SBB-0524031818-KFKF-S1-WP

Rev 1.0

Broadband Amplifier, 0.5 to 40 GHz, 15 dB Gain, +12 dBm P_{1dB}

Description:

Model SBB-0524031818-KFKF-S1-WP is a broadband amplifier with a typical small signal gain of 15 dB, a nominal P_{1dB} of +12 dBm, and a typical noise figure of 7 dB across the frequency range of 0.5 to 40 GHz. The DC power requirement for the amplifier is +12 V_{DC}/250 mA. The use of a heat sink is advised to assist in cooling the device. The RF connectors are female 2.92 mm connectors. Other port configurations are available under different model numbers. This unit is a well priced module, consult test data graphs to evaluate performance.

Features:

- Broadband Coverage
- Good Gain Flatness

Applications:

- RF Microwave & VSAT
- Wireless Infrastructure
- Test Equipment

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	0.5 GHz		40 GHz
Gain		15 dB	
P_{1dB}		+15 dBm	
P_{sat}		+17 dBm	
Noise Figure		7 dB	
P_{in}			+20 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		250 mA	
Specification Temperature		+25 ˚C	
Operating Temperature	0 ˚C		+50 ˚C

Mechanical Specifications:

Item	Specification
Input	2.92 mm (F)
Output	2.92 mm (F)
Bias	Solder Pin
Case Material	Brass
Finish	Gold Plated
Weight	3.2 Oz
Size	1.38” (L) x 1.58” (W) x 0.47” (H)
Outline	BG-SC-1

