STB-7531142515-1010-S1-C

Compact Benchtop Amplifier, 75 to 110 GHz, 25 dB Gain, +20 dBm PSAT

STB-7531142515-1010-S1-C is a compact benchtop amplifier with a typical small signal gain of 25 dB and a nominal P_{1dB} of +15 dBm and +20 dBm P_{SAT} across the frequency range of 75 to 110 GHz, respectively. The input required to saturate the amplifier is -5 dBm typically. An AC to DC power adapter is provided so that 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 or lab benches. The fan helps to keep the amplifier working around room temperature. The input and output ports are WR-10 waveguides with standard UG-387/U-M anti-cocking flanges.

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	75 GHz		110 GHz
Gain		25 dB	
P_{1dB}		+15 dBm	
P_{sat}		+20 dBm	
P_{in}			+15 dBm
Port Return Loss		10 dB	
Power Supply (AC Adapter Provided)	100 V_{AC}		240 V_{AC}
Specification Temperature		+25 °C	
Operating Temperature	0 °C		+50 °C

Mechanical Specifications:

Item	Specification
RF Ports	WR-10 Waveguide with UG-387/U-M Anti-Cocking Flange
DC Bias	2.5 mm DC Jack (AC-to-DC power converter included)
Enclosure Material	Extruded Aluminum
Finish	Various
Weight	1.5 lbs
Size	2.36” (W) x 2.36” (L) x 4.10” (H)
Outline	TB-SW-A-C

ECCN

EAR99

FEATURES

- Full Waveguide Band Coverage
- High Gain
- High Output Power

APPLICATIONS

- Communication Systems
- Bench Top Power Amplification
- Test Equipment

SUPPLEMENTAL DETAILS

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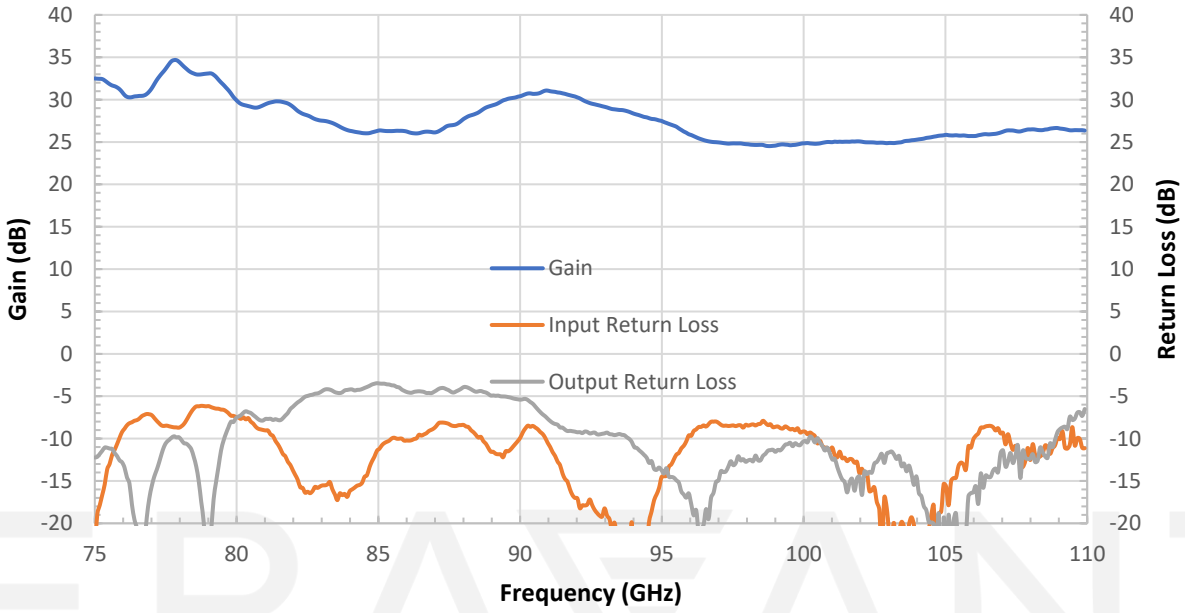
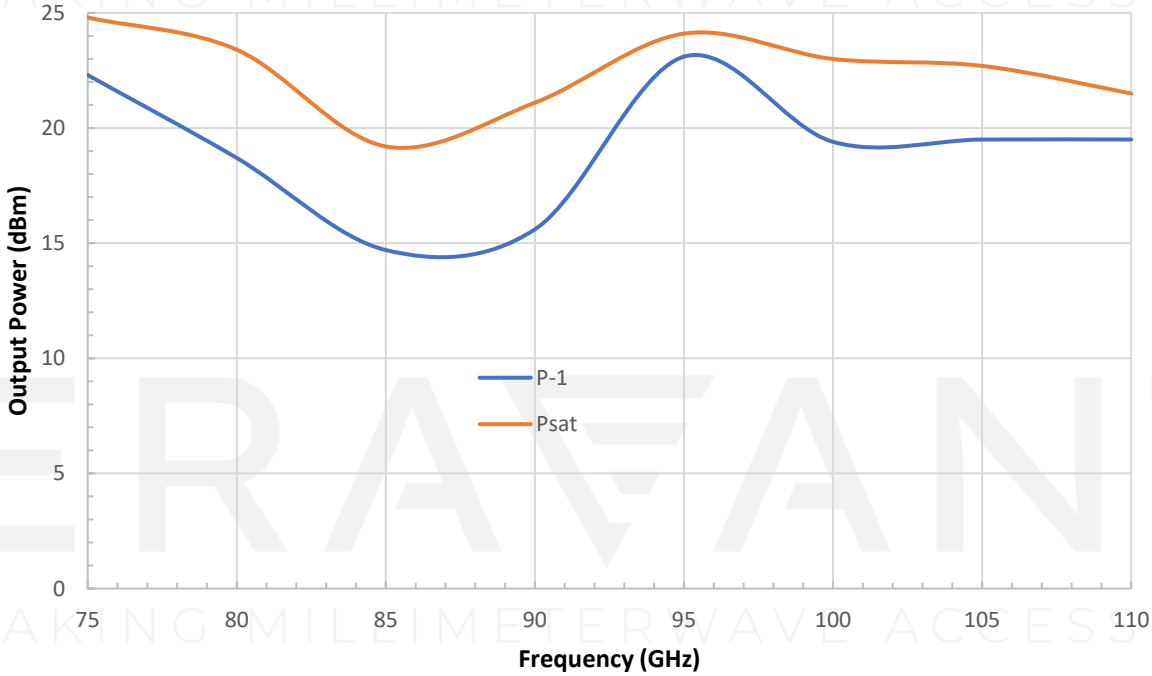
Gain and Return Loss vs. Frequency



