

Low Noise Amplifier, 26.5 GHz to 40 GHz, 40 dB Gain, 2.5 dB NF

Description:

Model SBL-2734034025-KFKF-E3 is a low noise amplifier with a typical small signal gain of 40 dB and a nominal noise figure of 2.5 dB across the frequency range of 26.5 GHz to 40 GHz. The DC power requirement for the amplifier is +12 V_{DC}/200 mA. The input and output port configurations are both K (F) connectors. Other port configurations, such as 2.4 mm (F) connectors are available under model number **SBL-2734034025-2F2F-E3**.



Features:

- Broadband Operation
- State-of-the-Art Noise Figure
- Good Gain Flatness

Applications:

- 5G Systems
- Radar Systems
- Communication Systems
- Low Noise Receivers

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	26.5 GHz		40 GHz
Gain		40 dB	
Noise Figure		2.5 dB	
P _{1dB}		+10 dBm	
P _{in}			-10 dBm
Input Return Loss		10 dB	
Output Return Loss		10 dB	
DC Voltage		+12 V _{DC}	+15 V _{DC}
DC Supply Current		200 mA	
Specification Temperature		+25 °C	
Operating Temperature	0 °C		+50 °C

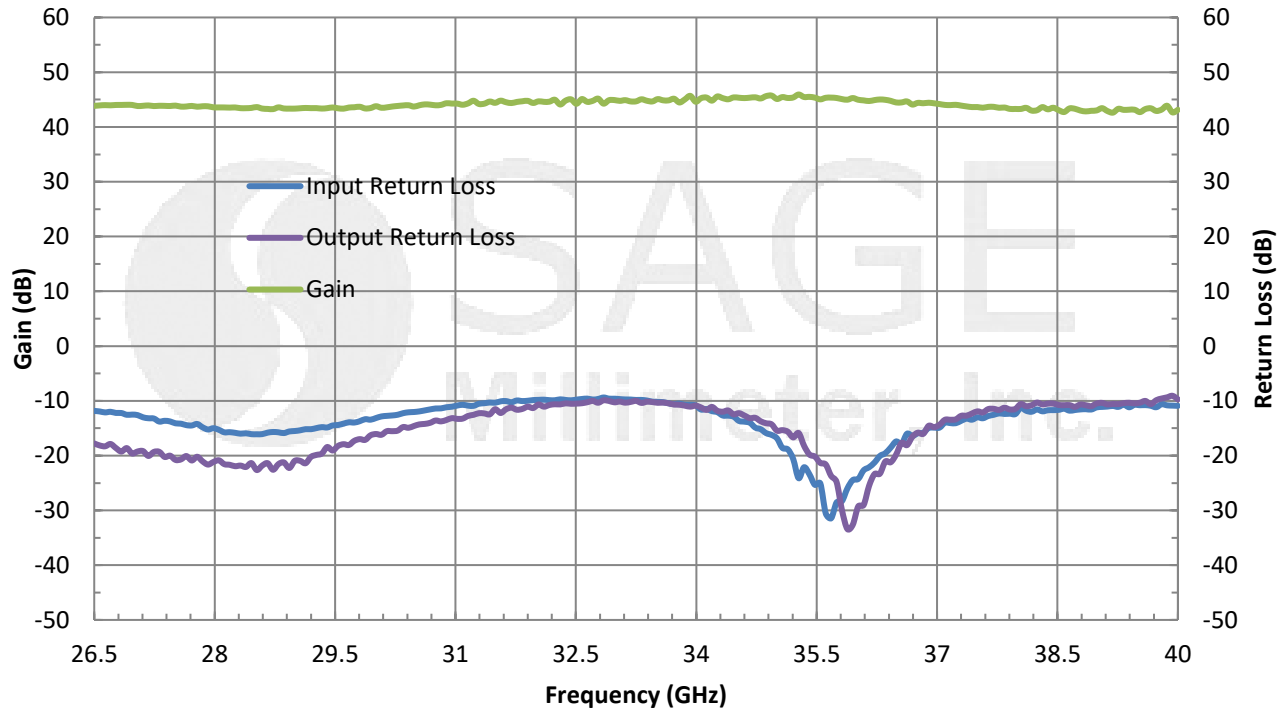
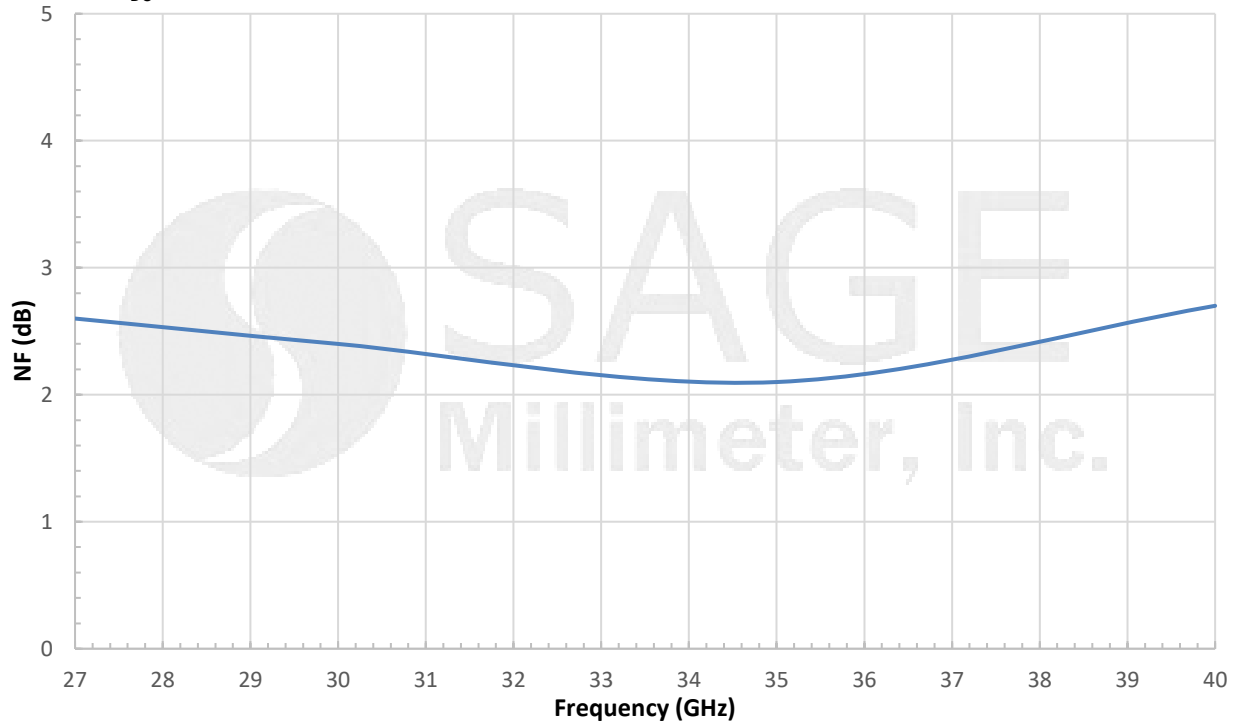
Mechanical Specifications:

