



Compact Benchtop Amplifier, 0.5 to 24 GHz, 26 dB Gain, 5 dB NF

Description:

Model STB-0522432617-KFKF-S1-C is a compact benchtop amplifier with a typical small signal gain of 26 dB and a nominal P_{1dB} of +17 dBm, +18 dBm P_{SAT} and a noise figure of 5 dB across the frequency range of 0.5 to 24 GHz. The input required to saturate the amplifier is -14 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 female 2.92 mm (K) connectors. Other port configurations are available under different model numbers.



Features:

- High Output Power
- Extreme Gain Flatness
- Broadband Coverage

Applications:

- Bench Top Power Amplification
- Communication Systems
- Test Equipment

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	0.5 GHz		24.0 GHz
Gain		26 dB	
P_{1dB}		+17 dBm	
P_{sat}		+18 dBm	
Noise Figure		5 dB	
P_{in}			0 dBm
Input/Output 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:

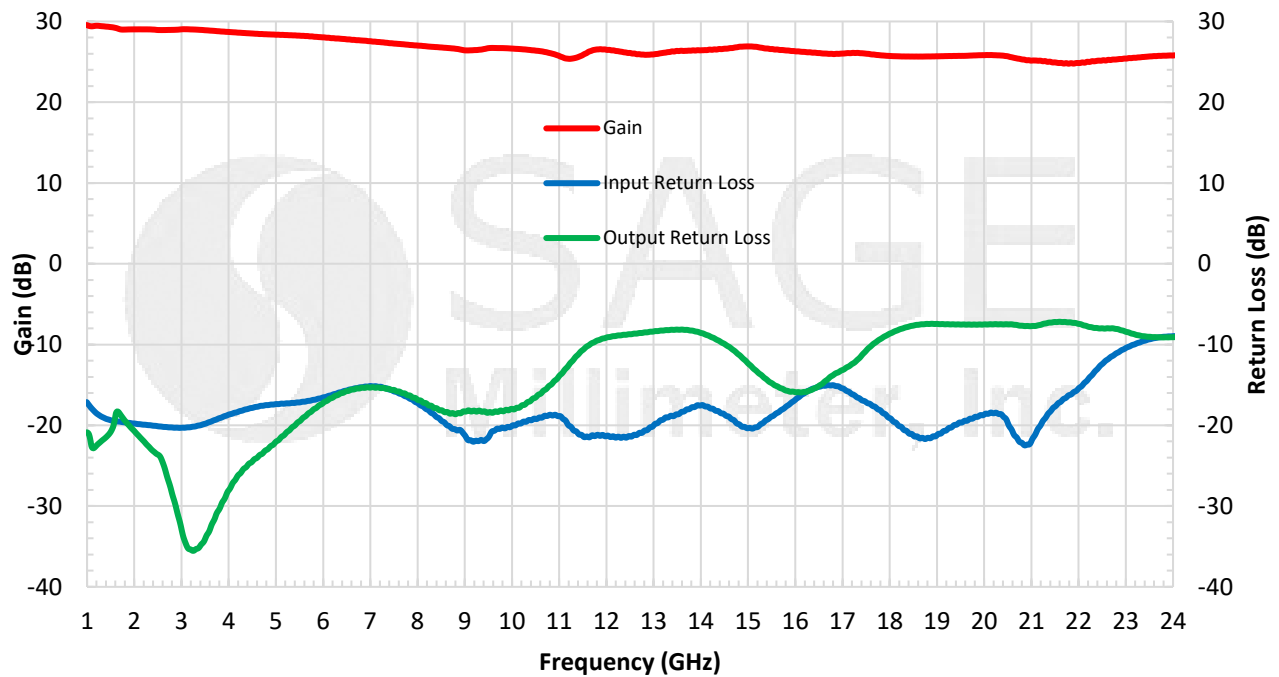
Item	Specification
RF Ports	2.92mm K(F)
DC Bias	2.5 mm DC Jack (AC-to-DC power converter included)
Enclosure Material	Extruded Aluminum
Finish	Various
Weight	1.5 lbs
Size	2.36" (W) x 2.36" (L) x 4.10" (H)
Outline	TB-ZC-C