Output Power vs. Frequency



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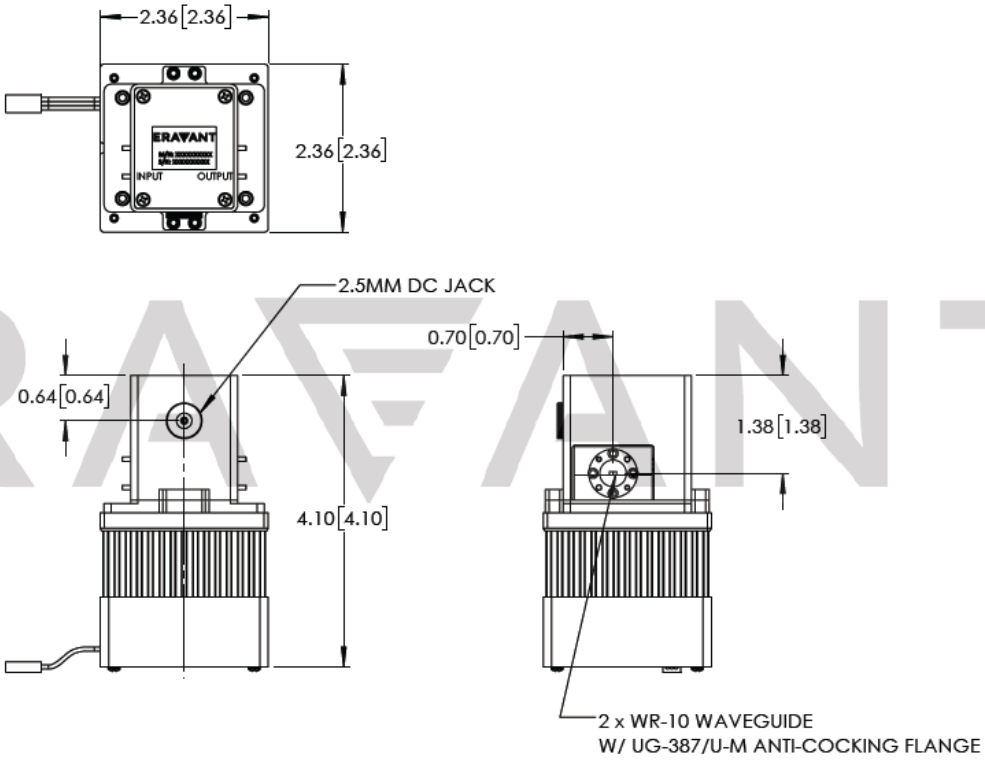
Mechanical Outline: (Unless otherwise specified, all dimensions are in inches [millimeters])



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.
- AC-to-DC power adapter with cord is included.
- Other mechanical configurations are available under different model numbers.
- Eravant, 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.
- The case temperature of the device shall never exceed +50 ˚C. Use proper heatsink or fan if necessary.

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