SBB-1834034018-KFKF-E3

Rev 1.0

Broadband Amplifier, 18 to 40 GHz, 40 dB Gain, +18 dB P_{1dB}

Description:

Model SBB-1834034018-KFKF-E3 is a broadband amplifier with a typical small signal gain of 40 dB, a nominal P_{1dB} of +18 dBm, and a typical noise figure of 6.0 dB across the frequency range of 18 to 40 GHz. The DC power requirement for the amplifier is +12 V_{DC}/650 mA. The use of a heat sink is advised to assist in cooling the device. The RF connectors are female K connectors. Other port configurations are available under different model numbers.

Features:

- Broadband Coverage
- Good Gain Flatness

Applications:

- RF Microwave & VSAT
- Wireless Infrastructure
- Test Equipment

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	18 GHz		40 GHz
Gain		40 dB	
P_{1dB}		+18 dBm	
P_{sat}		+19 dBm	
Noise Figure		6.0 dB	
P_{in}			-10 dBm
Input Return Loss		10 dB	
Output Return Loss		10 dB	
DC Voltage		+12 V_{DC}	+15 V_{DC}
DC Supply Current		650 mA	750 mA
Specification Temperature		+25 ˚C	
Operating Temperature	0 ˚C		+50 ˚C

Mechanical Specifications:

Item	Specification
Input	K(F)
Output	K(F)
Bias	Solder Pin
Case Material	Aluminum
Finish	Gold Plated
Weight	1.8 Oz
Size	1.38” (L) x 1.57” (W) x 0.47” (H)
Outline	BG-ZC-1

www.sagemillimeter.com | 3043 Kashiwa Street, Torrance, CA 90505
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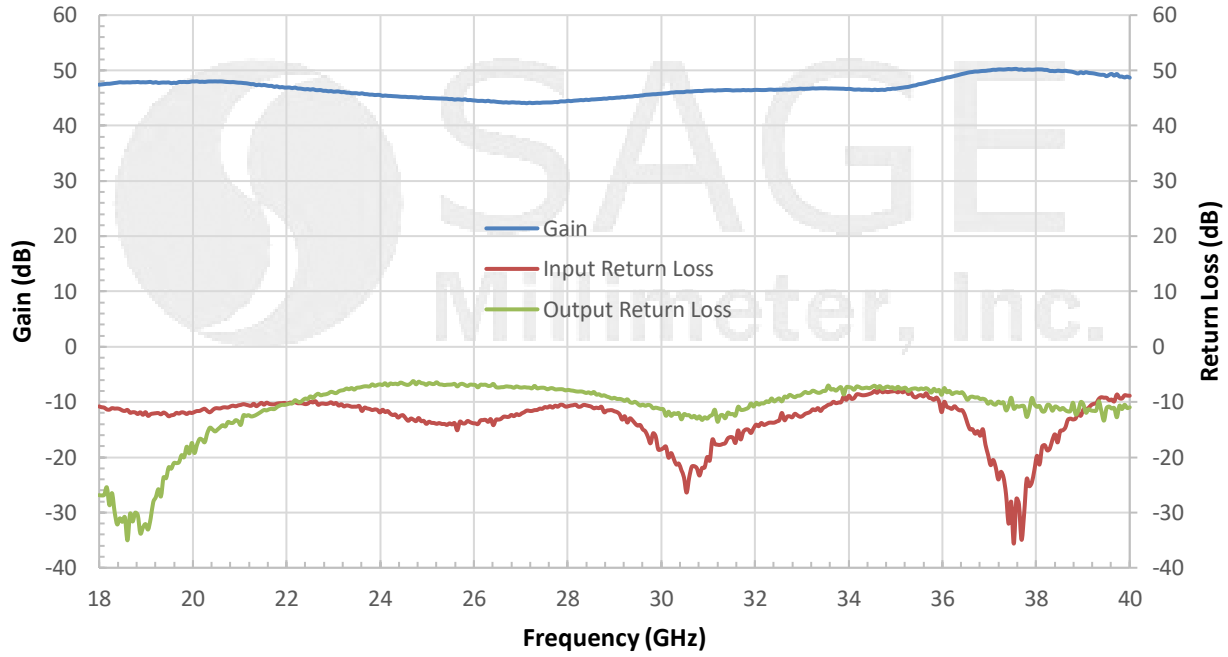
Broadband Amplifier, 18 to 40 GHz, 40 dB Gain, +18 dB P_{1dB}

