

SBL-1834034038-KFKF-E3**Low Noise Amplifier, 18 to 40 GHz, 40 dB Gain, 4 dB NF**

SBL-1834034038-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 4 dB across the frequency range of 18 to 40 GHz. The DC power requirement for the amplifier is +12 VDC/300 mA. The use of a heat sink is advised to assist in cooling the device. The RF connectors are female K connectors. Port configurations in 2.4 mm connectors are available under model number SBL-1834034038-2F2F-E3.

**Electrical Specifications:**

Parameter	Minimum	Typical	Maximum
Frequency	18 GHz		40 GHz
Gain		40 dB	
P _{1dB}		+18 dBm	
Noise Figure		4 dB	
P _{in}			-10 dBm
Input Return Loss		10 dB	
Output Return Loss		10 dB	
DC Voltage	+6 V _{DC}	+12 V _{DC}	+15 V _{DC}
DC Supply Current		300 mA	350 mA
Impedance		50 Ω	
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	Aluminum
Finish	Gold Plated
Weight	1.8 Oz
Size	1.38" (L) x 1.58" (W) x 0.47" (H)
Outline	BG-ZC-1

ECCN

EAR99

FEATURES

- Broadband Coverage
- Good Gain Flatness

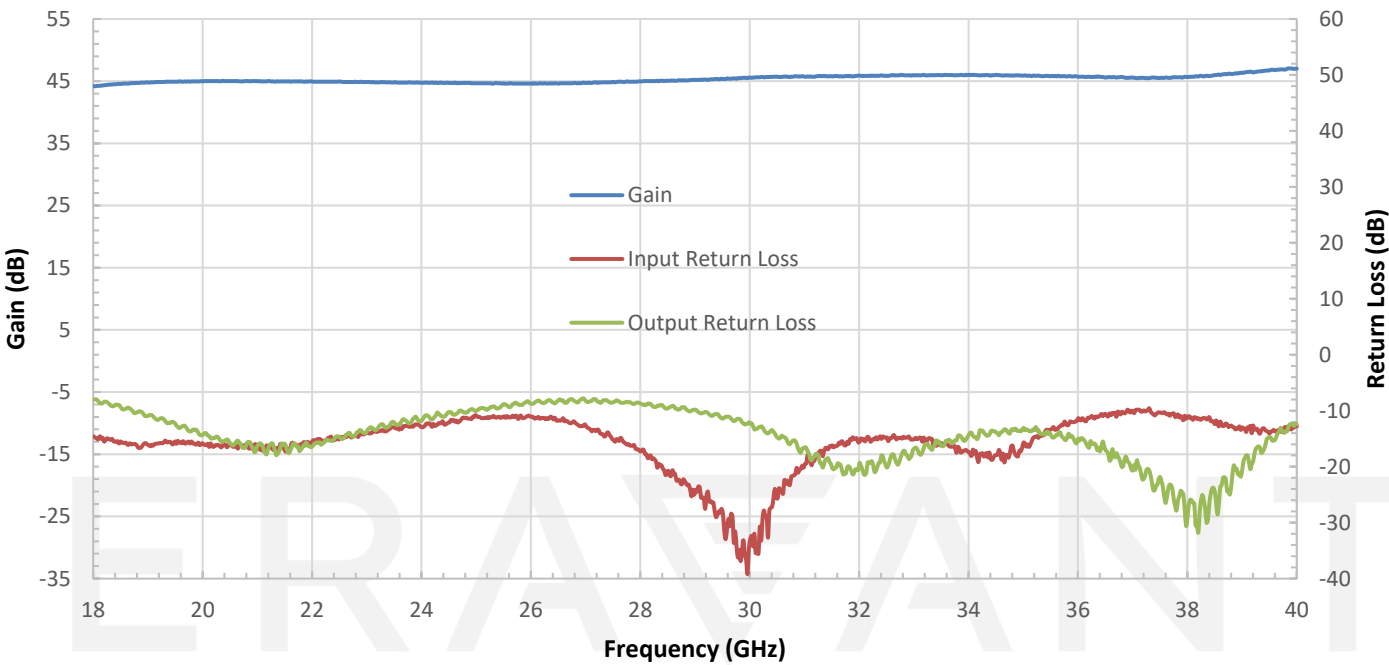
APPLICATIONS

- RF Microwave & VSAT
- Wireless Infrastructure
- Test Equipment

SUPPLEMENTAL DETAILS

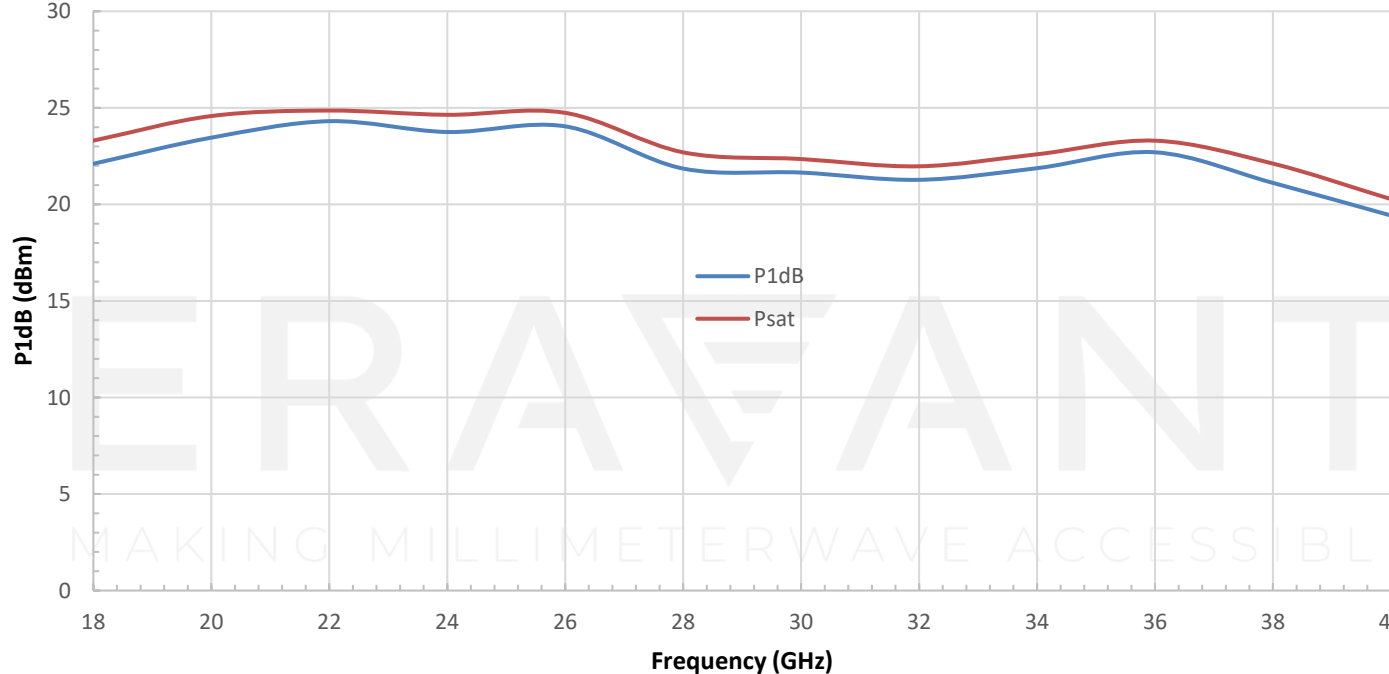
Typical Gain and Return Loss vs. Frequency

