STB-1141741860-0606-L1

Advanced

D-Band Bench Top Amplifier, 18 dB Gain, 6 dB NF

Description:

Model STB-1141741860-0606-L1 is a D Band bench top amplifier with a typical small signal gain of 18 dB and noise figure of 6 dB across the frequency range of 110 to 170 GHz. The power supply required is a single phase AC voltage in the range of 100 to 240 $V_{AC,}$ which can be supplied by a wall outlet. The LED light helps to indicate the working status of the amplifier. The input and output port configurations are both WR-06 waveguide with UG387/U-M flanges.

Features:

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

Applications:

- D-Band Imaging Systems
- Low Noise Amplification
- Gain Blocks

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	110 GHz		170 GHz
Gain		18 dB	
Noise Figure		6.0 dB	
P_{1dB}		-15 dBm	
Damage P_{in}			-25 dBm
Input Return Loss		6 dB	
Output Return Loss		6 dB	
Power Supply (AC Adapter Provided)	100 V_{AC}		240 V_{AC}
Specification Temperature		+25 ˚C	
Case Temperature	0 ˚C		+50 ˚C

Mechanical Specifications:

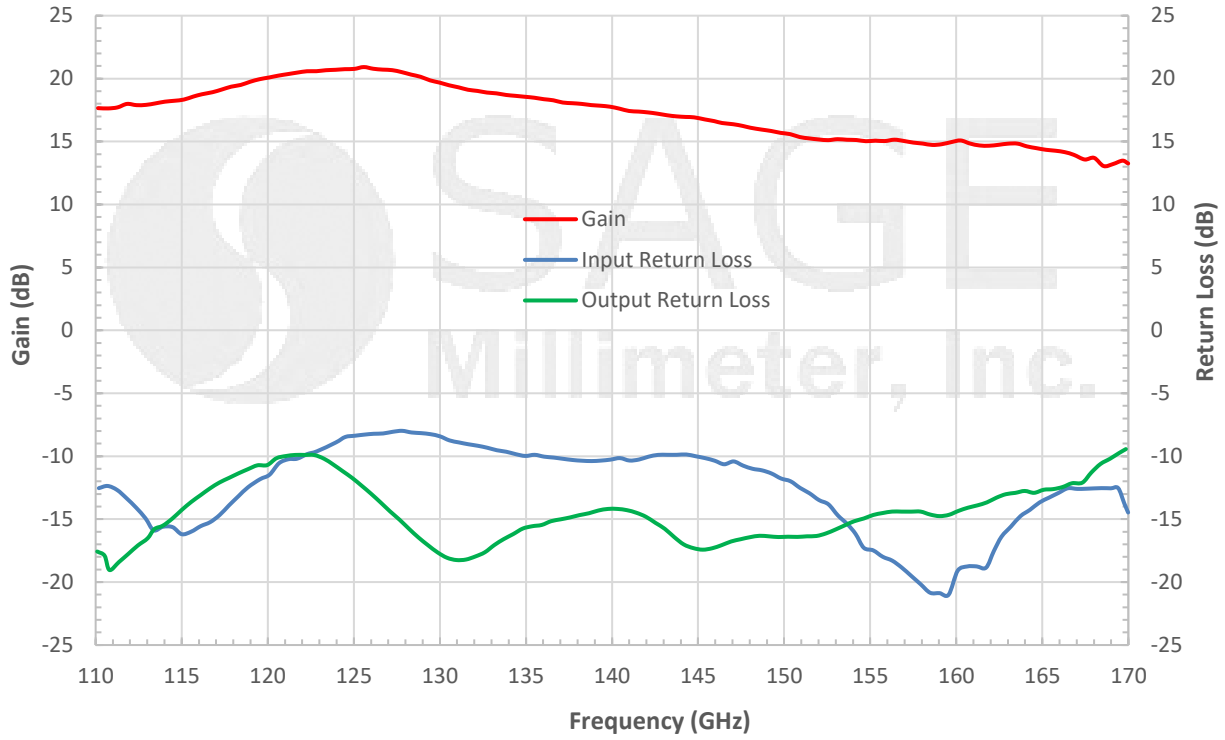
Item	Specification
Input	WR-06 Waveguide with UG-387/U-M Flange
Output	WR-06 Waveguide with UG-387/U-M Flange
DC Bias	2.5 mm DC Jack (AC-to-DC power converter included)
DC Bias Switch	On-Off Rocker Switch with Indicator Light
Enclosure Material	Extruded Aluminum
Finish	Black Anodized
Weight	3 lbs
Size	5.51” (L) x 4.72” (W) x 2.81” (H)
Outline	TB-SD