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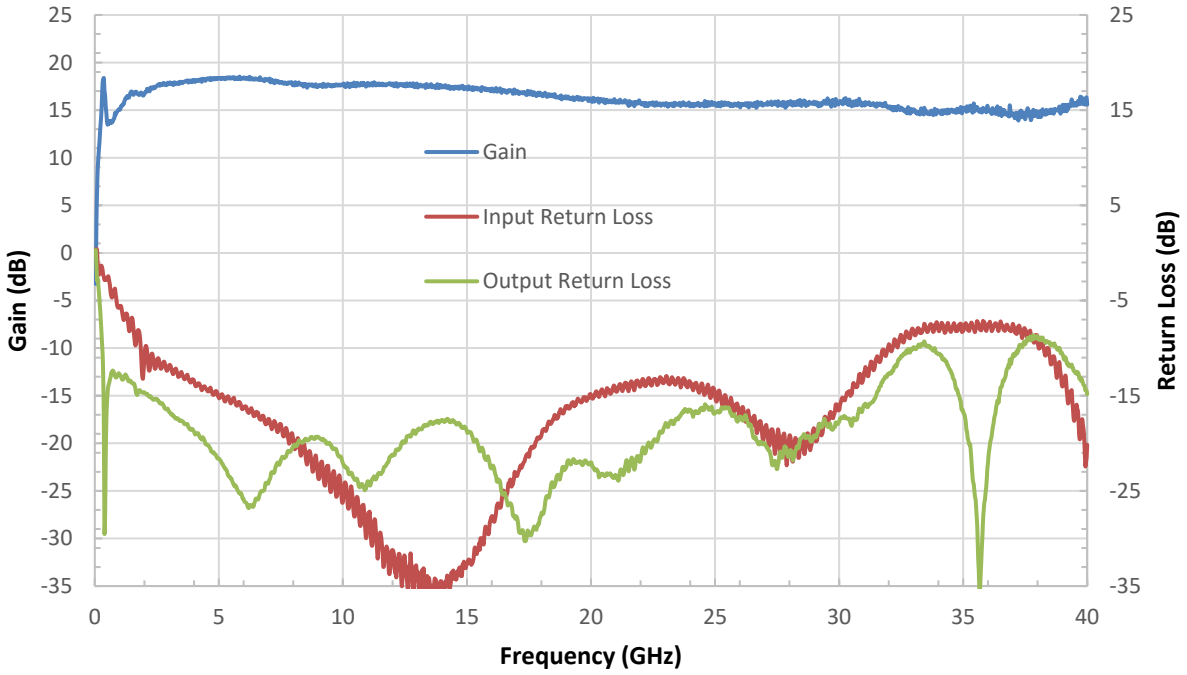
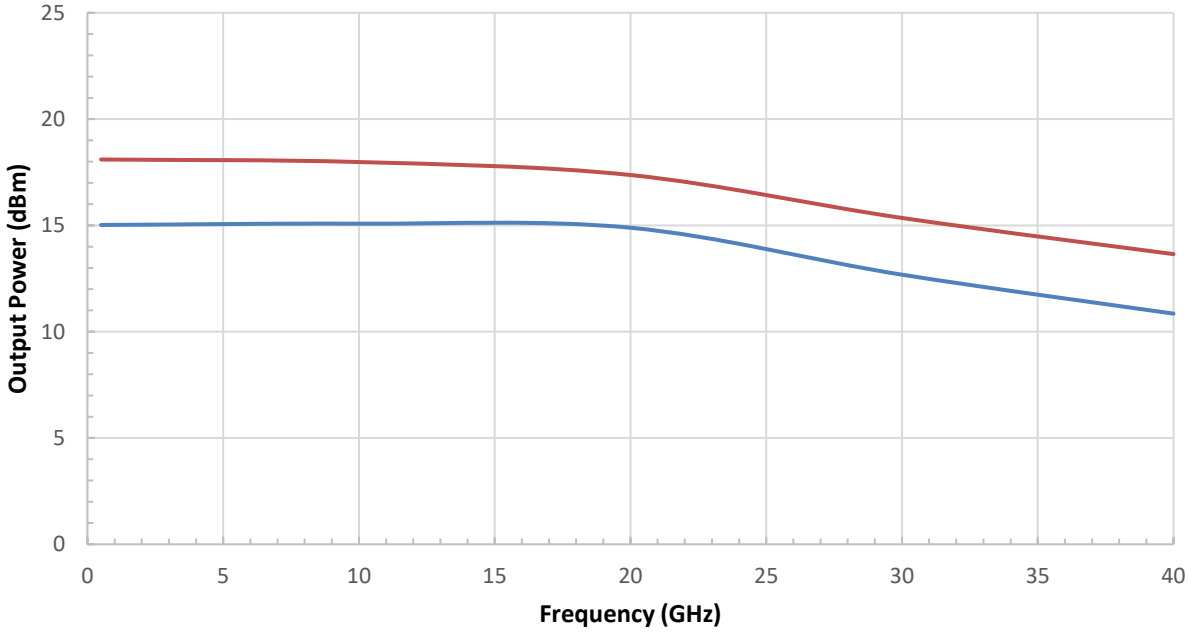
Gain and Return Loss vs. Frequency

