

MODEL NUMBER:  
**PA40G10M**

**Broadband Amplifier,  
10 MHz to 40 GHz, 40 dB Gain,  
+18 dBm P<sub>1dB</sub>**



### DESCRIPTION:

**Model PA40G10M** is a broadband benchtop driver amplifier with a typical small signal gain of 40 dB and a nominal P<sub>1dB</sub> of +18 dBm across the frequency range of 10 MHz to 40 GHz. 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. The LED light helps to indicate the working status of the amplifier. The input and output port configurations are both female 2.92 mm connectors.

### FEATURES:

- Ultra-Broadband Coverage
- Good Gain Flatness

### APPLICATIONS:

- Bench Top Power Amplification
- Antenna Range
- Power Boosting

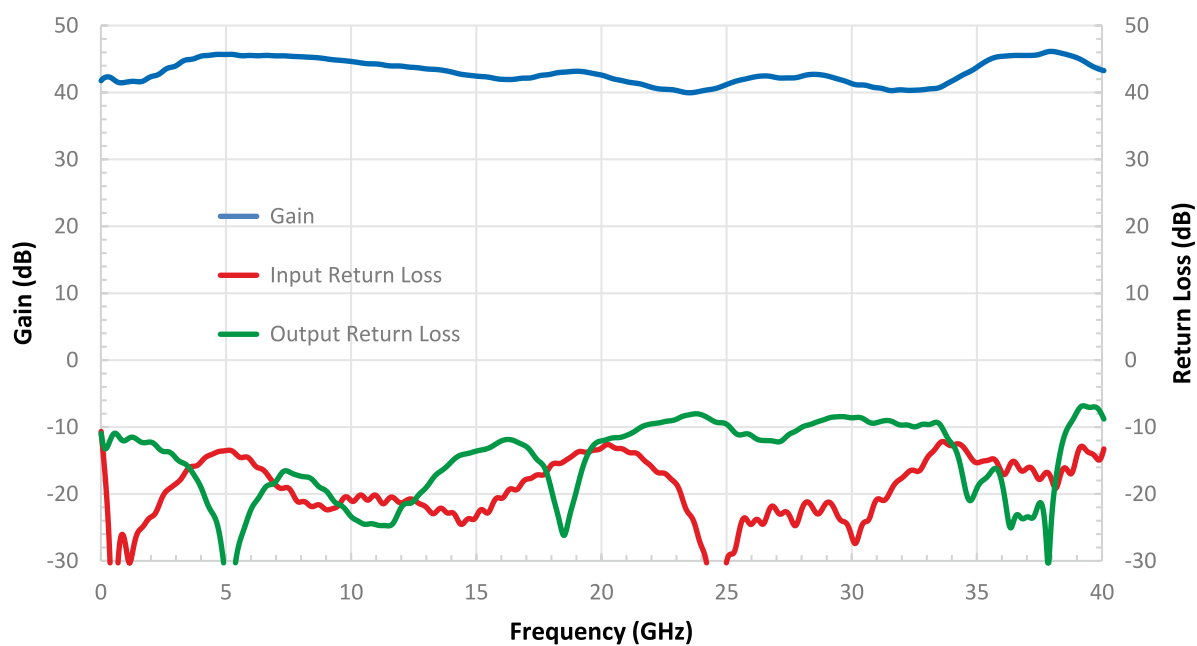
### ELECTRICAL SPECIFICATIONS:

Parameter	Minimum	Typical	Maximum
Frequency	10.0 MHz		40.0 GHz
Gain		40 dB	
P <sub>1dB</sub>		+18 dBm	
P <sub>sat</sub>		+19 dBm	
Noise Figure		6.0 dB	
RF Input Damage Level			0 dBm
Input Return Loss		8 dB	
Output Return Loss		8 dB	
Power Supply (AC Adapter Provided)	100 V <sub>AC</sub>		240 V <sub>AC</sub>
Specification Temperature		+25 °C	
Case Temperature	0 °C		+50 °C

