

MODEL NUMBER:  
**PA40G**

**BROADBAND AMPLIFIER, 18 TO 40 GHZ,  
40 DB GAIN, 3 DB NOISE FIGURE**



### DESCRIPTION:

Model PA40G is a broadband benchtop low noise amplifier with a typical small signal gain of 40 dB and a nominal noise figure of 3 dB across the frequency range of 18 to 40 GHz. The power supply required is a single phase AC voltage in the range of 100 to 240 VAC, 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 female K connectors.

### FEATURES:

- Ultra-Broadband Coverage
- Good Gain Flatness

### APPLICATIONS:

- Bench Top Power Amplification
- Antenna Range
- Power Boosting

### ELECTRICAL SPECIFICATIONS:

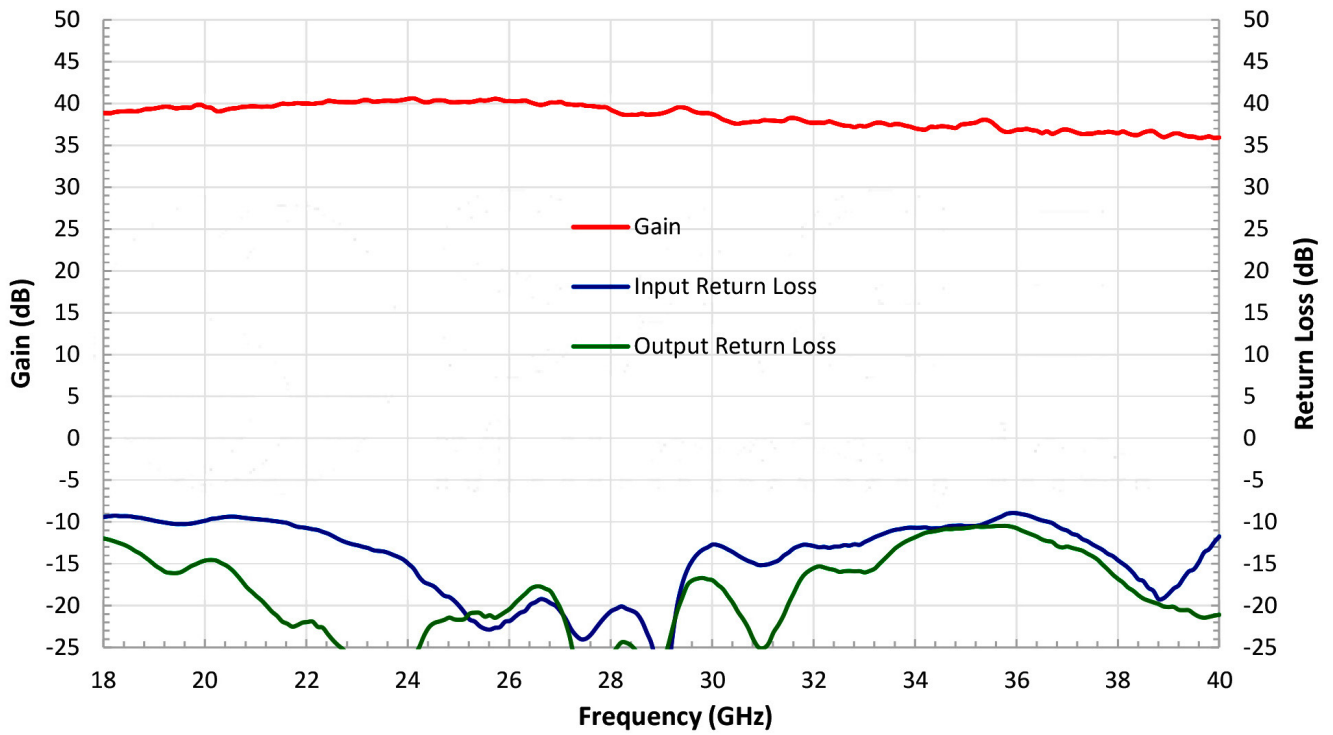
PARAMETER	MINIMUM	TYPICAL	MAXIMUM
Frequency	18 GHz		40 GHz
Gain		40 dB	
Noise Figure		3 dB	
$P_{1dB}$		+10 dBm	
RF Input Damage Level			-20 dBm
Input Return Loss		10 dB	
Output Return Loss		10 dB	
Power Supply (AC Adapter Provided)	100 V <sub>AC</sub>		240 V <sub>AC</sub>
Specification Temperature		+25 °C	
Case Temperature	0 °C		+50 °C

