SBB-2434436029-2F2F-S1

Broadband Amplifier, 24 to 44 GHz, 60 dB Gain, 2.5 dB Noise Figure, +29 dBm P_{-1dB}

SBB-2434436029-2F2F-S1 is a broadband noise amplifier with a typical small signal gain of 60 dB and a nominal noise figure of 2.5 dB the frequency range of 24 to 44 GHz. The DC power requirement for the amplifier is +8 V_{DC}/1.5 A. The input and output port configurations are both female 2.4 mm connectors. Other port configurations, such as male 2.4 mm connectors and WR-28 waveguides for either the input or output port, are also available under different model numbers.

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	24 GHz		44 GHz
Gain		60 dB	
Noise Figure		2.5 dB	
Output P_{1dB}		+29 dBm	
Input Power			+5 dBm
Input Return Loss		10 dB	
Output Return Loss		10 dB	
DC Voltage	+6 V_{DC}	+8 V_{DC}	+12 V_{DC}
DC Supply Current		1.5 A	
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
Size	Aluminum
Finish	Gold Plated
Weight	1.3 Oz
Size	1.20” (W) 1.20” (L) X 0.50” (H)
Outline	BG-SC-1

ECCN

3A001.b.4

FEATURES

- Broadband Coverage
- Low Noise Figure
- High Gain
- High Output Power

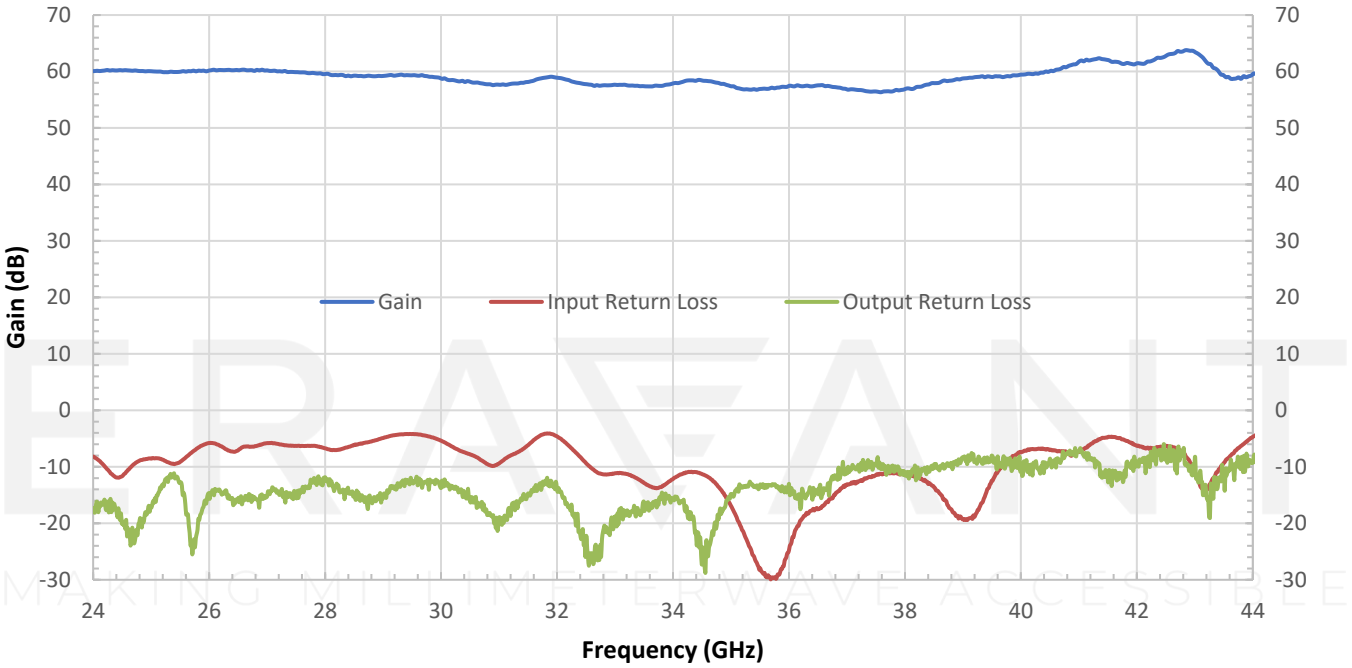
APPLICATIONS

- 5G Systems
- Communication Systems
- Test Equipment

SUPPLEMENTAL DETAILS

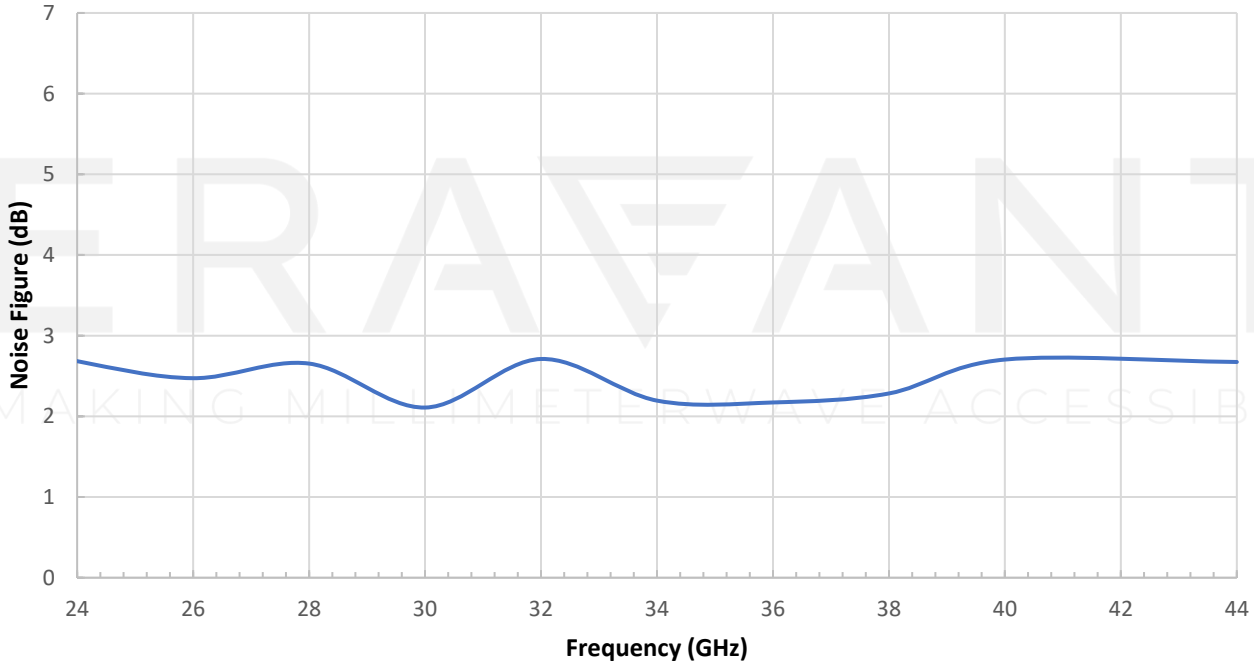
Gain and Return Loss vs. Frequency

Bias: +8 V_{DC}/1,455 mA



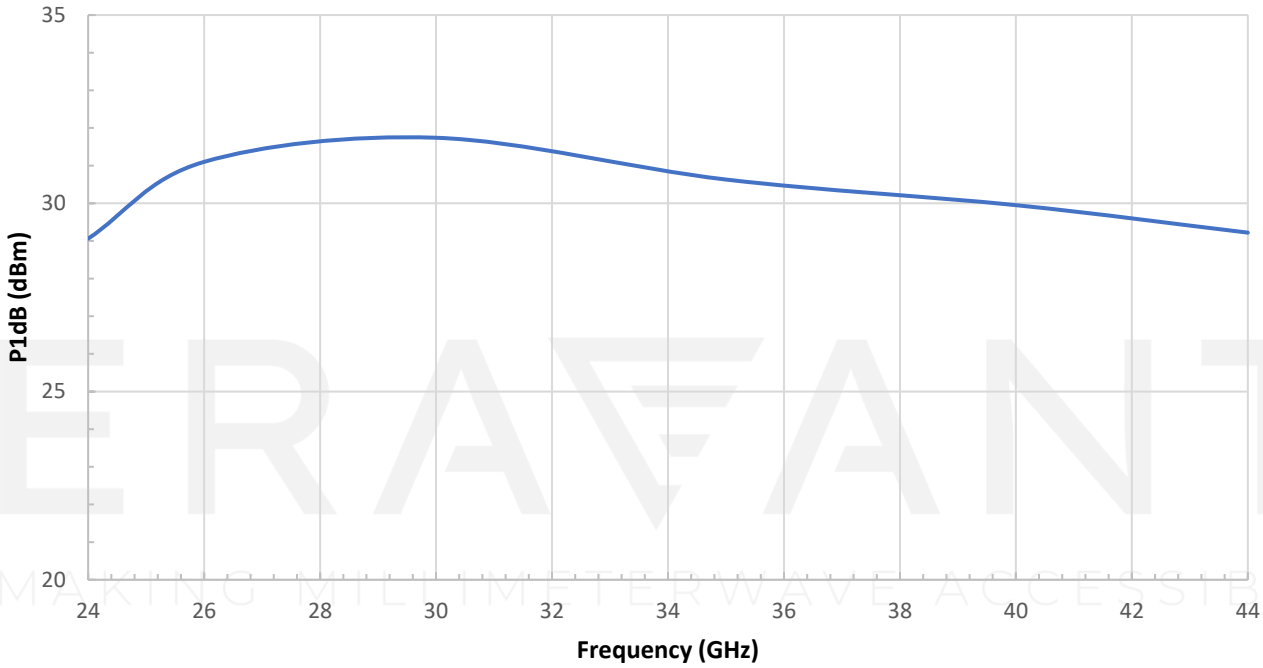