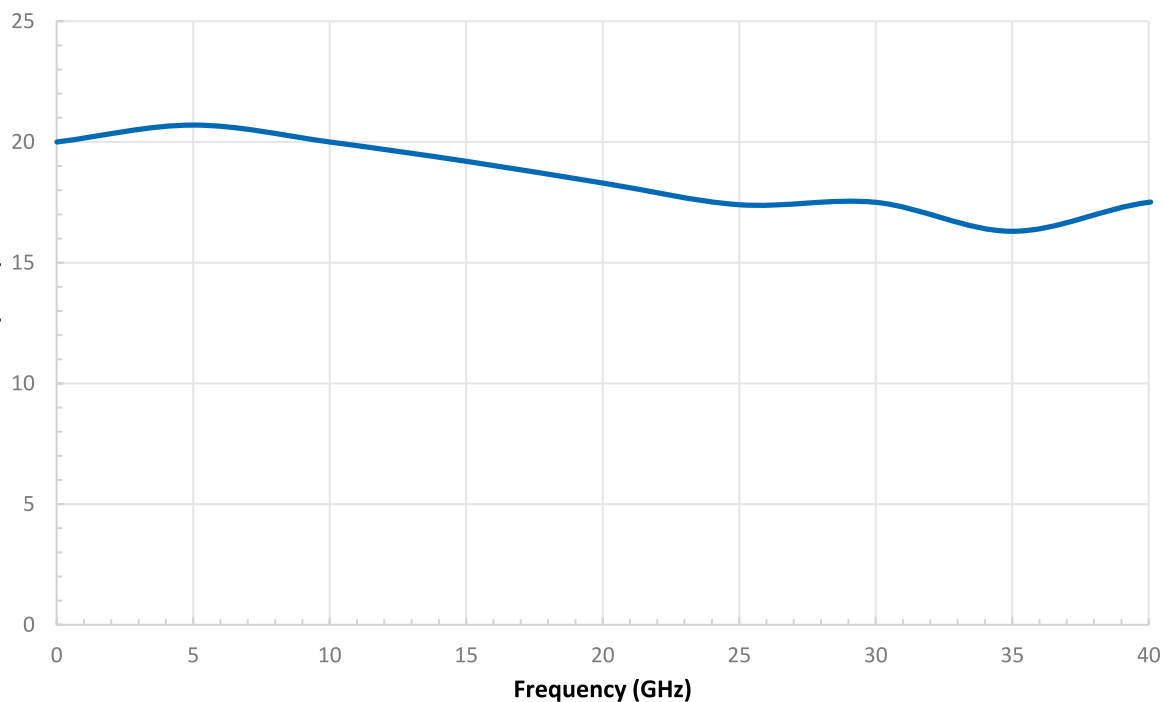
### MECHANICAL SPECIFICATIONS:

Item	Specification
Input	2.92 mm (F)
Output	2.92 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