Bias: +12 V_{DC}/230 mA



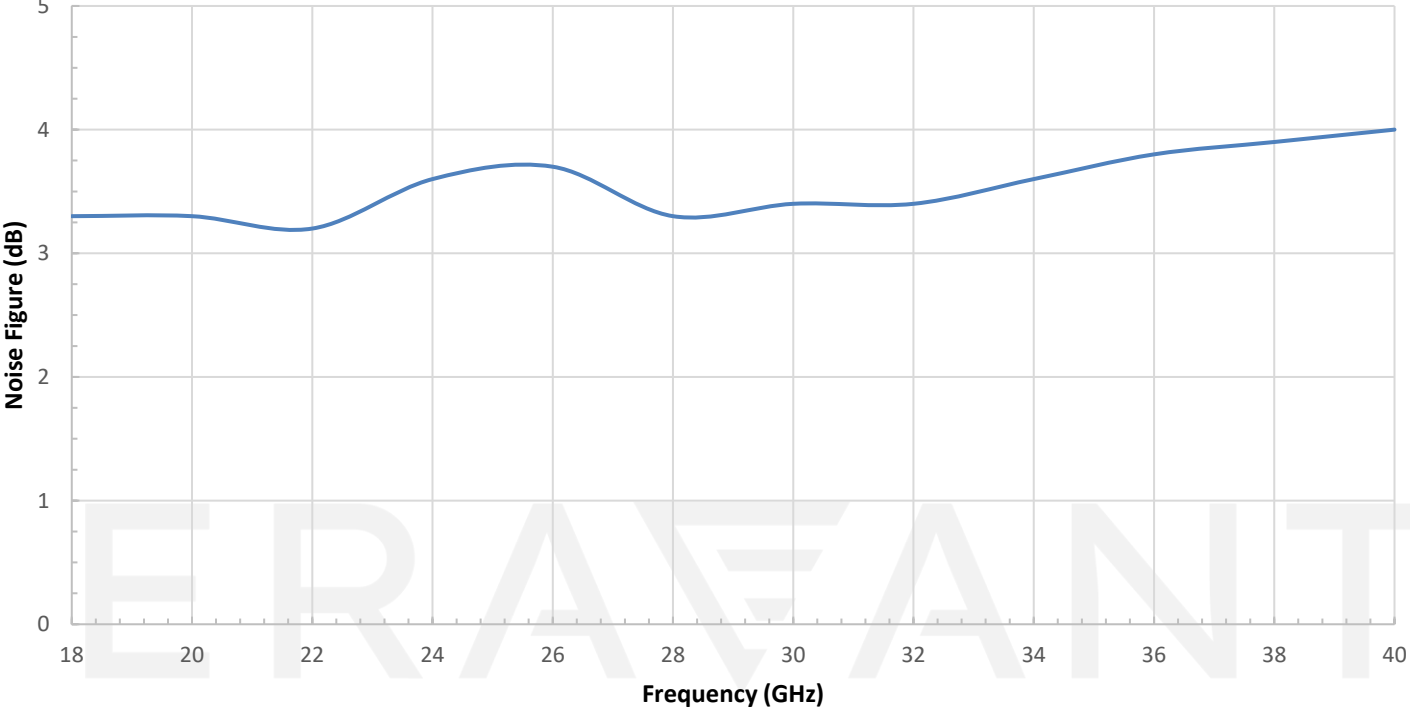
Typical Power vs. Frequency

Bias: +12 V_{DC}/320 mA



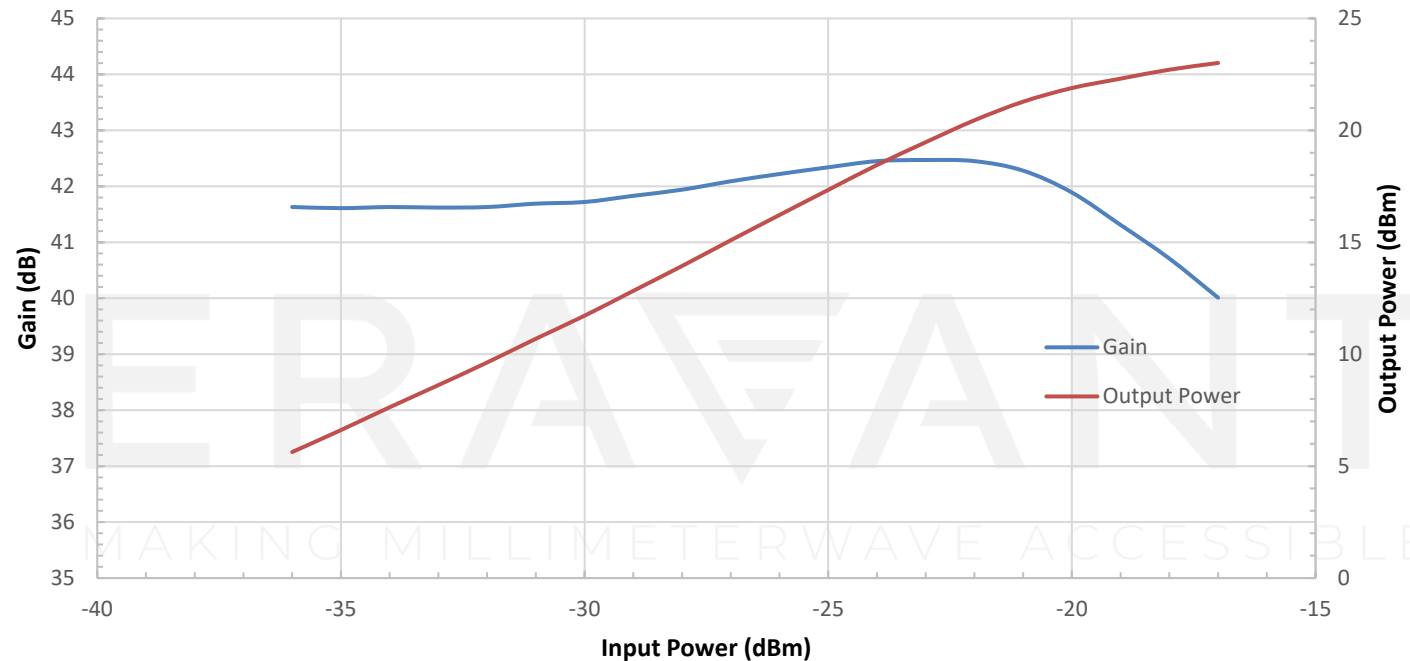
Typical Noise Figure vs. Frequency

Bias: +12V_{DC}/230 mA



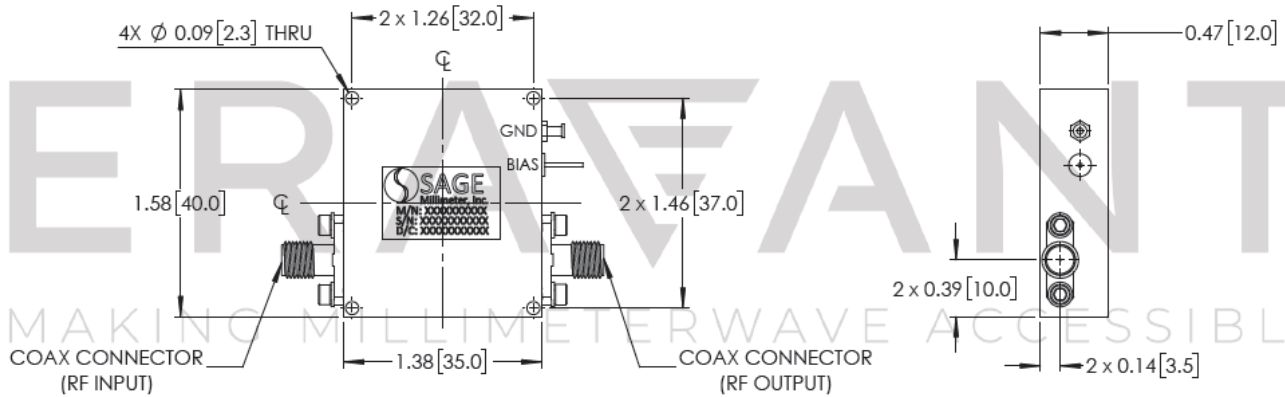
Gain and Output Power vs. Input Power

Input Frequency: 25 GHz



SBL-1834034038-KFKF-E3

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



NOTE:

- On condition that test data is provided it is collected from a sample lot. Actual data may vary slightly from unit to unit. All testing is performed under +25 °C room 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.
- For 1.35 mm, 1.85 mm, 2.4 mm, 2.92 mm, and SMA connectors proper torque should be applied: 8.0 ± 0.15 inch-pounds (0.90 ± 0.02 Nm). Torque wrench model SCH-08008-S1 is highly recommended.