SBL-1832733025-KFKF-E3

Advanced

Low Noise Amplifier, K Band, 30 dB Gain, 2.5 dB Noise Figure

Description:

Model SBL-1832733025-KFKF-E3 is a low noise amplifier with a typical small signal gain of 30 dB and a nominal noise figure of 2.5 dB across the frequency range of 18 to 26.5 GHz. The DC power requirement for the amplifier is +8 V_{DC}/200 mA. The RF connectors are female K connectors. Other port configurations, such as male K connectors and WR-42 waveguides for either the input or output port, are also available under different model numbers.

Features:

- Full Waveguide Band Operation
- State-of-the-Art Noise Figure
- Low Power Consumption

Applications:

- Radar Systems
- Communication Systems
- Low Noise Receivers

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	18 GHz		26.5 GHz
Gain		30 dB	
Noise Figure		2.5 dB	
P_{1dB}		+14 dBm	
P_{in}			-10 dBm
Input Return Loss		10 dB	
Output Return Loss		10 dB	
DC Voltage	+6 V_{DC}	+8 V_{DC}	+12 V_{DC}
DC Supply Current		200 mA	
Specification Temperature		+25 ˚C	
Operating Temperature	0 ˚C		+50 ˚C

Mechanical Specifications:

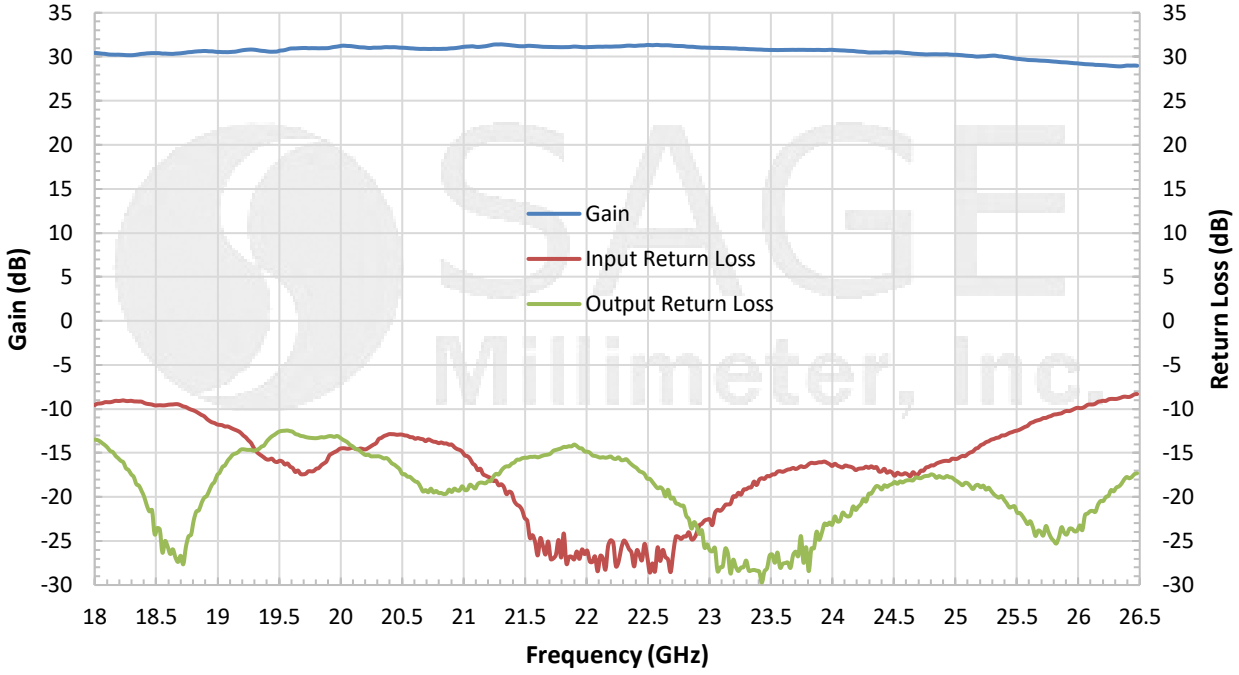
Item	Specification
Input	K(F)
Output	K(F)
Bias	Solder Pin
Case Material	Aluminum
Finish	Gold Plated
Weight	1.06 Oz
Size	1.38” (L) x 1.57” (W) x 0.47” (H)
Outline	BG-ZC-1