Noise Figure vs. Frequency

Bias: +8 V_{DC}/1,455 mA

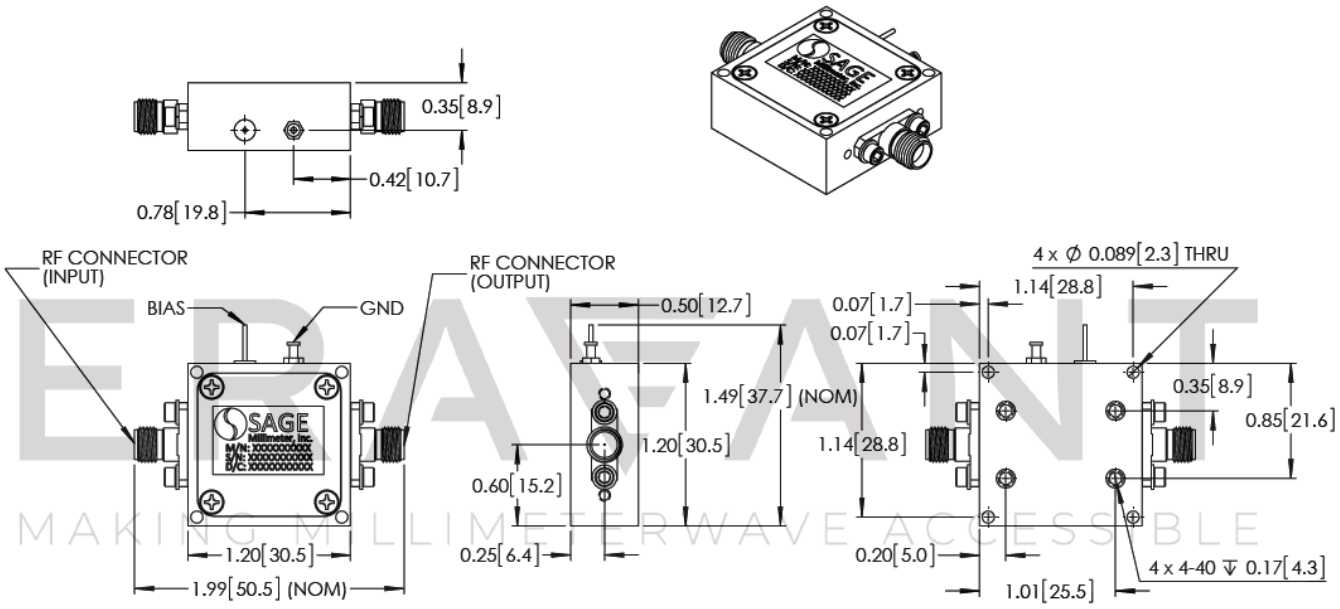


P1dB vs. Frequency

Bias: +8 V_{DC}/1,455 mA



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



NOTE:

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

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 +85 °C. Use proper heatsink or fan if necessary
- Any foreign objects in the waveguide will degrade performance and/or damage the device.
- For 1.35 mm, 1.85 mm, 2.4 mm, 2.92 mm, and SMA connectors proper torque should be applied: 8.0 ± 0.15 inch-pounds (0.90 ± 0.02 Nm). Torque wrench model SCH-08008-S1 is highly recommended.

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