Bias: +8 V_{DC}/214 mA



Output Power vs. Frequency

Bias: +8V_{DC}/214 mA



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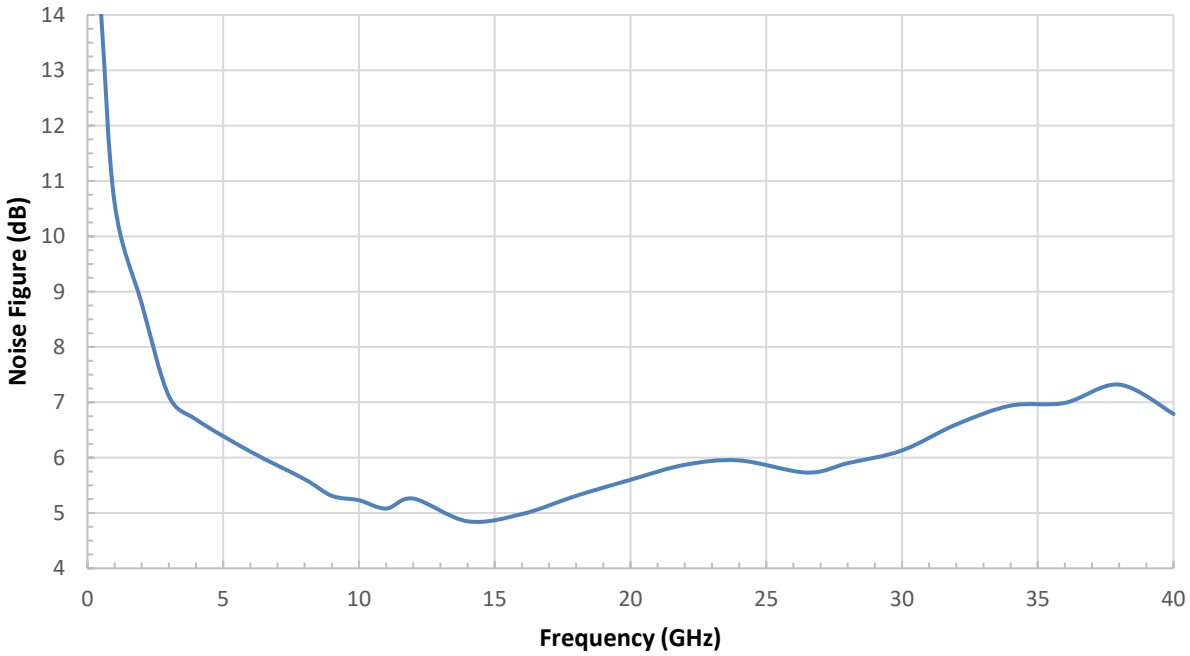
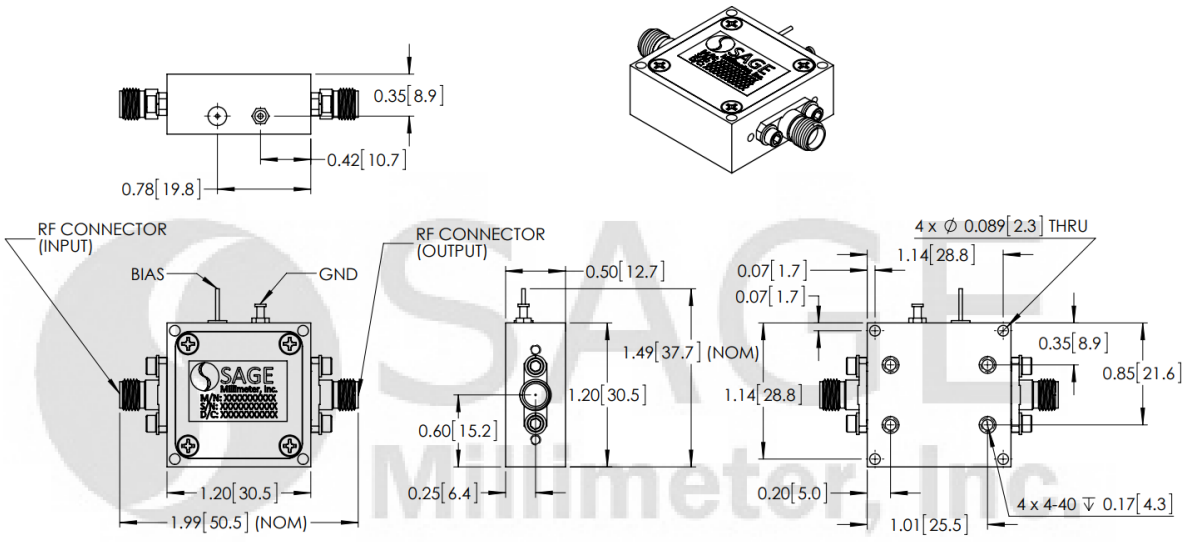
Noise Figure vs. Frequency

Bias: +8V_{DC}/214 mA



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



NOTE:

RF CONNECTORS (INPUT & OUTPUT): SMA, K, 2.4MM, OR V
- MALE OR FEMALE

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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.**

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