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

Low Noise Amplifier, K Band, 30 dB Gain, 2.5 dB Noise Figure

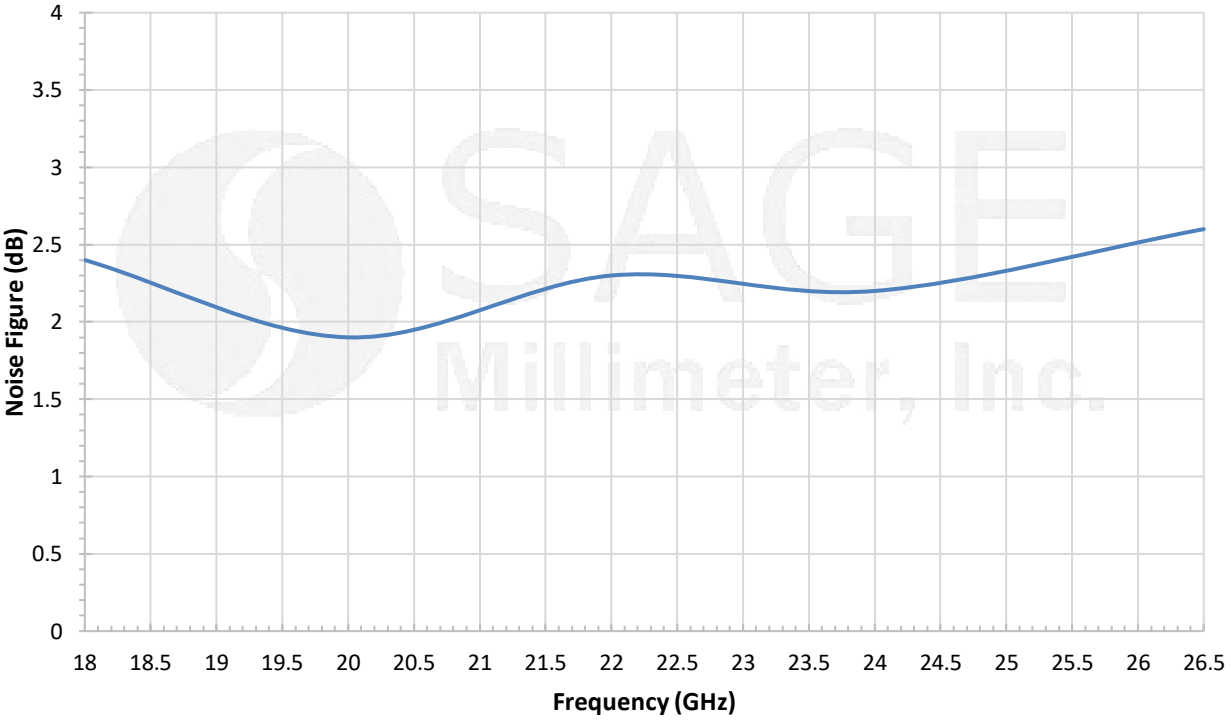
Typical Gain and Return Loss vs. Frequency

