STB-0115034018-2F2F-S1

Broadband Amplifier, 10 MHz to 50 GHz, 40 dB Gain, +18 dBm P_{1dB}

STB-0115034018-2F2F-S1 is a broadband benchtop driver amplifier with a typical small signal gain of 40 dB and a nominal P_{1dB} of +18 dBm across the frequency range of 10 MHz to 50 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 female 2.4 mm connectors.

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency Range	0.01 GHz		50 GHz
Gain		40 dB	
P_{1dB}		+18 dBm	
P_{sat}		+19 dBm	
Noise Figure		6.0 dB	
RF Input Damage Level			-15 dBm
Input Return Loss		8 dB	
Output Return Loss		8 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
Input	2.4 mm (F)
Output	2.4 mm (F)
DC Bias	2.5 mm DC Jack (AC-to-DC Power Converter Included)
DC Bias Switch	Off-On Latching Switch with Indicator Light
Enclosure Material	Extruded Aluminum
Finish	Black Anodized
Weight	3 lbs
Size	4.89” (W) x 5.00” (L) x 1.90” (H)
Outline	TB-SC-2

ECCN

EAR99

FEATURES

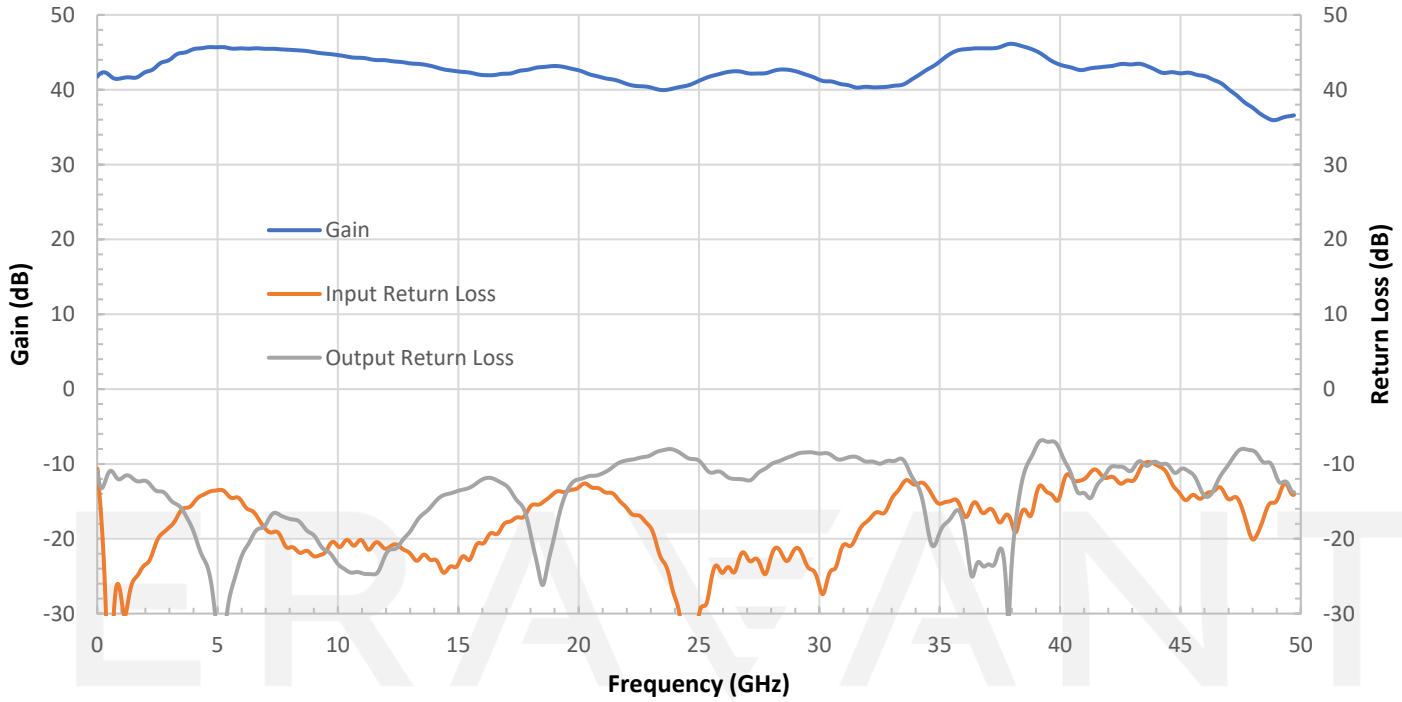
- Ultra-Broadband Coverage
- Good Gain Flatness

