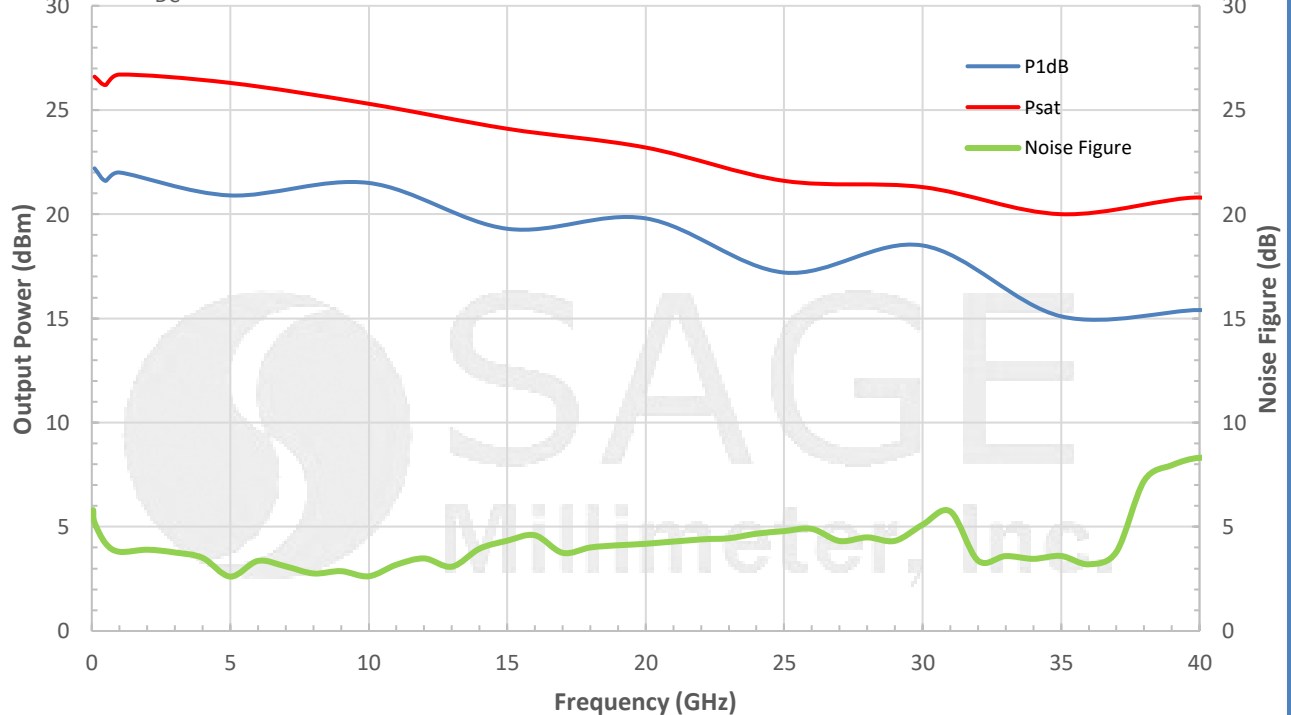
Typical Performance vs. Frequency

Bias: +12 V_{DC}/450 mA



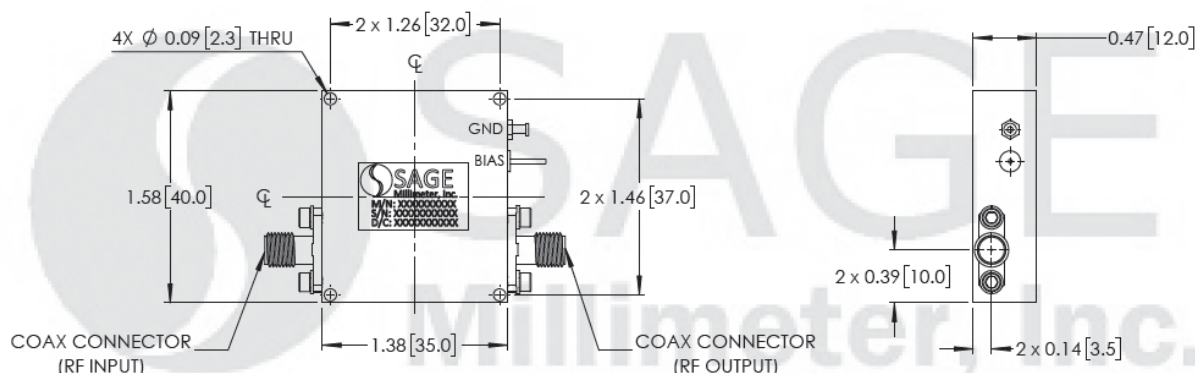
Typical P_{1dB} & Psat and Noise Figure vs Frequency

Bias: +12 V_{DC}/650 mA



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



Note:

- All data presented is collected from a sample lot. Actual data may vary unit to unit, slightly.
- All testing was performed under +25 °C case temperature.
- 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 (0.90 ± 0.02 Nm), should be applied. **Eravant torque wrench, model SCH-08008-S1, is highly recommended.**

