

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

Description:

Model SBL-2734034025-2F2F-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 to 40 GHz. The DC power requirement for the amplifier is +12 V_{DC}/200 mA. Both input and output port are 2.4 mm Female connectors. Other port configurations are also available under different model numbers.



Features:

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

Applications:

- Radar Systems
- Communication Systems
- Low Noise Receivers

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	26.5 GHz		40 GHz
Gain		40 dB	
P _{1dB}		+10 dBm	
Noise Figure		2.5 dB	
P _{in}			-30 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:

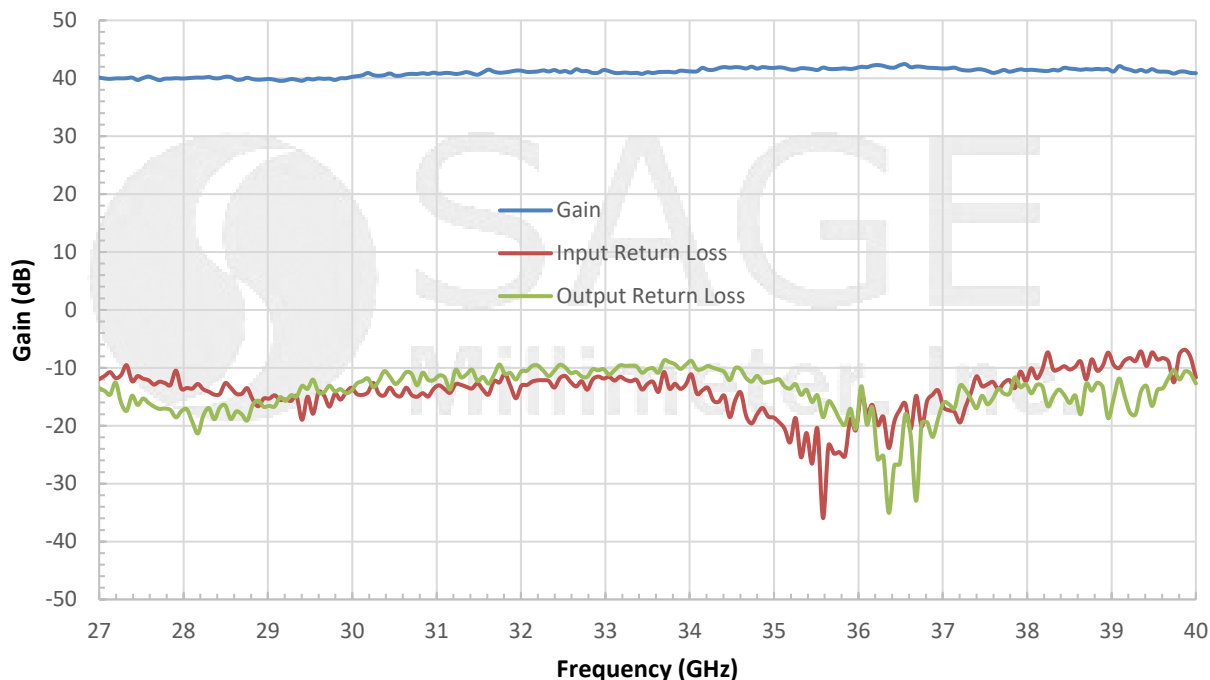
Item	Specification
Input Port	2.4 mm (F)
Output Port	2.4 mm (F)
Bias Port	Solder Pin
Case Material	Aluminum
Finish	Gold Plated
Weight	1.76 Oz
Size	1.18" (L) X 1.18" (W) X 0.32" (H)
Outline	BL-ZC-8



