SBB-3538033020-1M1M-S1

Rev 1.0

Broadband Amplifier, 35 to 80 GHz, 30 dB Gain, +20 dBm P_{1dB}, 8 dB NF

Description:

Model SBB-3538033020-1M1M-S1 is a broadband amplifier with a typical small signal gain of 30 dB, a nominal P_{1dB} of +20 dBm, and a typical noise figure of 8.0 dB across the frequency range of 35 to 80 GHz. The DC power requirement for the amplifier is +8 V_{DC}/1100 mA. The RF connectors are male 1 mm connectors. Other port configurations are available under different model numbers.

Features:

- Broadband Operation
- High Power and High Gain

Applications:

- Test Equipment

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency Range	35 GHz		80 GHz
Gain (35 to 75 GHz)		30 dB	
Gain (75 to 80 GHz)		20 dB	
P_{1dB} (35 to 70 GHz)		+20 dBm	
P_{1dB} (70 to 80 GHz)		+18 dBm	
P_{sat} (35 to 70 GHz)		+22 dBm	
P_{sat} (70 to 80 GHz)		+19 dBm	
Noise Figure		8.0 dB	
P_{in}			0 dBm
Input Return Loss		10 dB	
Output Return Loss		10 dB	
DC Voltage	+6 V_{DC}	+8 V_{DC}	+15 V_{DC}
DC Supply Current		1100 mA	
Specification Temperature		+25 ˚C	
Operating Temperature	0 ˚C		+50 ˚C

Mechanical Specifications:

Item	Specification
Input Port	1 mm (M)
Output Port	1 mm (M)
Bias	Solder Pin
Case Material	Aluminum
Finish	Gold Plated
Weight	1.3 Oz
Size	1.20” (W) X 1.20” (L) X 0.48” (H)
Outline	BG-SC-2

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Phone: 424-757-0168 | Fax: 424-757-0188 | Email: support@eravant.com

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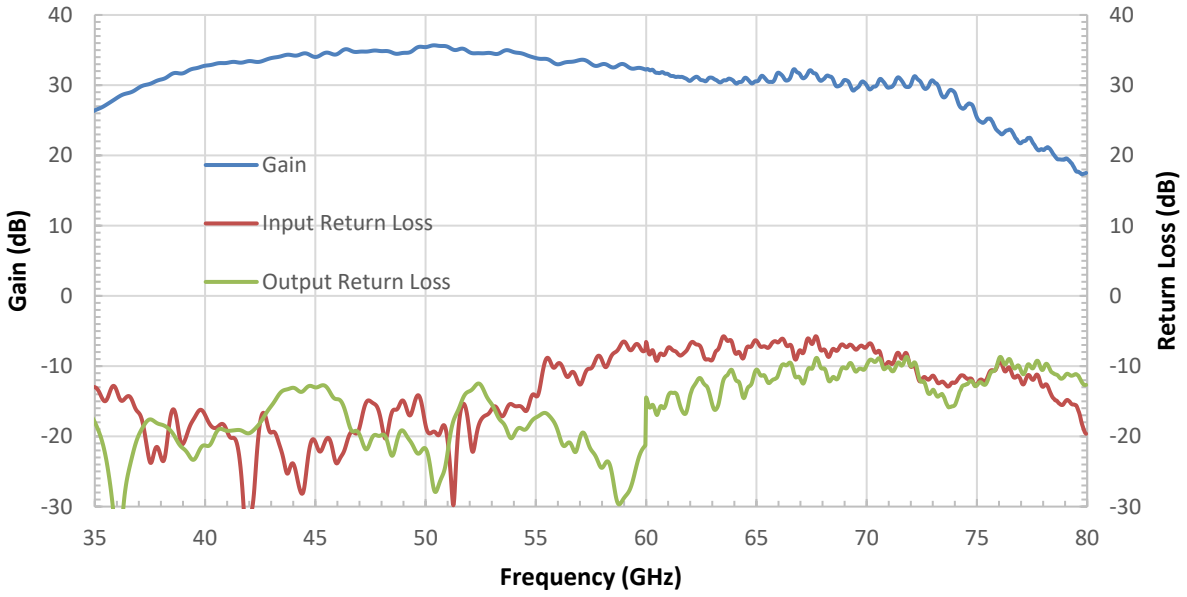
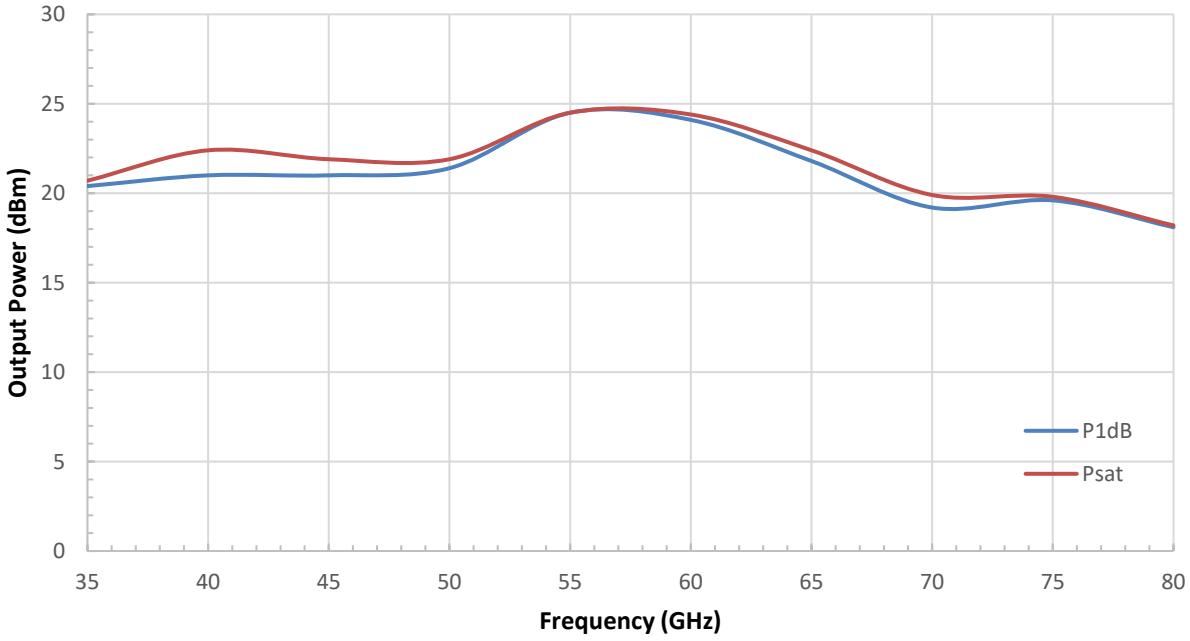
Gain and Return Loss vs. Frequency