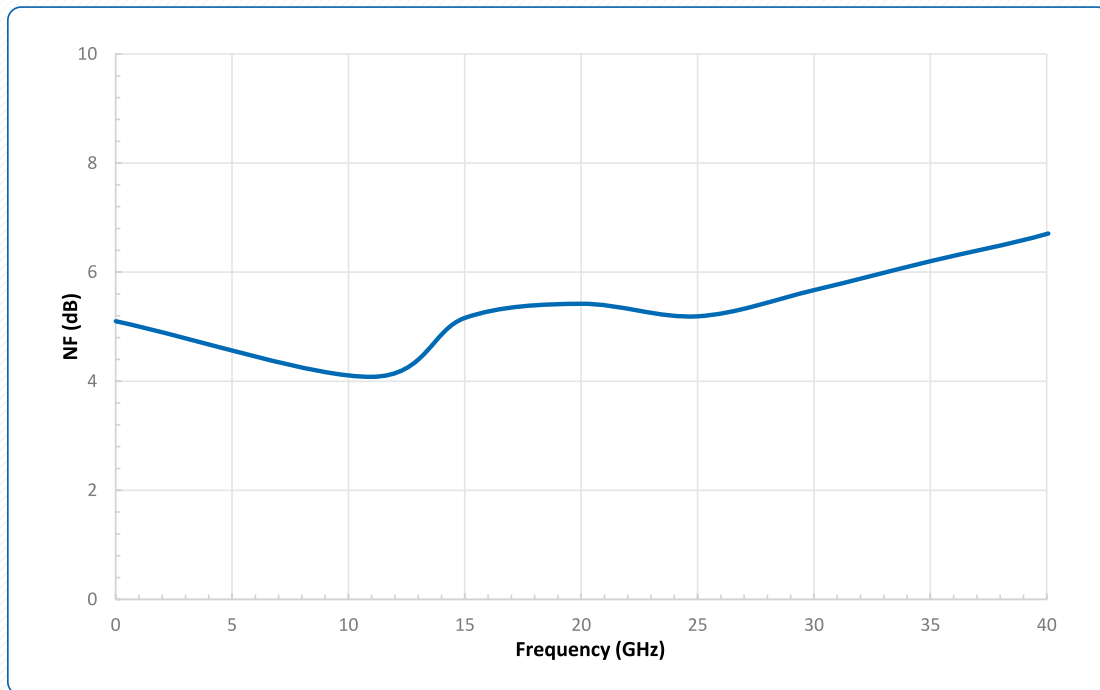
## GAIN AND RETURN LOSS VS. FREQUENCY



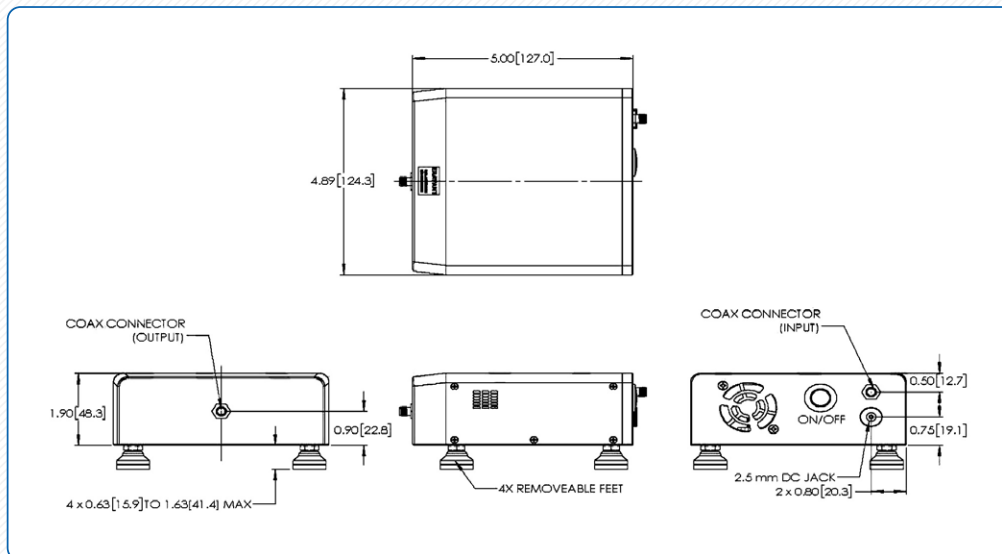
## P1DB VS. FREQUENCY



## NOISE FIGURE VS. FREQUENCY



## MECHANICAL OUTLINE: (Unless otherwise specified, all dimensions are in inches [millimeters])



### Note:

- 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 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.
- Proper torque,  $8.0 \pm 0.15$  inch-pounds ( $0.92 \pm 0.05$  Nm), should be applied. Eravant torquewrench, model PA40G10M, is highly recommended.