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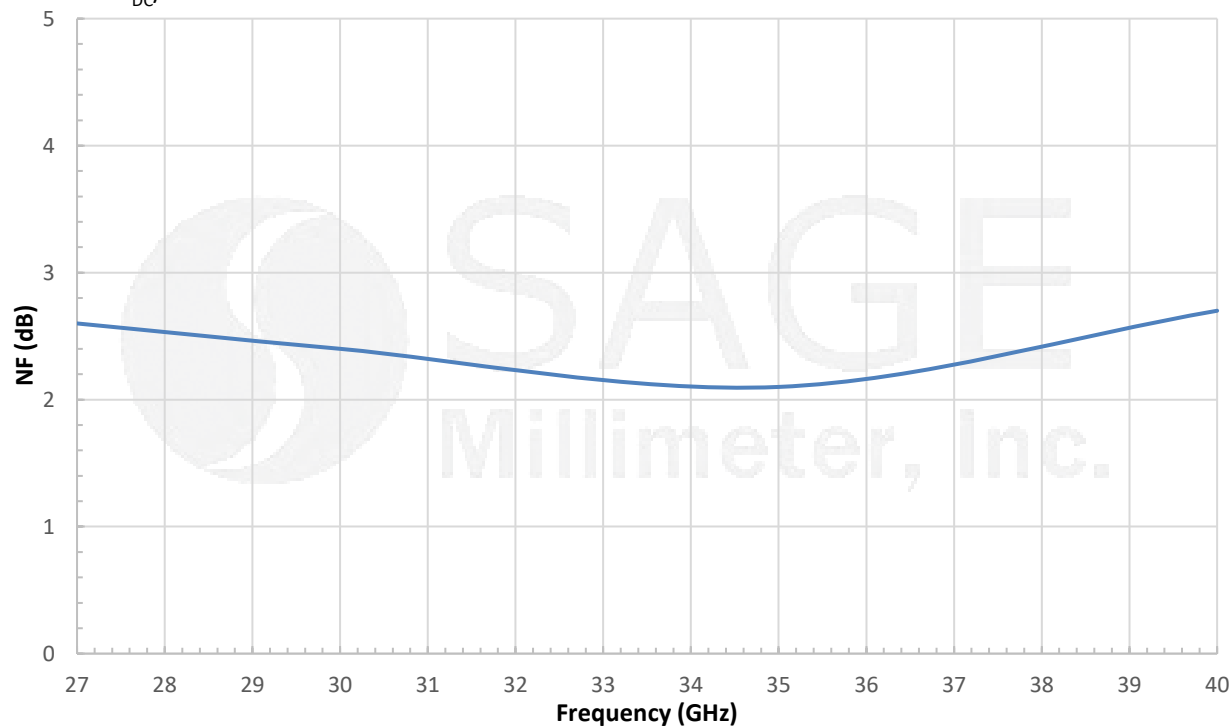
Typical Gain and Return Loss vs. Frequency