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

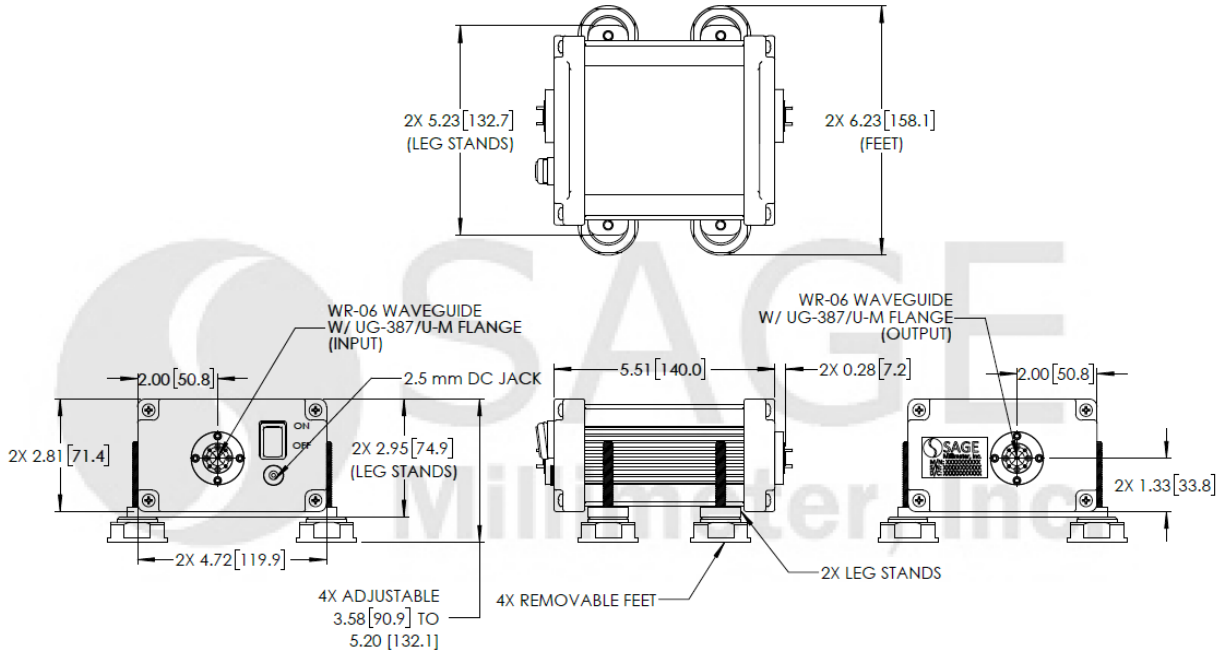
D-Band Bench Top Amplifier, 18 dB Gain, 6 dB NF

Typical Performance vs. Frequency

Bias: +3 V_{DC}/60 mA



Mechanical Outline: (Unless otherwise specified, all dimensions are in inches [millimeters])



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

D-Band Bench Top Amplifier, 18 dB Gain, 6 dB NF

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.
- The case temperature of the device shall never exceed +50˚C. Use proper heatsink or fan if necessary.