SBB-0123031520-KFKF-S1

Rev. 1.1

Broadband Amplifier, 0.1 to 30 GHz, 15 dB Gain, +15 dBm P_{1dB}, 5 dB NF

Description:

Model SBB-0123031520-KFKF-S1 is a broadband amplifier with a typical small signal gain of 15 dB, a nominal P_{1dB} of +15 dBm, and a noise figure of 5.0 dB across the frequency range of 0.1 to 30 GHz. The DC power requirement for the amplifier is +8 V_{DC}/160 mA. The RF connectors are female K connectors. Other port configurations, such as male K connectors for either the input or output port, are also available under different model numbers.

Features:

- High Output Power
- Broad Bandwidth

Applications:

- Radar Systems
- Communication Systems
- Test Equipment

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	0.1 GHz		30.0 GHz
Gain		15 dB	
P_{1dB}		+15 dBm	
P_{sat}		+20 dBm	
Noise Figure		5.0 dB	
P_{in}			+20 dBm
Input Return Loss		6 dB	
Output Return Loss		6 dB	
DC Voltage	+6 V_{DC}	+8 V_{DC}	+15 V_{DC}
DC Supply Current		160 mA	
Specification Temperature		+25 ˚C	
Operating Temperature	0 ˚C		+50 ˚C

Mechanical Specifications:

Item	Specification
Input Port	K(F)
Output Port	K(F)
Bias	Solder Pin
Case Material	Aluminum
Finish	Gold Plated
Weight	1.3 Oz
Size	1.20” (W) X 1.20” (L) X 0.50” (H)
Outline	BG-SC-1

www.sagemillimeter.com | 3043 Kashiwa Street, Torrance, CA 90505
Phone: 424-757-0168 | Fax: 424-757-0188 | Email: sales@sagemillimeter.com

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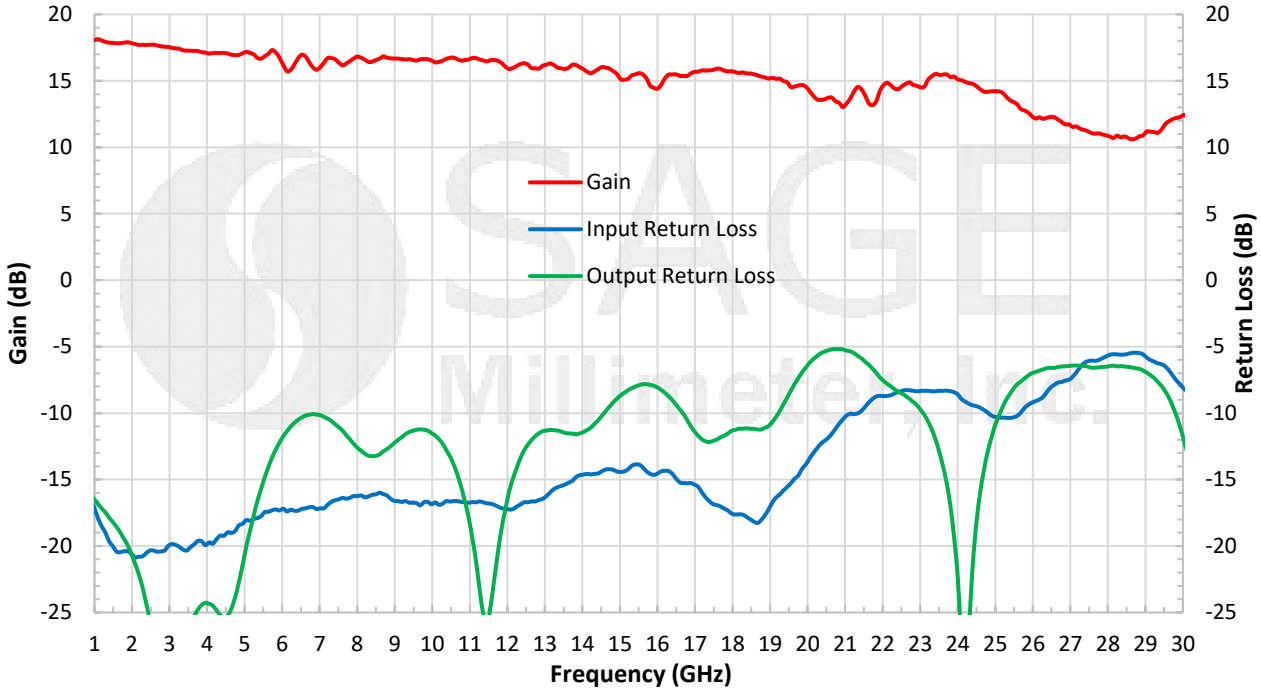
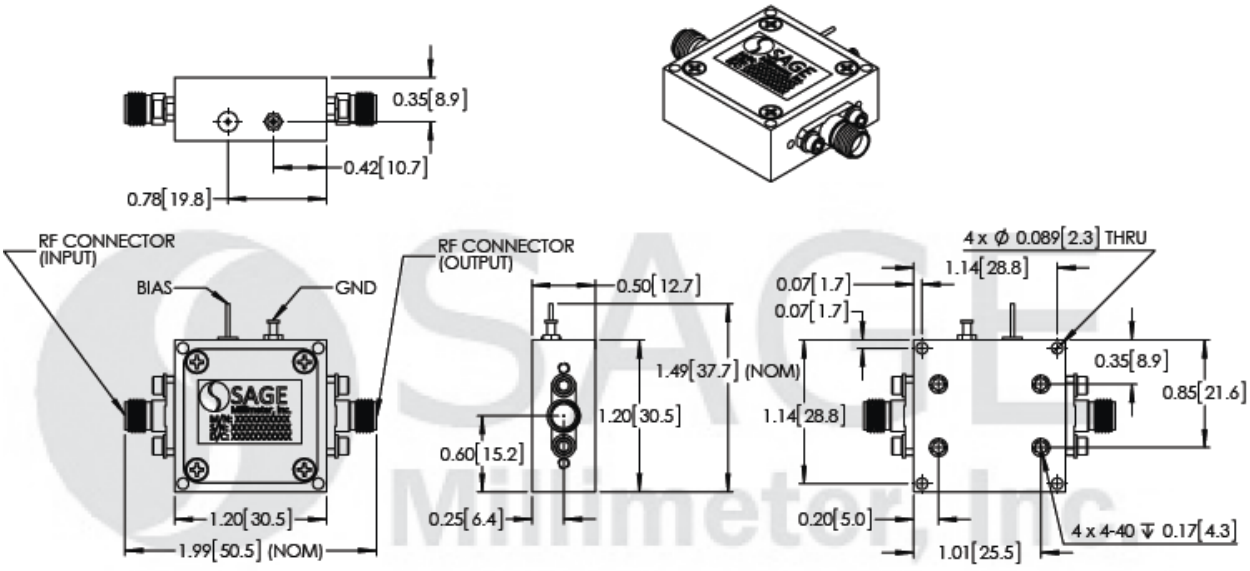
Typical Gain and Return Loss vs. Frequency

Bias: +8 V_{DC}/160 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, slightly.
- All testing was performed under +25 ˚C case temperature.
- SAGE Millimeter, Inc. 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. **SAGE Millimeter torque wrench, model SCH-08008-S1, is highly recommended.**