



## Compact Benchtop Amplifier, 26.5 to 40 GHz, 35 dB Gain, +27 dBm

### Description:

**Model STB-2734033526-2828-S1-C** is a compact benchtop amplifier with a typical small signal gain of 35 dB and a nominal  $P_{1dB}$  of +26 dBm and +27 dBm  $P_{SAT}$  across the frequency range of 26.5 to 40 GHz, respectively. The input required to saturate the amplifier is 0 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<sub>AC</sub>, 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-28 waveguides with standard UG-599/U flanges.



### Features:

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

### Applications:

- Communication Systems
- Bench Top Power Amplification
- Test Equipment

### Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	26.5 GHz		40 GHz
Gain		35 dB	
$P_{1dB}$		+26 dBm	
$P_{sat}$		+27 dBm	
$P_{in}$			+15 dBm
Port Return Loss		10 dB	
Power Supply (AC Adapter Provided)	100 V <sub>AC</sub>		240 V <sub>AC</sub>
Specification Temperature		+25 °C	
Operating Temperature	0 °C		+50 °C

### Mechanical Specifications:

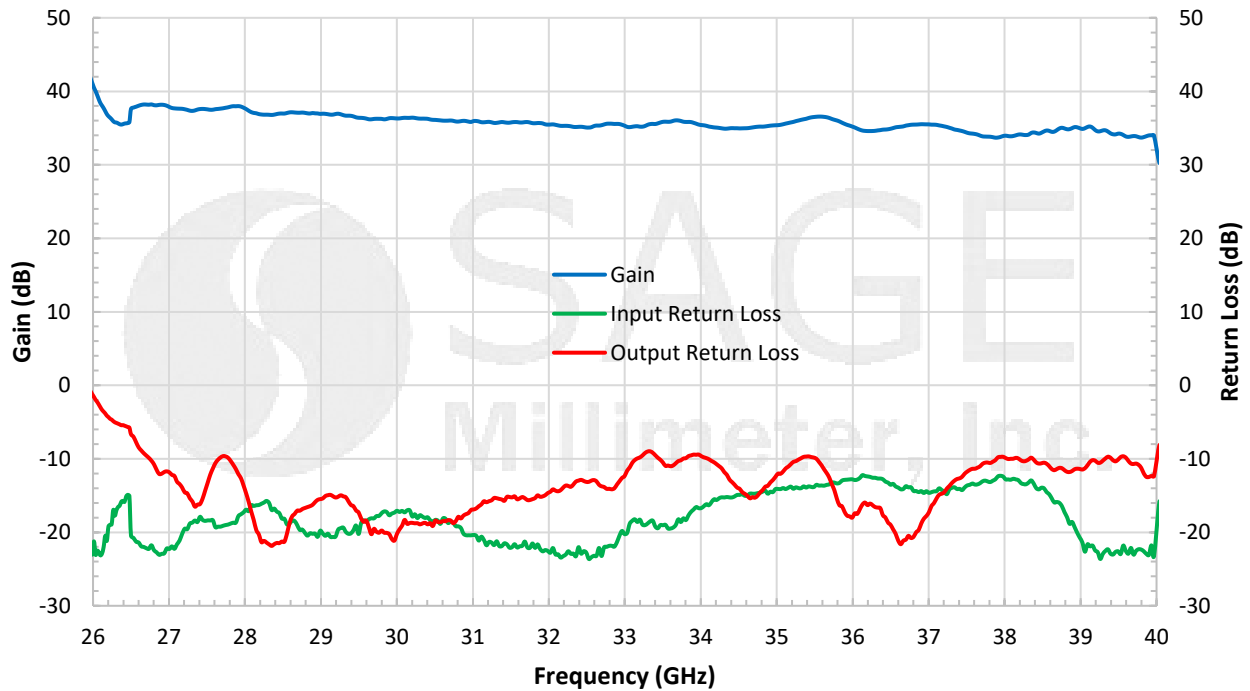
Item	Specification
RF Ports	WR-28 Waveguide with UG-599/U Flange
DC Bias	2.5 mm DC Jack (AC-to-DC power converter included)
Enclosure Material	Extruded Aluminum
Finish	Various
Weight	1.5 lbs
Size	2.36" (W) x 2.42" (L) x 3.92" (H)
Outline	TB-SA-C



