

Low Noise Amplifier, K Band, 20 dB Gain, 2.5 dB NF

Description:

Model SBL-1832732025-KFKF-S1-WP is a low noise amplifier with a typical small signal gain of 20 dB and a nominal noise figure of 2.5 dB across the frequency range of 18 to 27 GHz. The DC power requirement for the amplifier is +8 V_{DC}/130 mA. The RF connectors are female K connectors. Other port configurations are available under different model numbers. This model is previously used and shows slight cosmetic wear. Consult data below for electrical performance.



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		27 GHz
Gain		20 dB	
Noise Figure		2.5 dB	
P _{1dB}		+14 dBm	
P _{in}			+18 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		130 mA	
Specification Temperature		+25 °C	
Operating Temperature	0 °C		+50 °C

Mechanical Specifications:

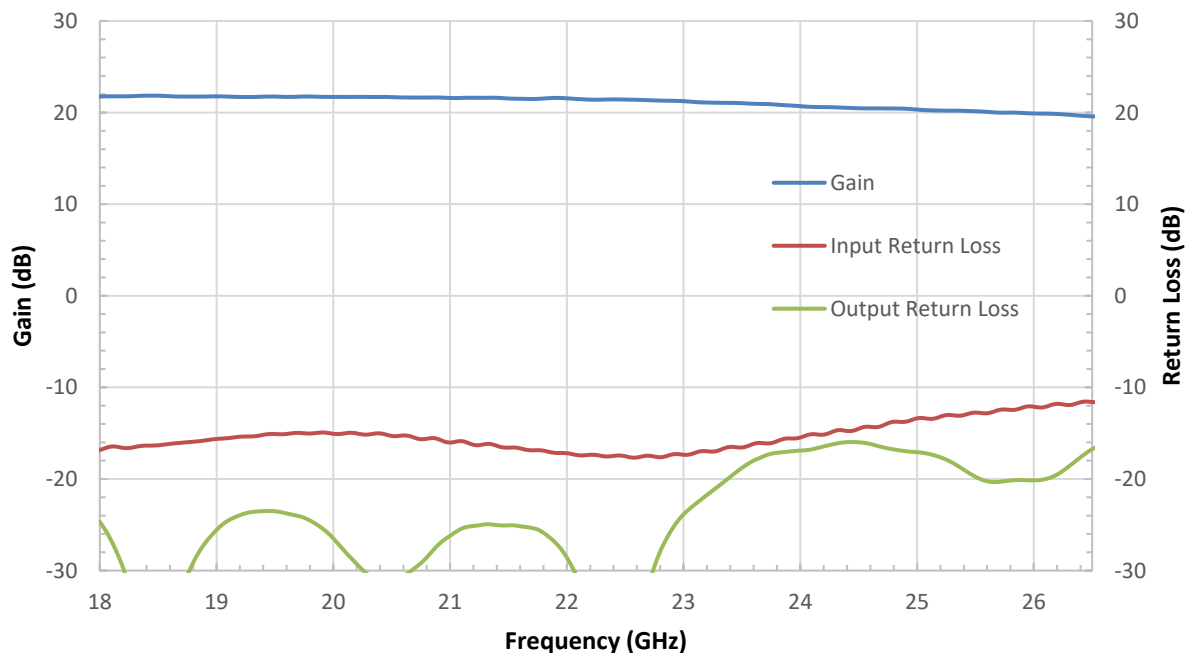
Item	Specification
Input Port	K(F)
Output Port	K(F)
Bias	Solder Pin
Case Material	Aluminum
Finish	Gold Plated
Weight	1.3 Oz
Size	1.20" (W) X 1.20" (L) X 0.50" (H)
Outline	BG-SC-1



