SBL-6039034050-1212-E1-WPC

E-Band Low Noise Amplifier

SBL-6039034050-1212-E1-WPC is a low noise amplifier with a typical small signal gain of 40 dB and a nominal noise figure of 5 dB across the frequency range of 60 to 90 GHz. The DC power requirement for the amplifier is +8 VDC/150 mA. The mechanical configuration offers an in line structure with WR-12 waveguides and UG-387/U anti-cocking flanges. Other port configurations, such as with 1 mm connectors or a right angle structure with WR-12 waveguides, are also available under different model numbers.

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency Range	60 GHz		90 GHz
Gain		40 dB	
Noise Figure		5 dB	
P_{1dB}		+10 dBm	
P_{In}			-20 dBm
Input Return Loss		8 dB	
Output Return Loss		8 dB	
DC Voltage	+6 V_{DC}	+8 V_{DC}	+15 V_{DC}
DC Supply Current		150 mA	
Specification Temperature		+25 ˚C	
Operating Temperature	0 ˚C		+50 ˚C

Mechanical Specifications:

Item	Specification
Input Port	WR-12 Waveguide with UG-387/U Anti-Cocking Flange
Output Port	WR-12 Waveguide with UG-387/U Anti-Cocking Flange
Bias	Solder Pin
Case Material	Aluminum
Finishing	Gold Plated
Weight	1.6 Oz
Size	1.10” (W) X 1.50” (L) X 0.75” (H)
Outline	BG-SE-2-A