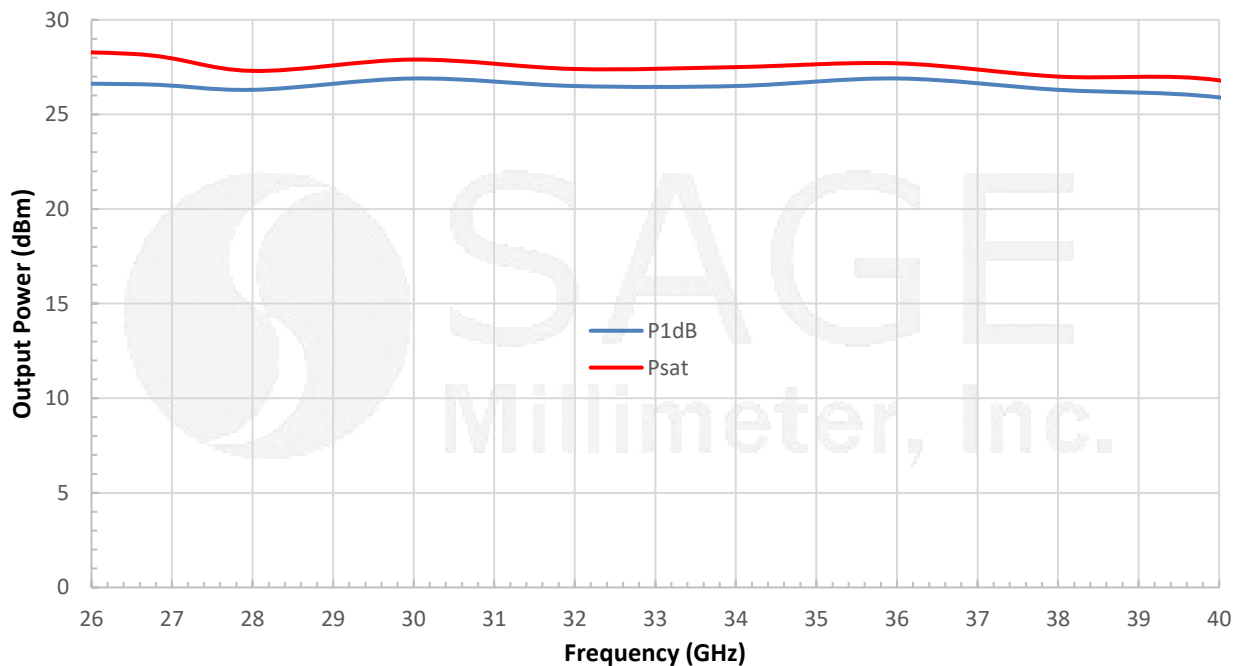


## Compact Benchtop Amplifier, 26.5 to 40 GHz, 35 dB Gain, +27 dBm

### Typical Gain and Return Loss vs. Frequency

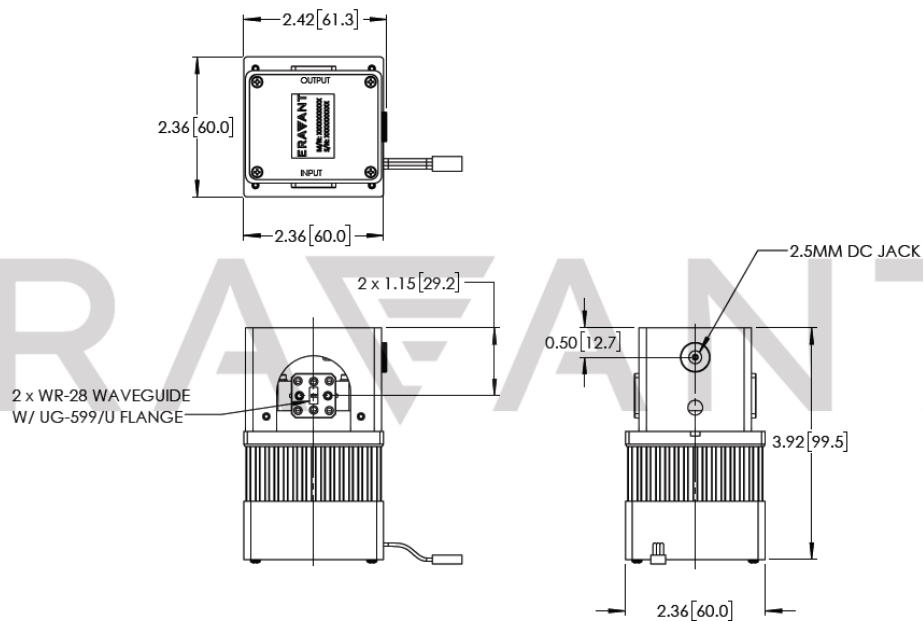


### Typical Output P<sub>1dB</sub> and Psat vs. Frequency



## Compact Benchtop Amplifier, 26.5 to 40 GHz, 35 dB Gain, +27 dBm

**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.