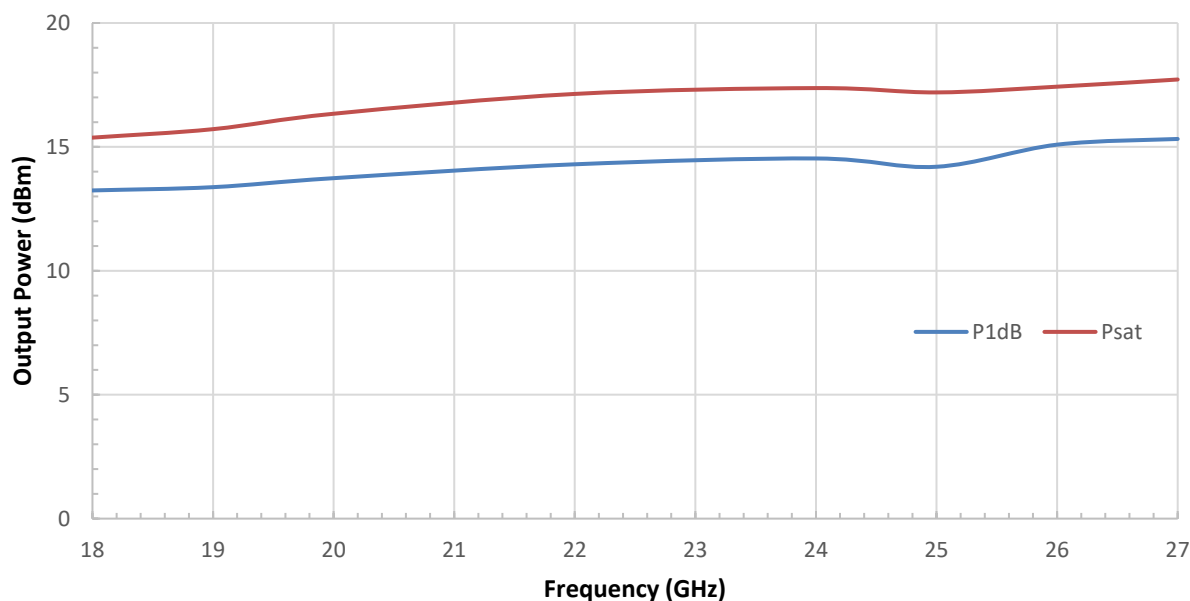


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Gain and Return Loss vs. Frequency

