

**Broadband Amplifier, 1.0 to 18 GHz, 25 dB Gain, 28 dBm P<sub>1dB</sub>****Description:**

**Model SBB-0131832528-SFSF-E3** is a broadband amplifier with a typical small signal gain of 25 dB, a nominal P<sub>1dB</sub> of +28 dBm, and a typical noise figure of 5.0 dB across the frequency range of 1.0 to 18 GHz. The DC power requirement for the amplifier is +12 V<sub>DC</sub>/500 mA. The use of a heat sink is advised to assist in cooling the device. The RF connectors are female SMA 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	1.0 GHz		18 GHz
Gain		25 dB	
P <sub>1dB</sub>		+28 dBm	
P <sub>sat</sub>		+29 dBm	
Noise Figure		5.0 dB	
P <sub>in</sub>			10 dBm
Input Return Loss		12 dB	
Output Return Loss		10 dB	
DC Voltage		+12 V <sub>DC</sub>	+15 V <sub>DC</sub>
DC Supply Current		500 mA	
Specification Temperature		+25 °C	
Operating Temperature	0 °C		+50 °C

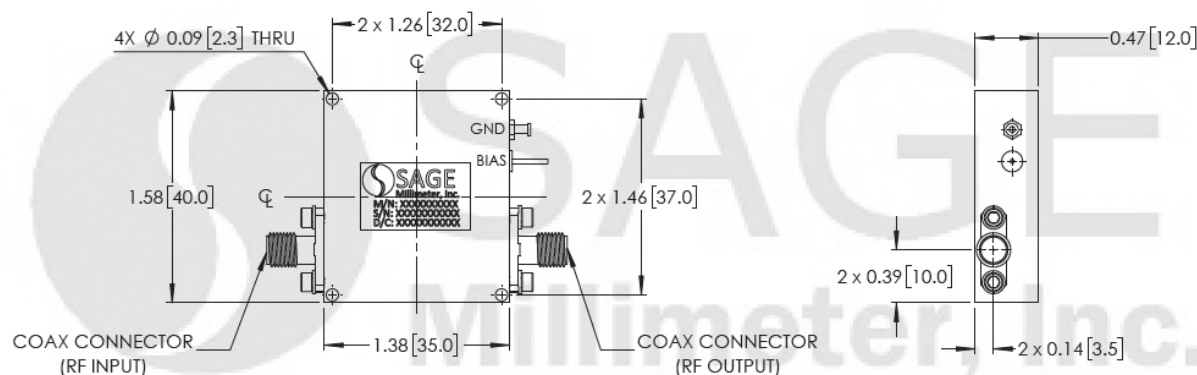
**Mechanical Specifications:**

Item	Specification
Input	SMA (F)
Output	SMA (F)
Bias	Solder Pin
Case Material	Aluminum
Finish	Gold Plated
Weight	3.2 Oz
Size	1.58" (L) x 1.38" (W) x 0.47" (H)
Outline	BG-ZC-1



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**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.
- 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. **Eravant torque wrench, model SCH-08008-S1, is highly recommended.**