Bias: +12 V_{DC}/245 mA



Typical Noise Figure vs. Frequency

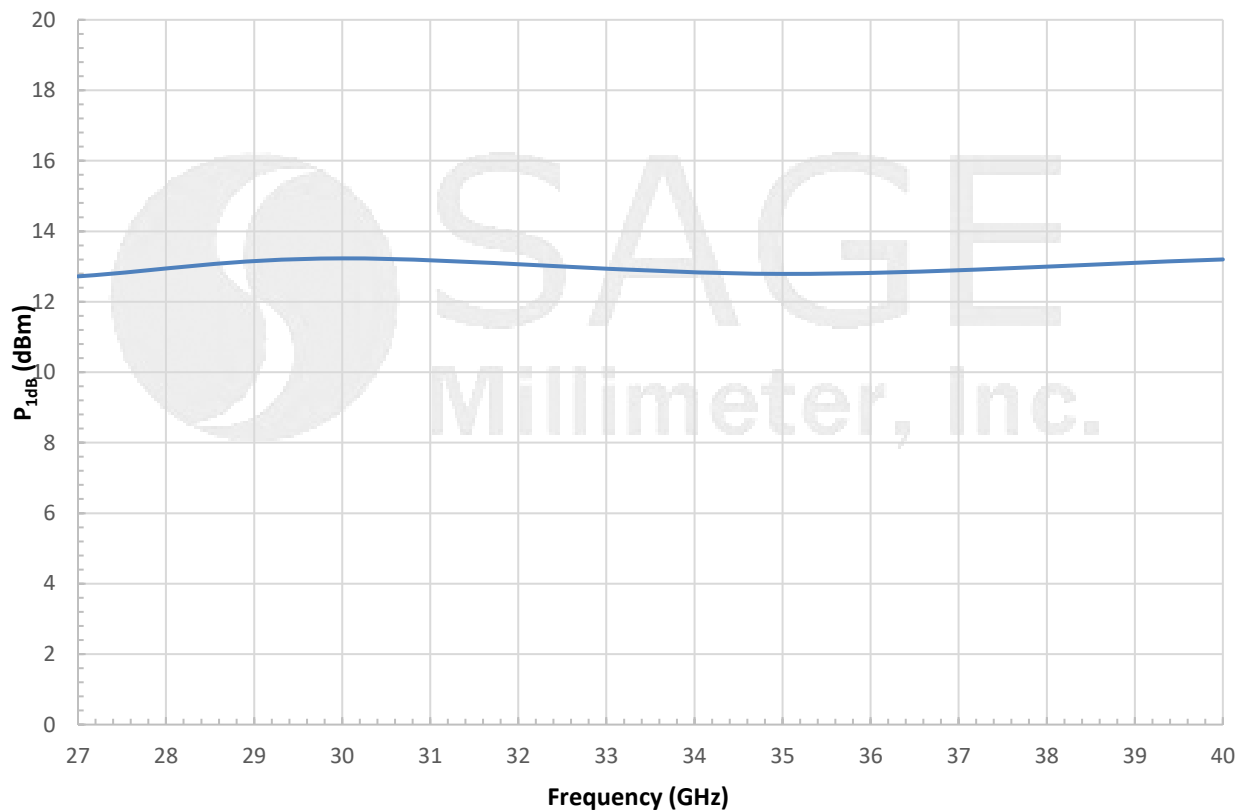
Bias: +12 V_{DC}/200 mA



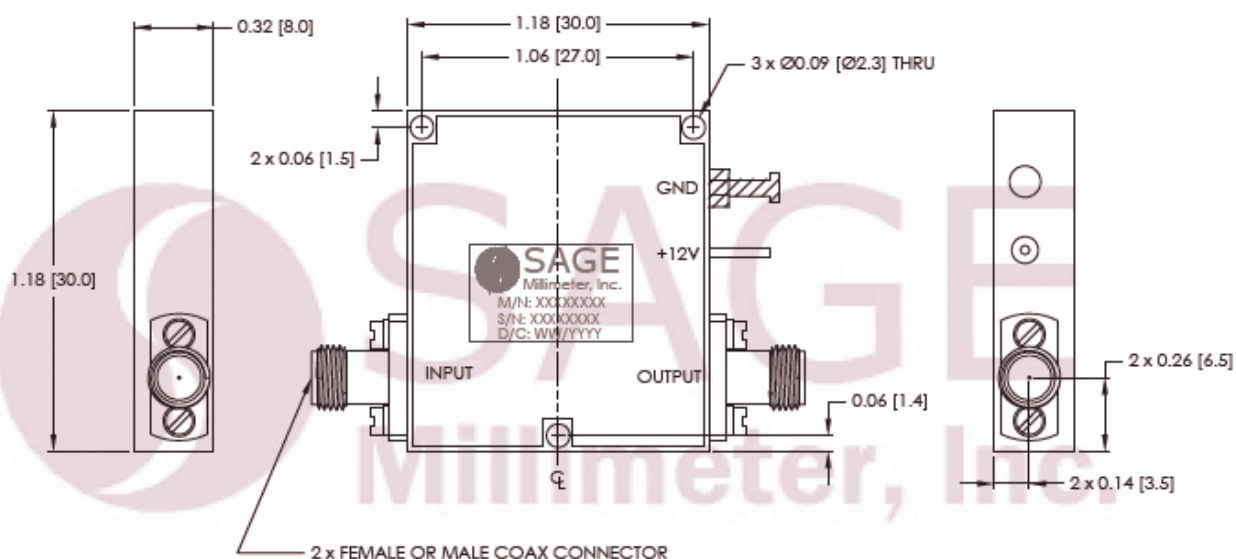
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Typical P_{1dB} vs. Frequency

Bias: +12 V_{DC}/245 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.
- Other mechanical configurations are available under different model numbers.
- 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.
- Any foreign objects in the waveguide will cause performance degradation and possible device damage.