Bias: +8 V_{DC}/126 mA

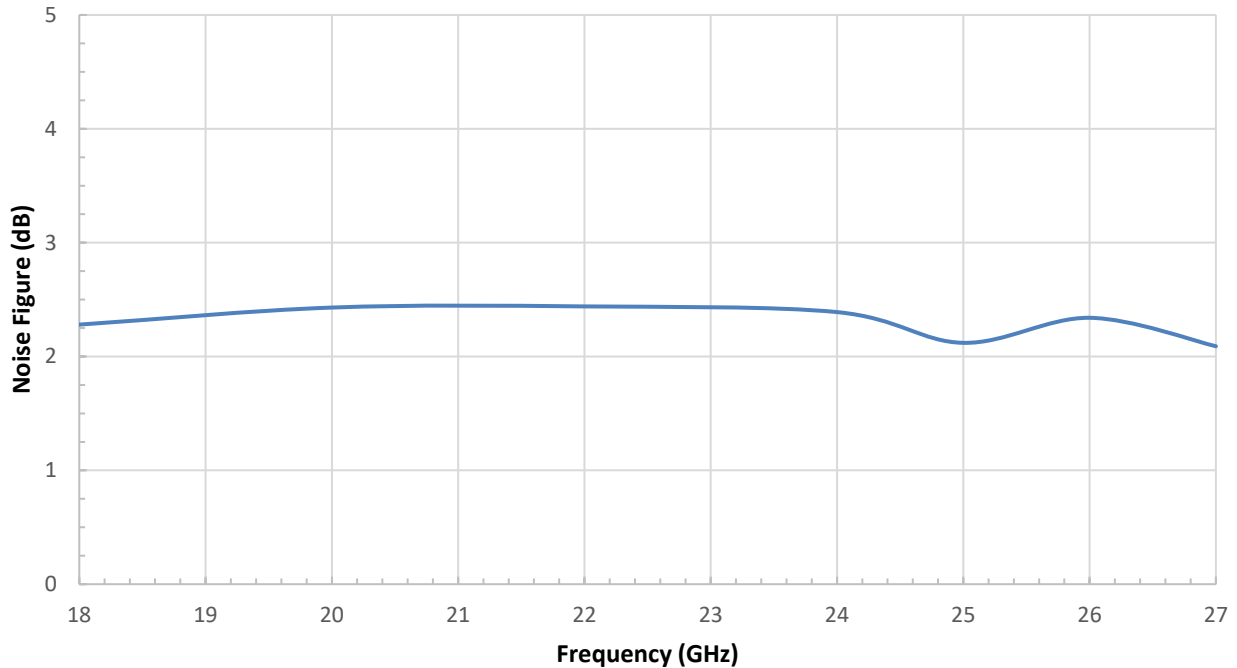
Output Power vs. Frequency

Bias: +8V_{DC}/126 mA

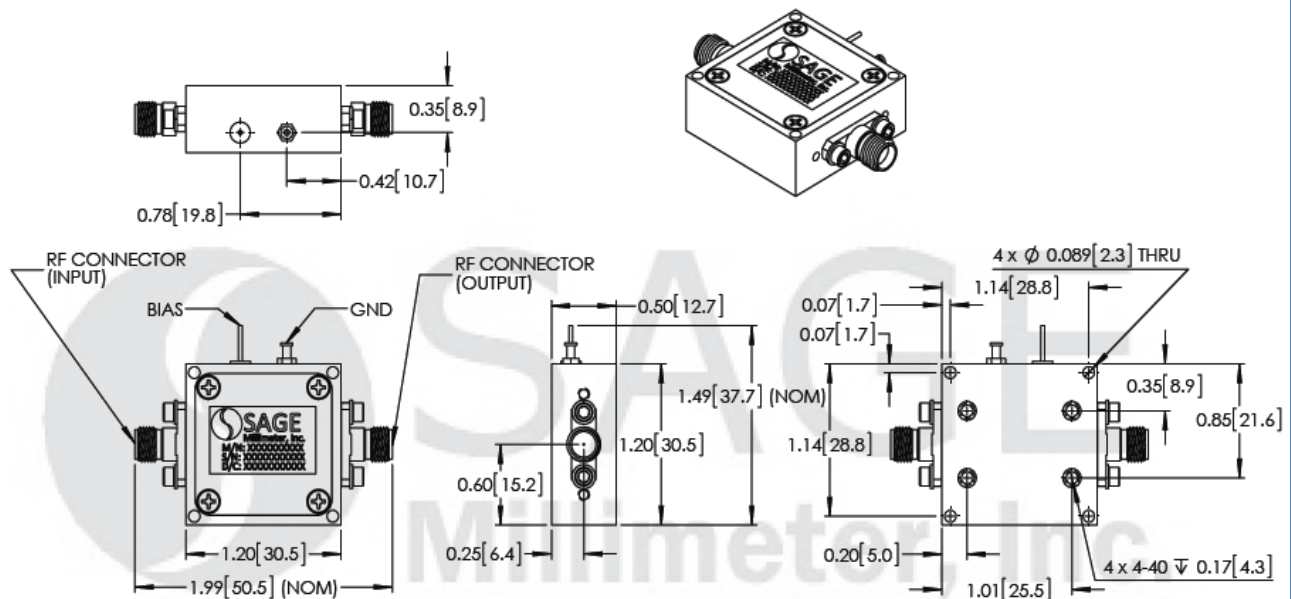
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Noise Figure vs. Frequency

Bias: +8 V_{DC} / 126 mA



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