Item	Specification
Input Port	K (F)
Output Port	K (F)
Bias	Solder Pin
Case Material	Aluminum
Finish	Gold Plated
Weight	1.76 Oz
Size	1.18" (W) X 1.18" (L) X 0.32" (H)
Outline	BL-ZC-8



Low Noise Amplifier, 26.5 GHz to 40 GHz, 40 dB Gain, 2.5 dB NF**Typical Gain and Return Loss vs Frequency**

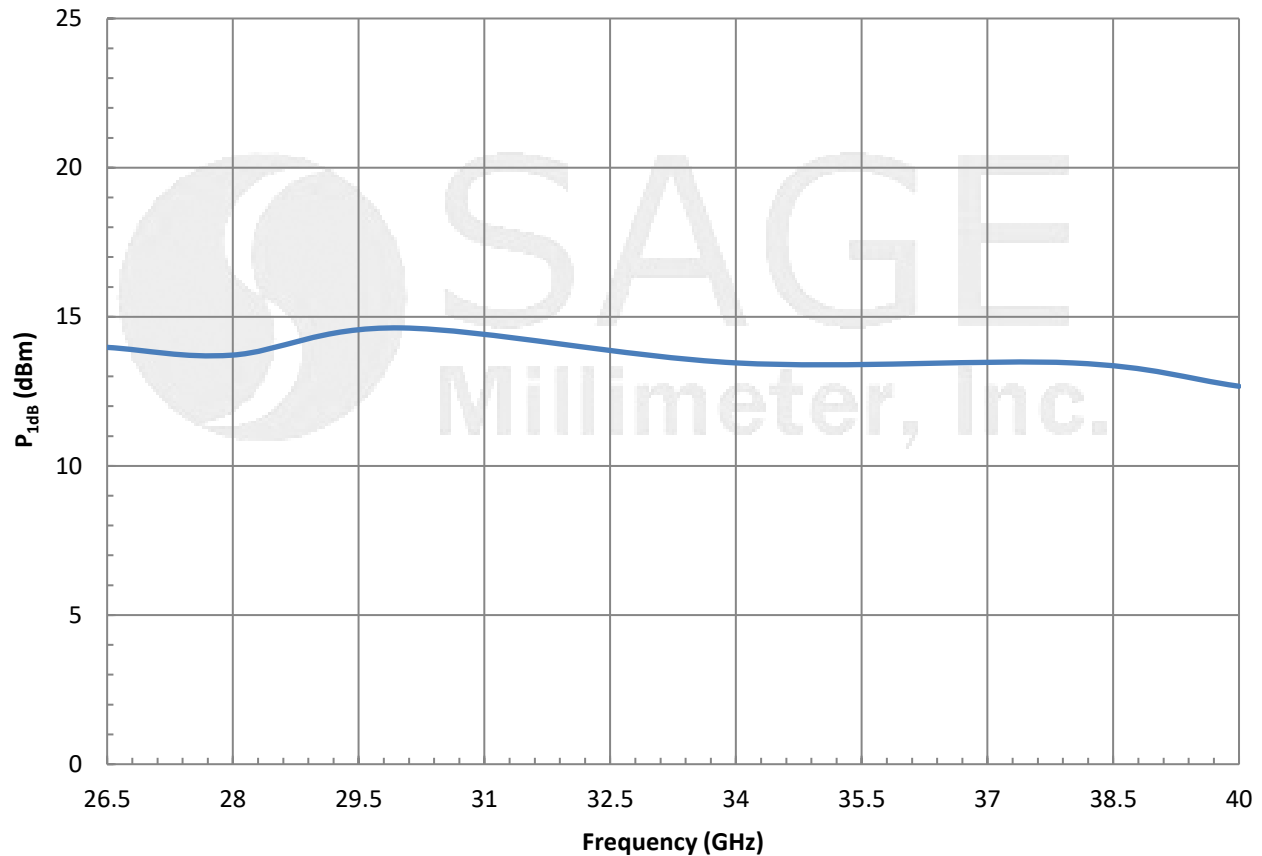
Bias: +12V/200 mA

**Typical Noise Figure vs. Frequency**Bias: +12 V_{DC}/200 mA

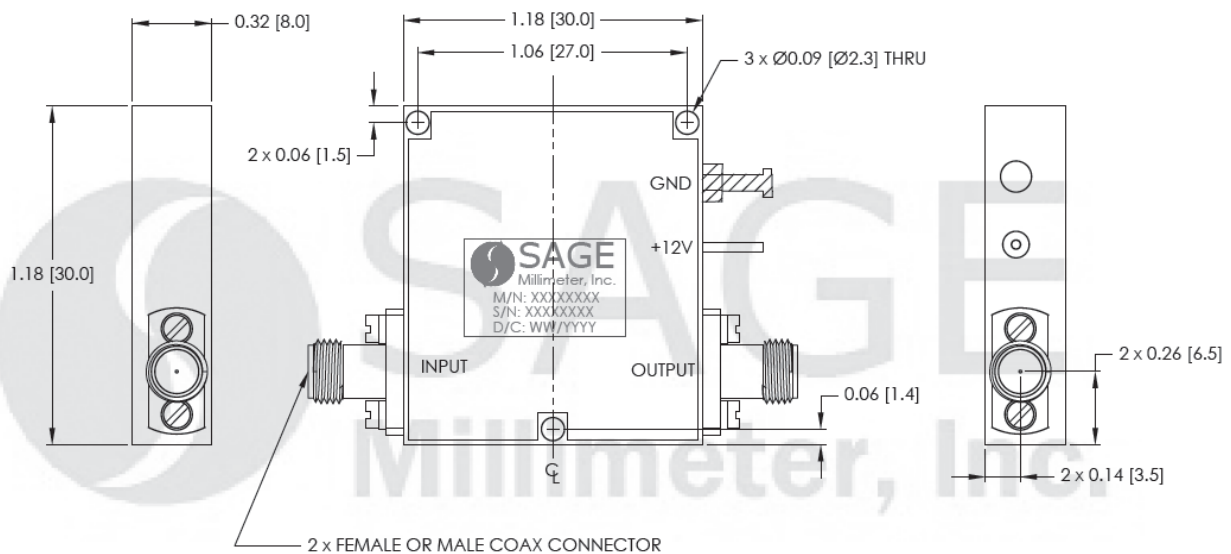
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Typical P_{1dB} vs. Frequency

Bias: +12V/250 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, slightly.
- 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 (0.92 ± 0.05 Nm), should be applied. **SAGE Millimeter torque wrench, model SCH-08008-S1, is highly recommended.**