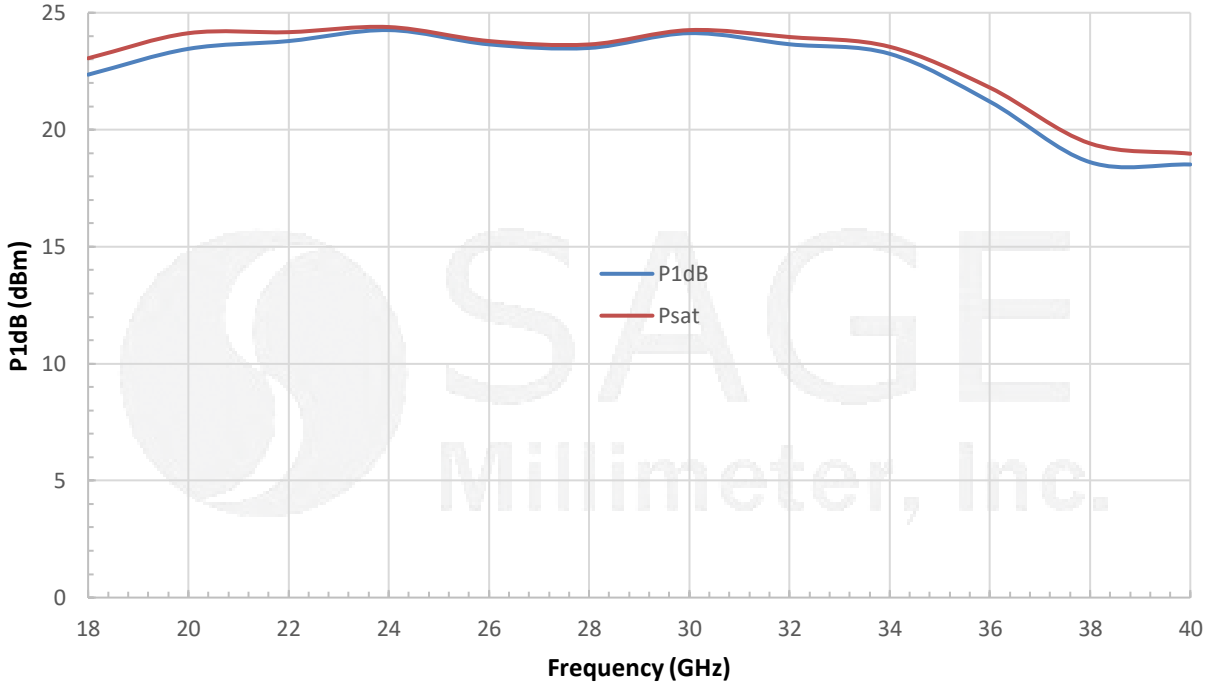
Typical Gain and Return Loss vs. Frequency