APPLICATIONS

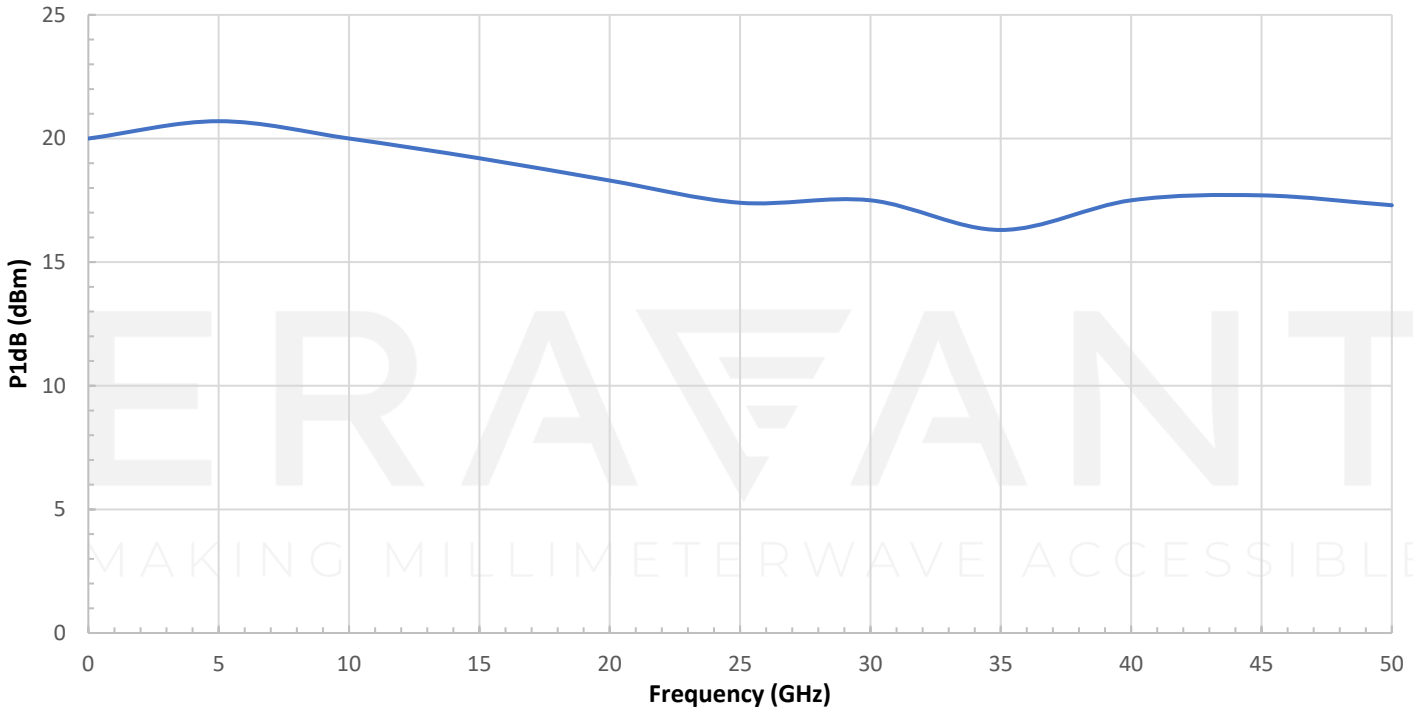
- Bench Top Power Amplification
- Antenna Range
- Power Boosting