### MECHANICAL SPECIFICATIONS:

ITEM	SPECIFICATION
Input Port	K(F)
Output Port	K(F)
DC Bias Port	2.5 mm DC Jack (AC-to-DC power converter included)
DC Bias Switch	On-Off Rocker Switch with Indicator Light
Enclosure Material	Extruded Aluminum
Finish	Black Anodized
Weight	1.5 lbs
Size	3.22" (W) x 4.12" (L) x 1.74" (H)
Outline	TB-SC

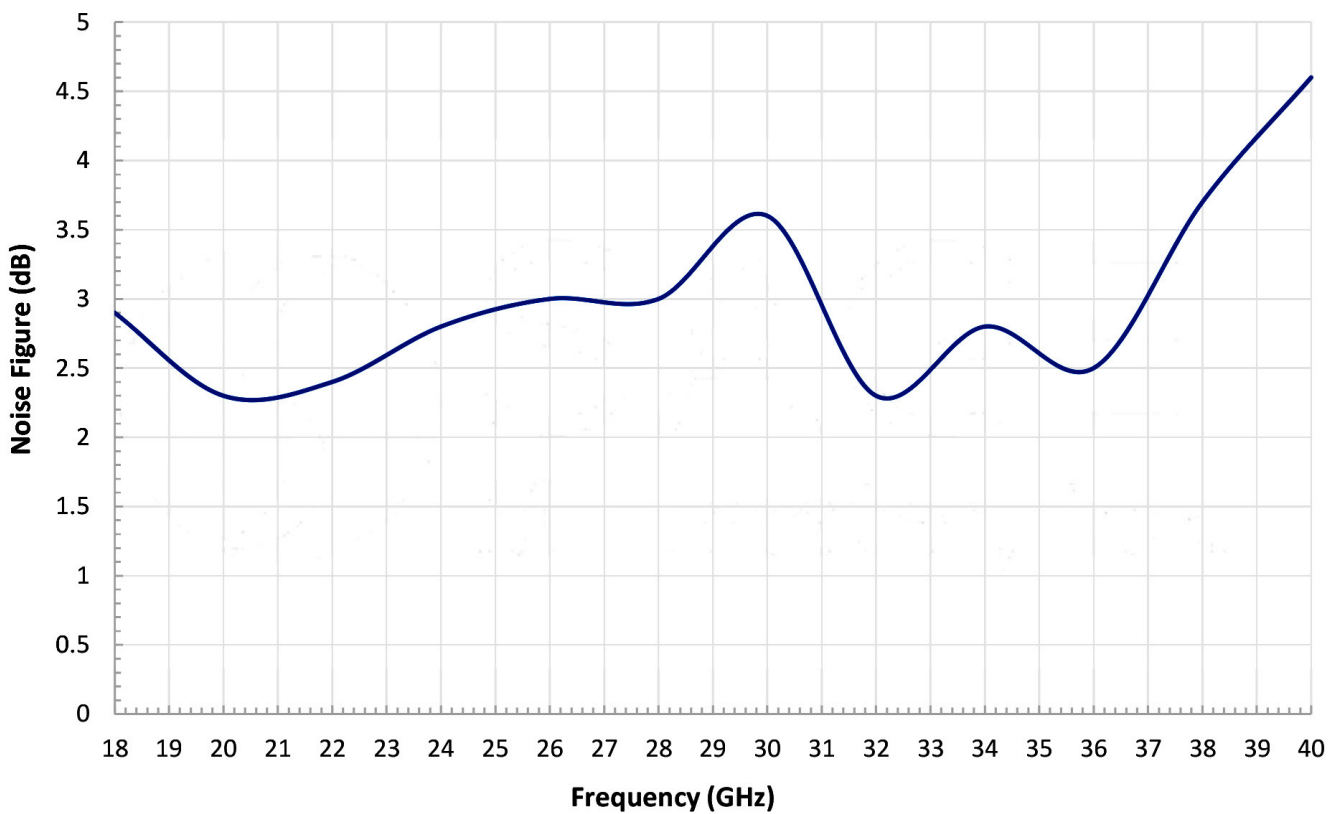
## TYPICAL GAIN AND RETURN LOSS VS. FREQUENCY