Bias: +12 V_{DC}/353 mA



Typical Power vs. Frequency

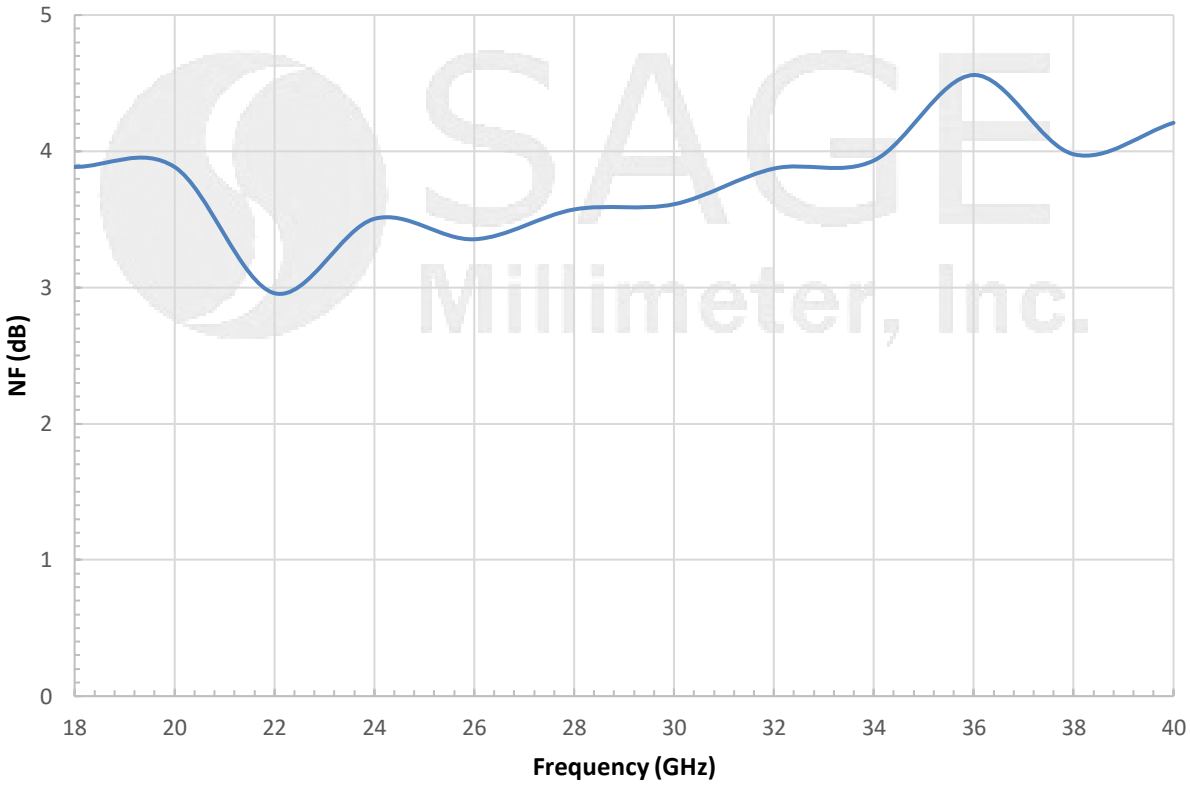
Bias: +12 V_{DC}/353 mA



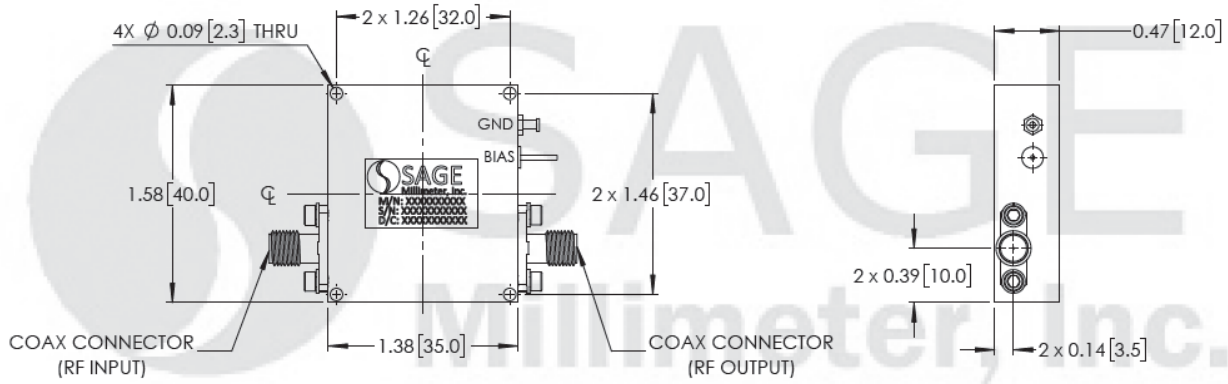
Broadband Amplifier, 18 to 40 GHz, 40 dB Gain, +18 dB P_{1dB}

Typical Noise Figure vs. Frequency

Bias: +12 V_{DC}/353 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 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.

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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.**