SUPPLEMENTAL DETAILS

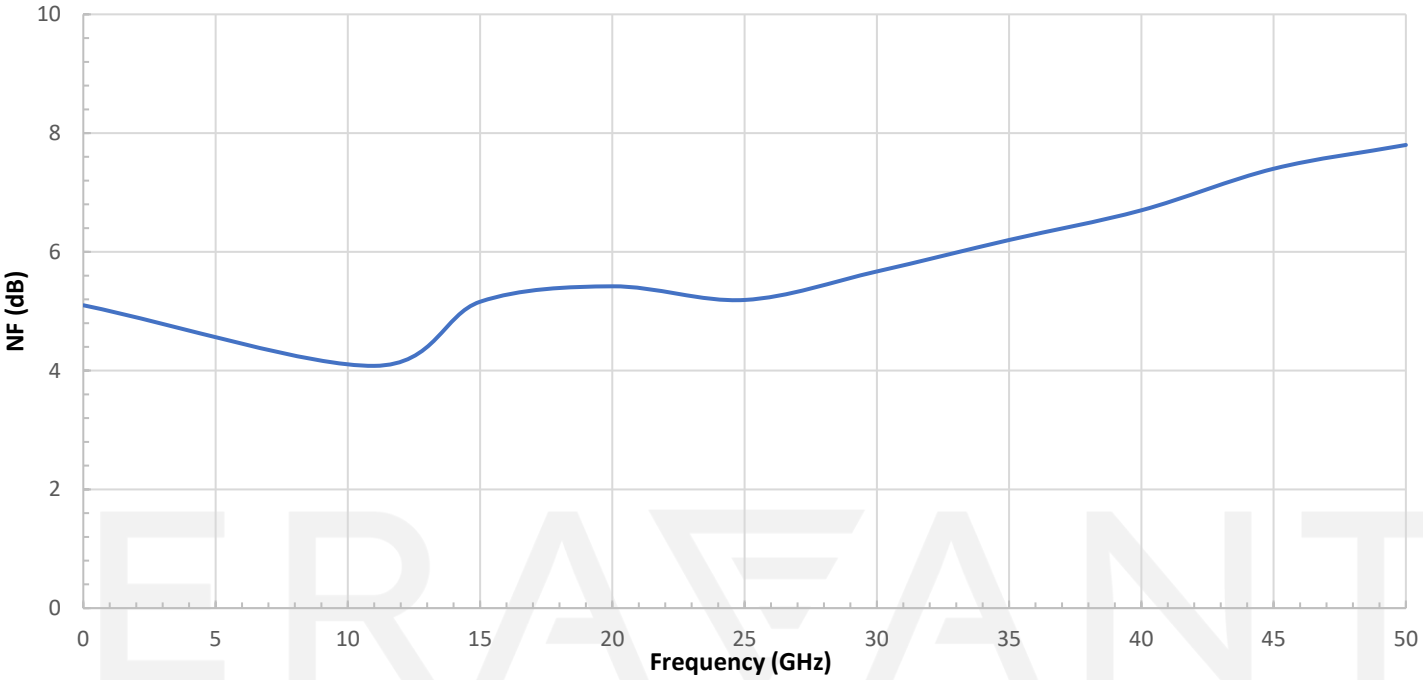
Gain and Return Loss vs. Frequency



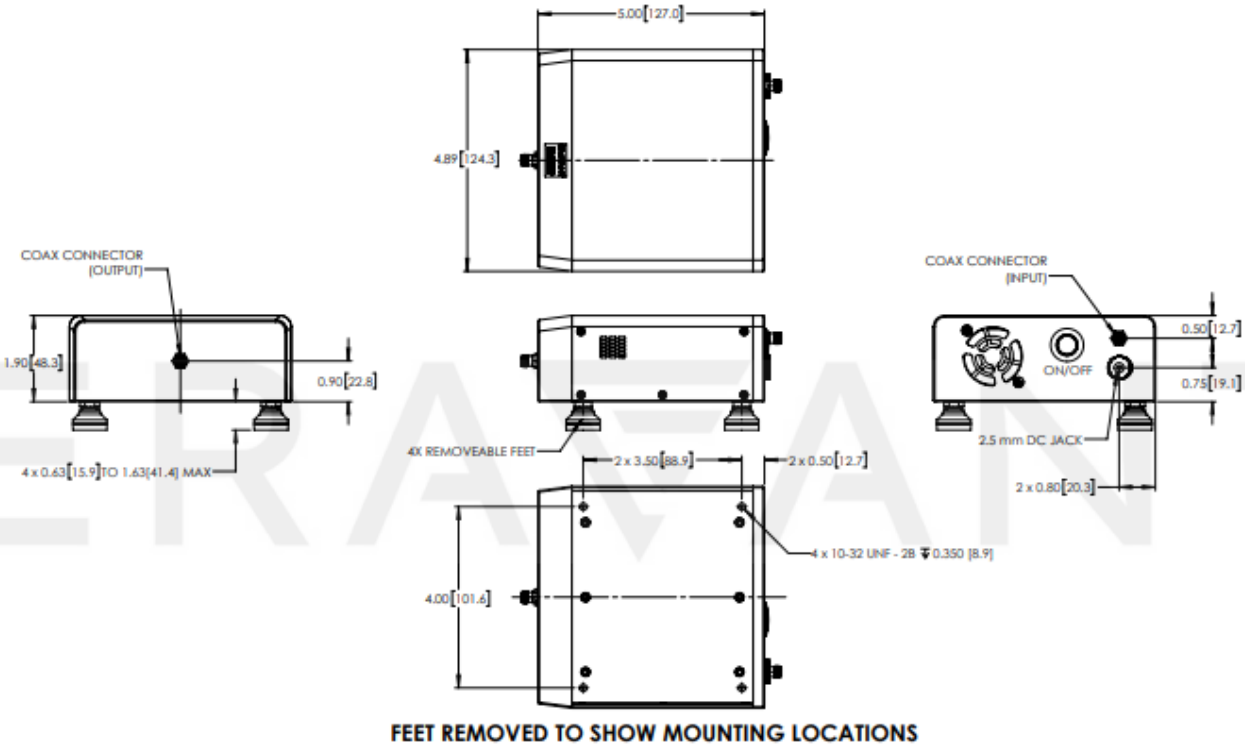
P1dB vs. Frequency



Noise Figure vs. Frequency



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



NOTE:

- On condition that test data is provided it is collected from a sample lot. Actual data may vary slightly from unit to unit. All testing is performed under +25 °C room temperature.
- AC-to-DC power converter with cord is included.
- Other mechanical configurations are available under different model numbers.
- Eravant 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.
- If a waveguide is present, any foreign objects in the waveguide will cause performance degradation and may damage or destroy the unit.
- For 1 mm connectors proper torque should be applied: 4.0 ± 0.15 inch-pounds (0.45 ± 0.02 Nm). Torque wrench model SCH-06004-S1 is highly recommended.
- For 1.35 mm, 1.85 mm, 2.4 mm, 2.92 mm, and SMA connectors proper torque should be applied: 8.0 ± 0.15 inch-pounds (0.90 ± 0.02 Nm). Torque wrench model SCH-08008-S1 is highly recommended.

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