ECCN

EAR99

FEATURES

- Full Band Coverage
- State-of-the-Art Noise Figure
- High Gain

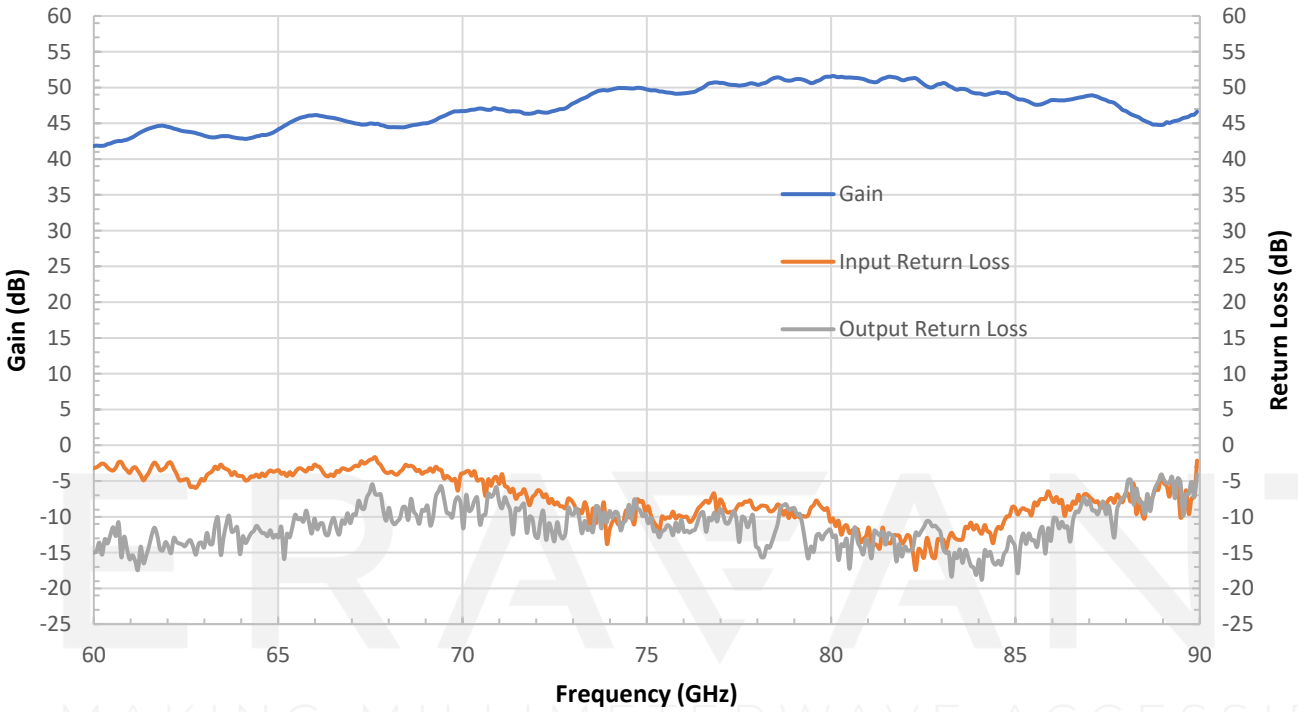
APPLICATIONS

- Radar Systems
- Communication Systems
- Low Noise Receivers

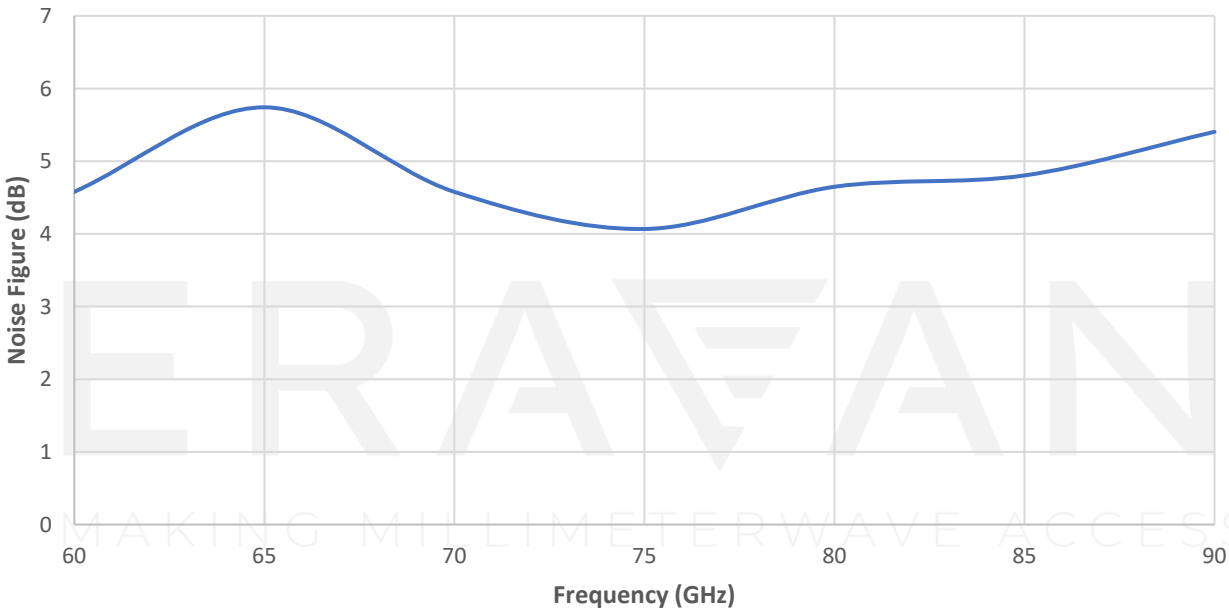
SUPPLEMENTAL DETAILS

Gain and Return Loss vs. Frequency

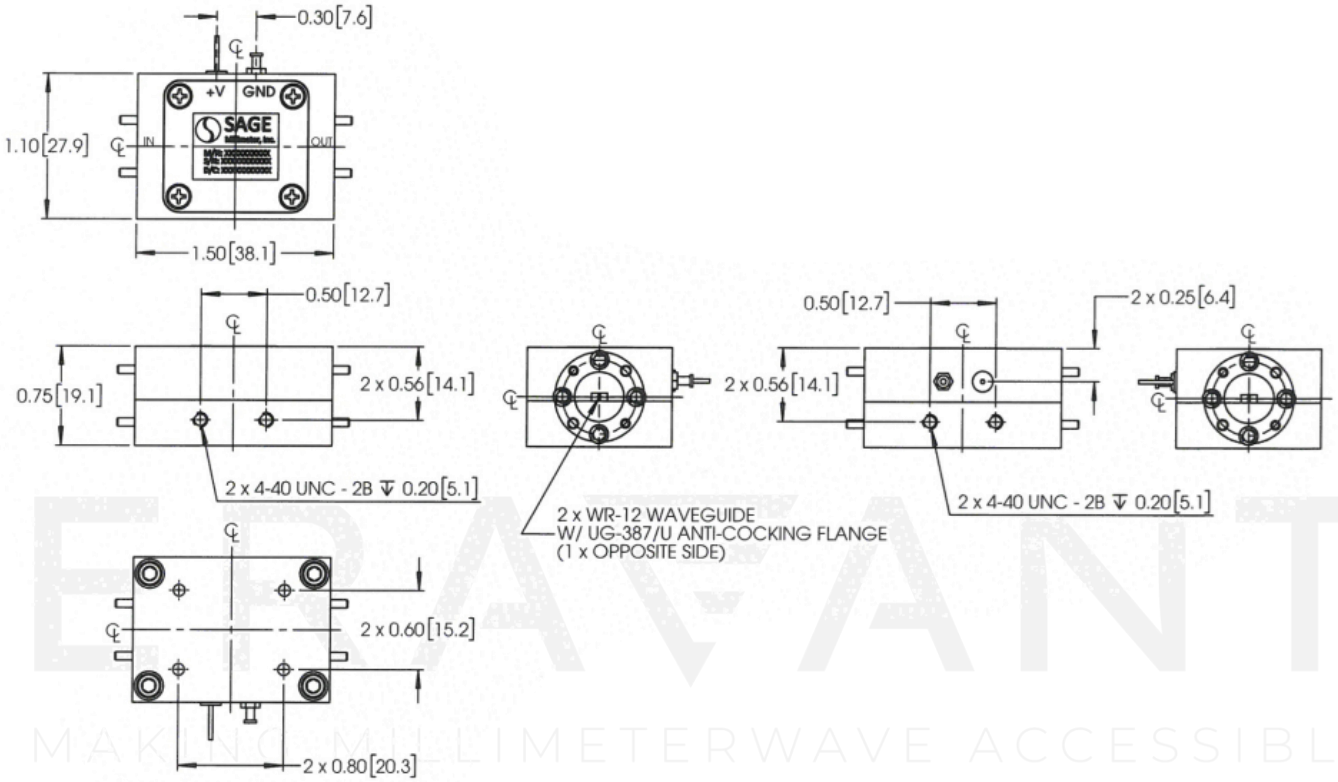
Bias: +8 V_{DC}/205mA



Measured Noise Figure vs Frequency



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.
- 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.
- Any foreign objects in the waveguide will cause performance degradation and may damage the device.