SBB-3538033020-1F1F-S1-WPC

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

SBB-3538033020-1F1F-S1-WPC 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 female 1 mm connectors. Other port configurations are available under different model numbers.

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 75 GHz)		+20 dBm	
P_{1dB} (70 to 80 GHz)		+18 dBm	
P_{sat} (35 to 75 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/Output Port	1 mm (F)
Bias	Solder Pin
Case Material	Aluminum
Finish	Gold Plated
Weight	1.3 Oz
Outline	BG-SC-2

ECCN

3A001.b.4

FEATURES

- Broadband Operation
- High Power and High Gain

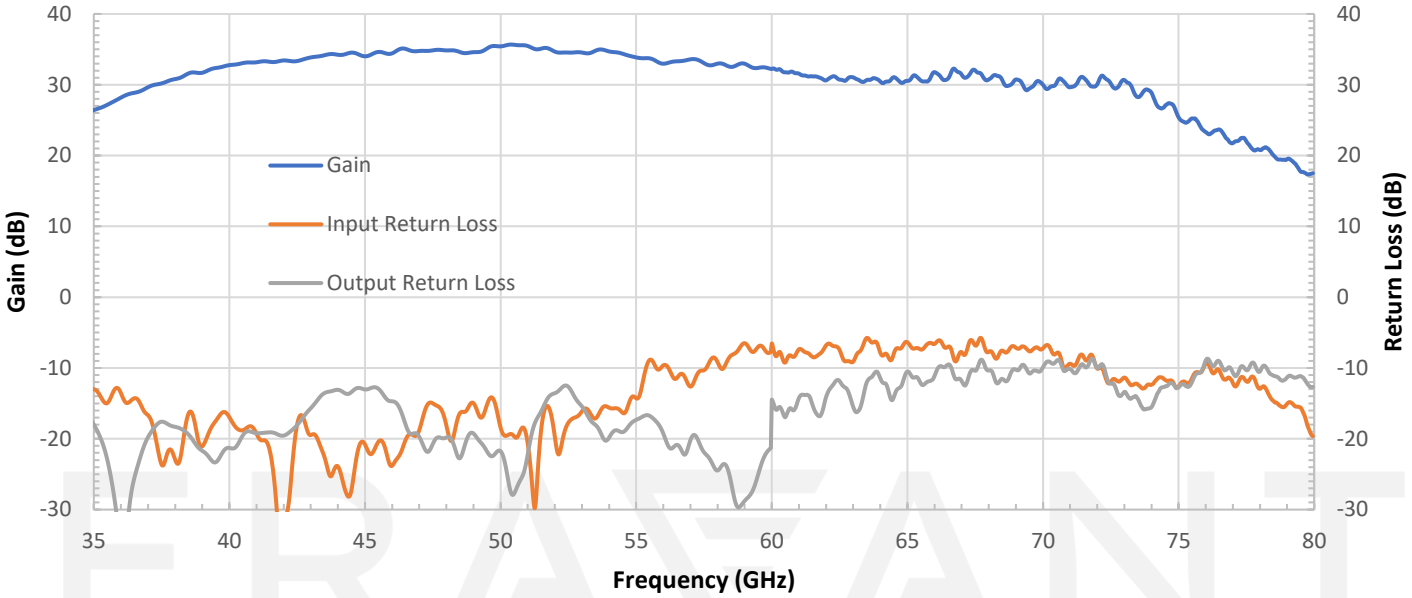
APPLICATIONS

- Test Equipment

SUPPLEMENTAL DETAILS

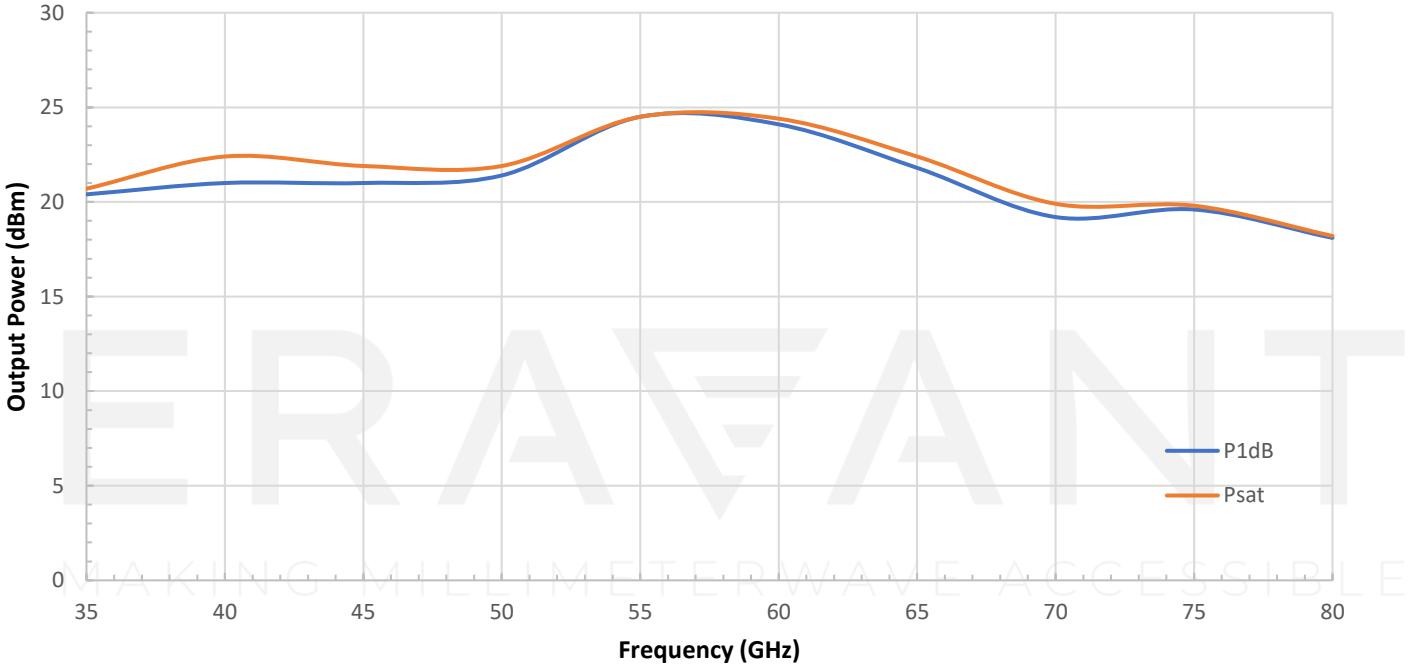
Gain and Return Loss vs. Frequency

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



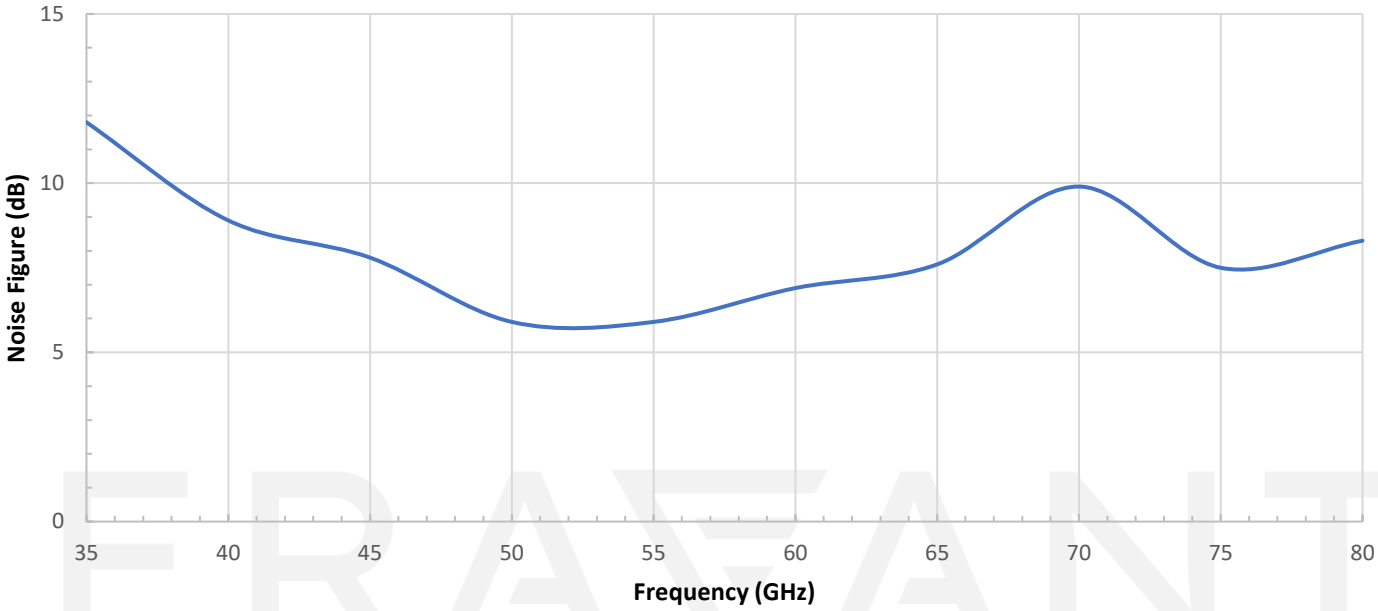
Output Power vs. Frequency

Bias: +8V_{DC}/1115mA

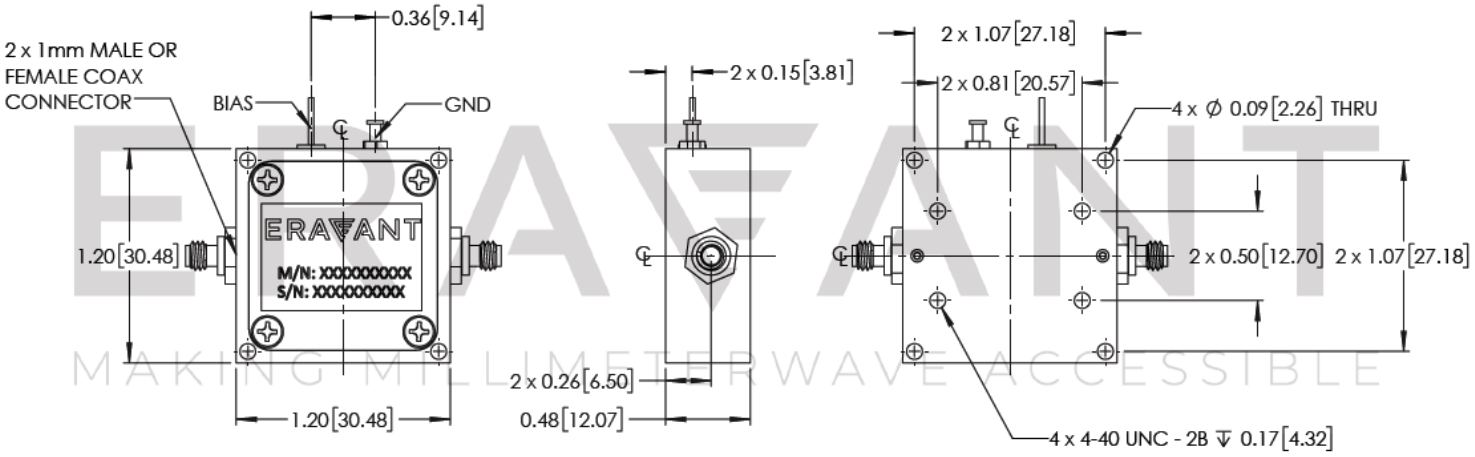


Noise Figure vs. Frequency

Bias: +8V_{DC}/1115 mA



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 slightly from unit to unit. All testing is performed under +25 °C room temperature.
- 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 +50° C. Use proper heatsink or fan if necessary.
- For 1 mm connectors proper torque should be applied: 4.0 ± 0.15 inch-pounds (0.45 ± 0.02 Nm). Torque wrench model SCH-06004-S1 is highly recommended.
- 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.

ERAVANT
MAKING MILLIMETERWAVE ACCESSIBLE