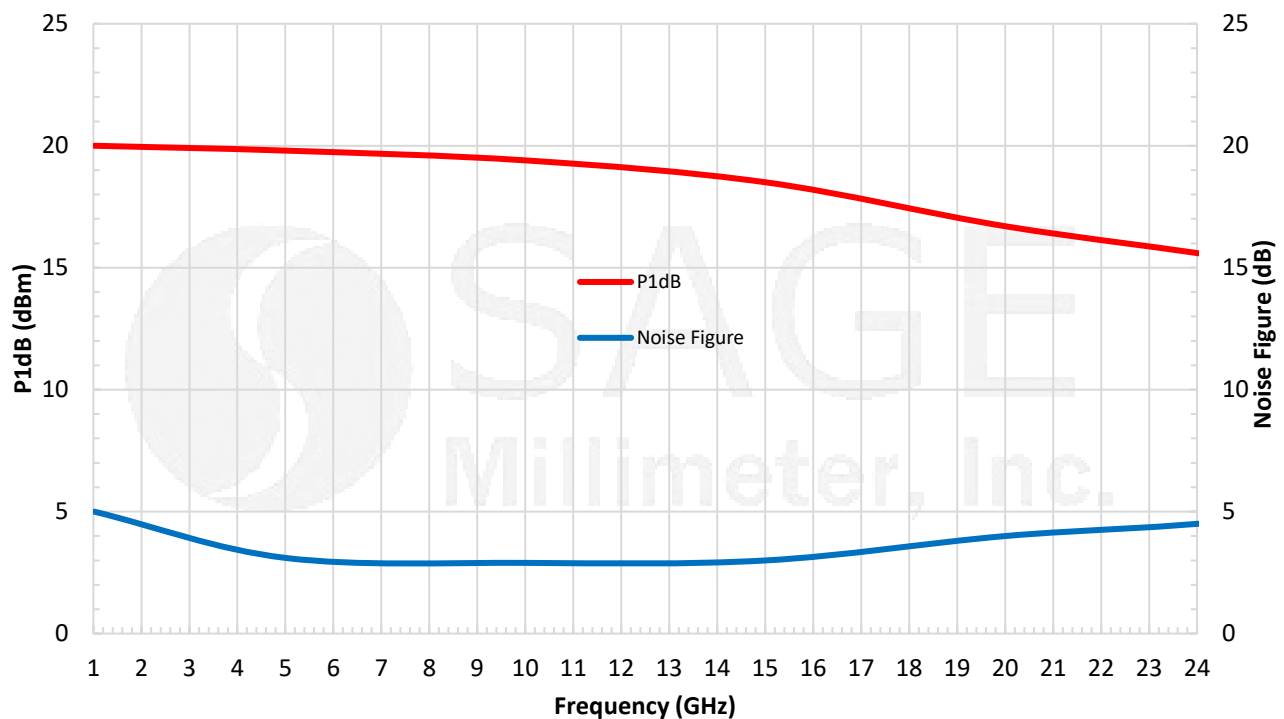


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Typical Gain and Return Loss vs. Frequency



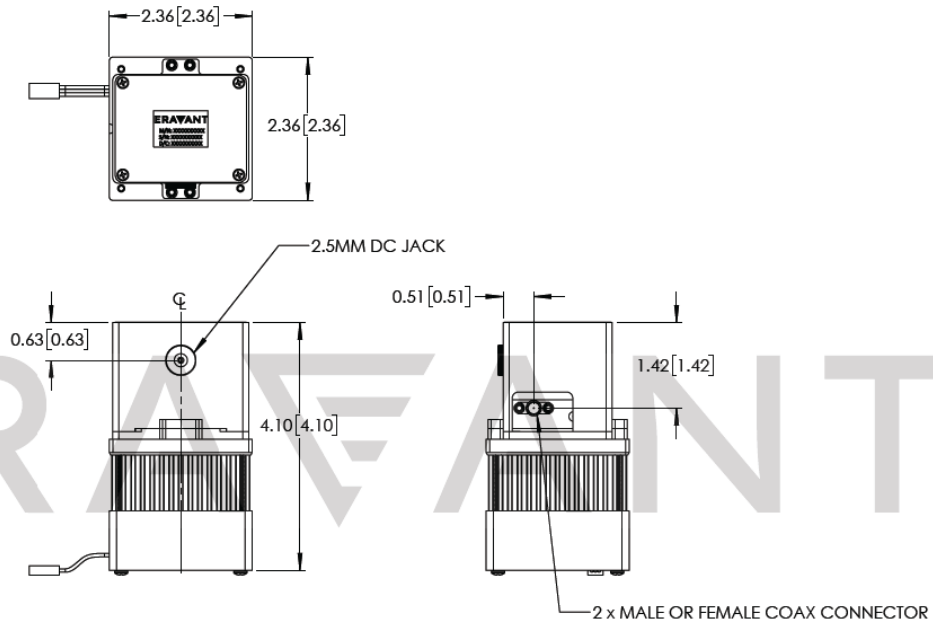
Typical P_{1dB} and Noise Figure vs. Frequency





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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.