Bias: +8 V_{DC}/1,113 mA



Output Power vs. Frequency

Bias: +8V_{DC}/1115mA



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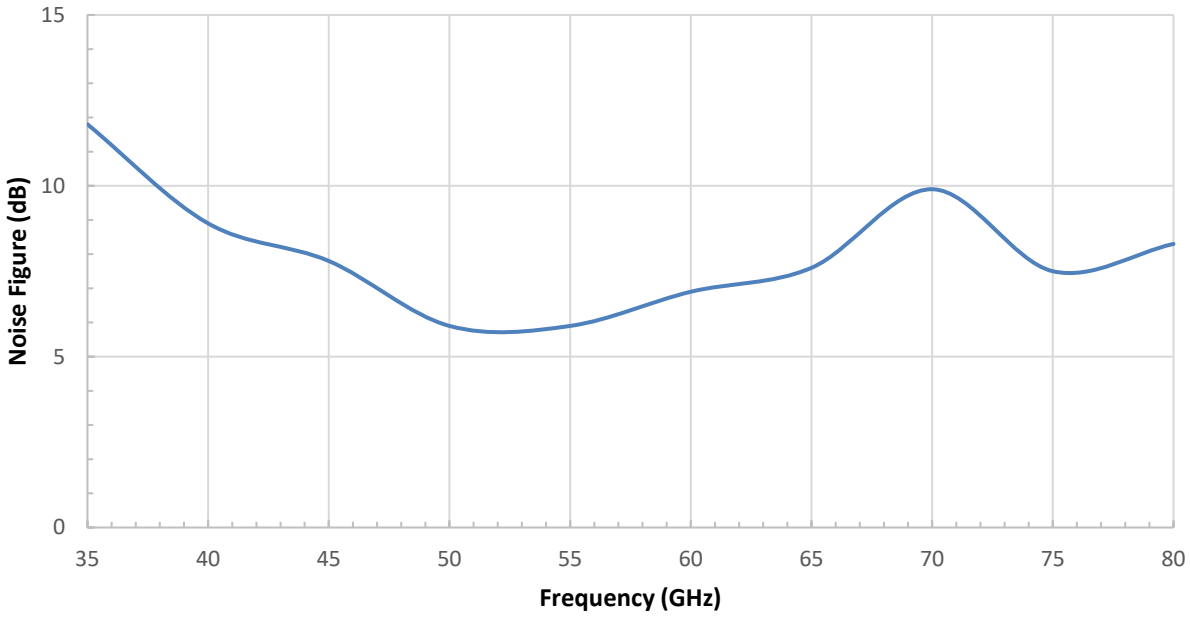
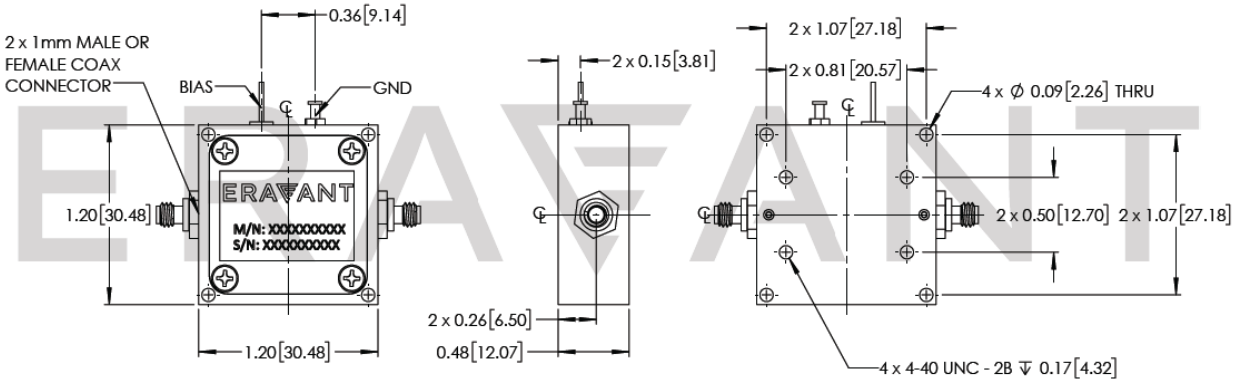
Noise Figure vs. Frequency

Bias: +8V_{DC}/1115 mA



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



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Note:

- All data presented is collected from a sample lot. Actual data may vary unit to unit.
- 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.**