

## Broadband Amplifier, 18 to 40 GHz, 40 dB Gain, +18 dBm P<sub>1dB</sub>

### Description:

**Model SBB-1834034018-2F2F-E3-WPC** is a broadband amplifier with a typical small signal gain of 40 dB, a nominal P<sub>1dB</sub> of +18 dBm, and a typical noise figure of 4.0 dB across the frequency range of 18 to 40 GHz. The DC power requirement for the amplifier is +12 V<sub>DC</sub>/650 mA. The use of a heat sink is advised to assist in cooling the device. The RF connectors are female 2.4 mm 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 <sub>1dB</sub>		+18 dBm	
P <sub>sat</sub>		+19 dBm	
Noise Figure		4.0 dB	
Input Return Loss		10 dB	
Output Return Loss		10 dB	
DC Voltage		+12 V <sub>DC</sub>	+15 V <sub>DC</sub>
DC Supply Current		650 mA	
Specification Temperature		+25 °C	
Operating Temperature	0 °C		+50 °C

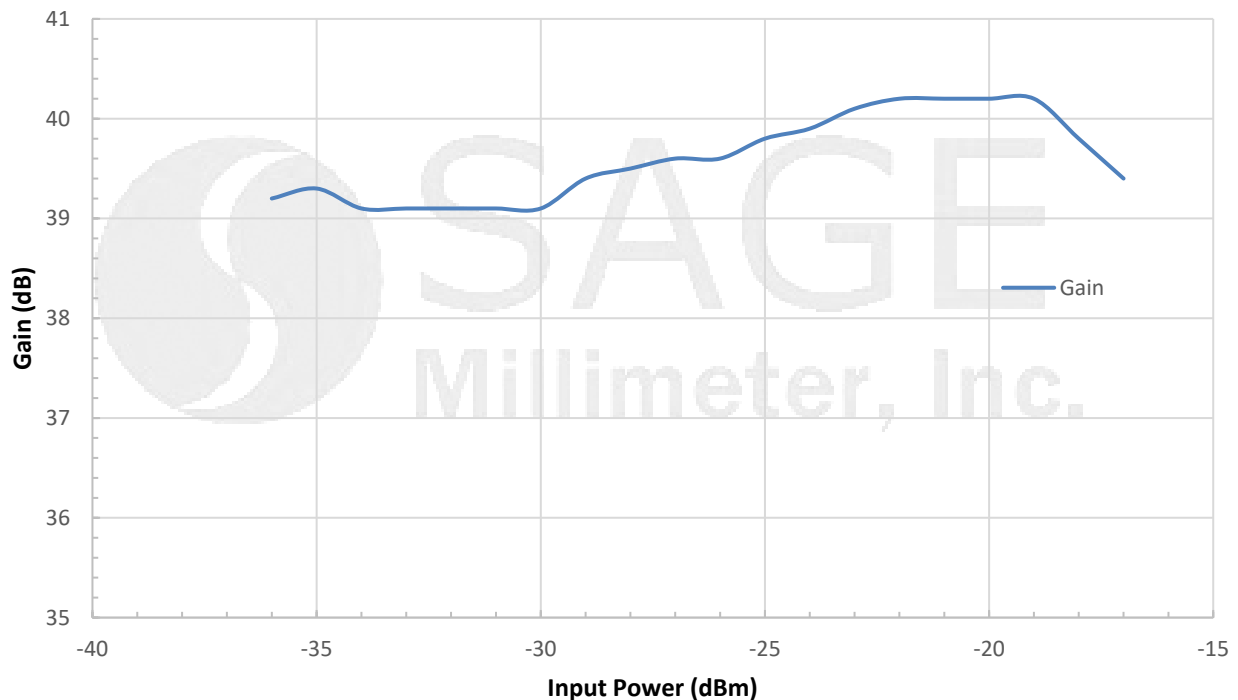
### Mechanical Specifications:

Item	Specification
Input	2.4 mm (F)
Output	2.4 mm (F)
Bias	Solder Pin
Case Material	Aluminum
Finish	Gold Plated
Weight	3.2 Oz
Size	1.57" (L) x 1.38" (W) x 0.47" (H)
Outline	BG-ZC-1

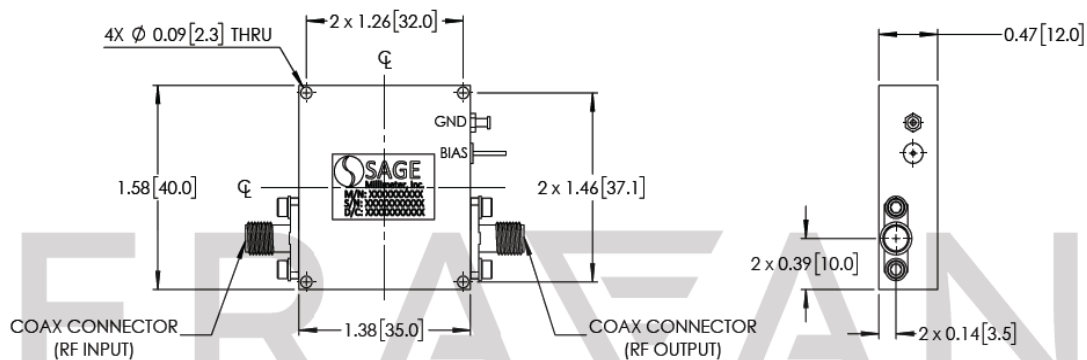


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### Gain vs. Input Power



### 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,  $8.0 \pm 0.15$  inch-pounds ( $0.90 \pm 0.02$  Nm), should be applied. **Eravant torque wrench, model SCH-08008-S1, is highly recommended.**