Bias: +8 V_{DC}/200 mA



Typical Noise Figure vs. Frequency

Bias: +8 V_{DC}/200 mA



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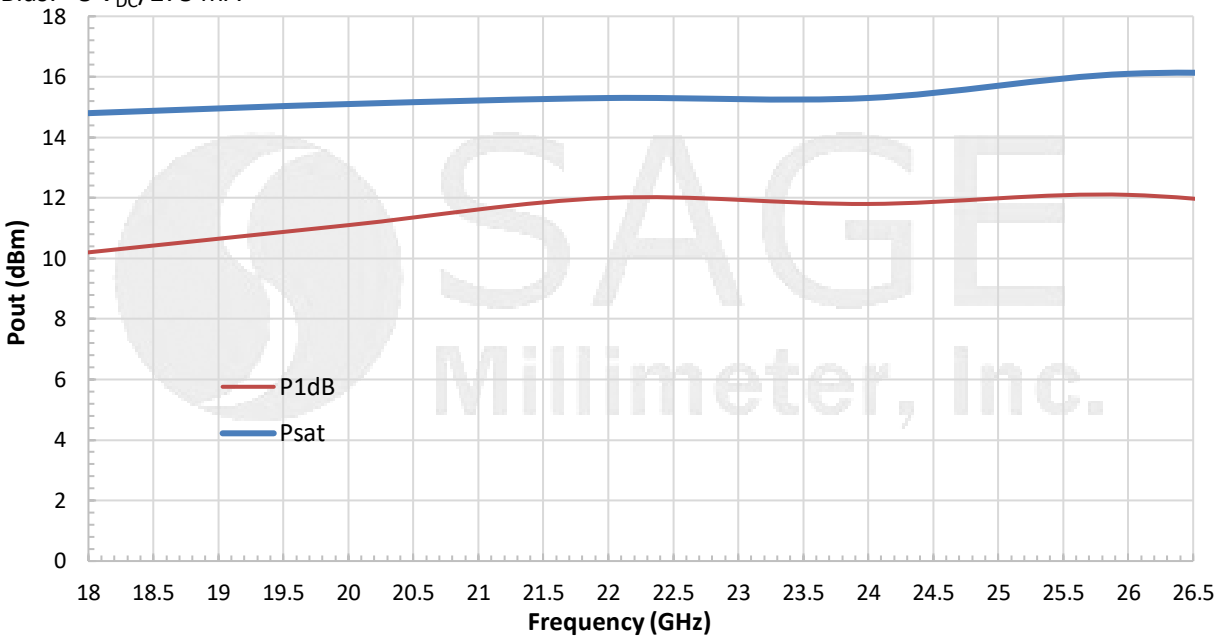
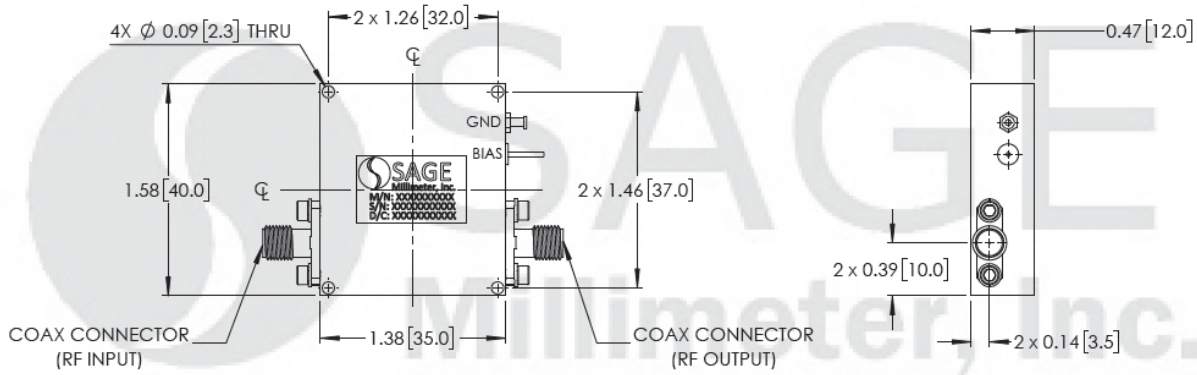
Low Noise Amplifier, K Band, 30 dB Gain, 2.5 dB Noise Figure

Typical Output Power vs. Frequency

Bias: +8 V_{DC}/275 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.
- All testing was performed under +25 ˚C case temperature.
- Other mechanical configurations are available under different model number.
- SAGE Millimeter, Inc. reserves the right to change the information presented without notice.

Caution:

- Exceeding absolute maximum ratings shown will damage the device.
- The device is static sensitive. Always follow ESD rules when working with the device.