BIAS: +8 V<sub>DC</sub> / 200 MA



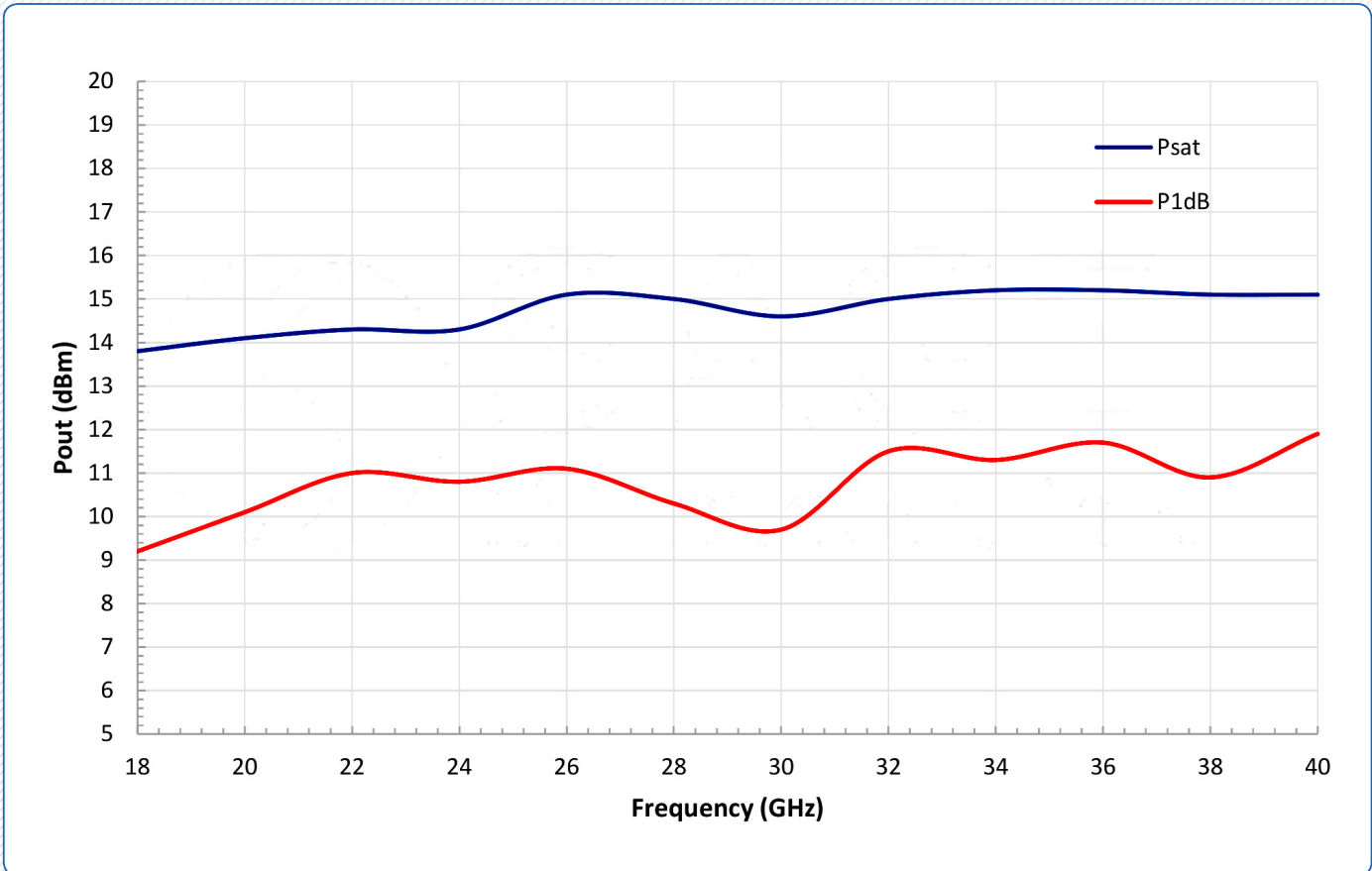
## TYPICAL NOISE FIGURE VS. FREQUENCY

BIAS: +8 V<sub>DC</sub> / 200 MA

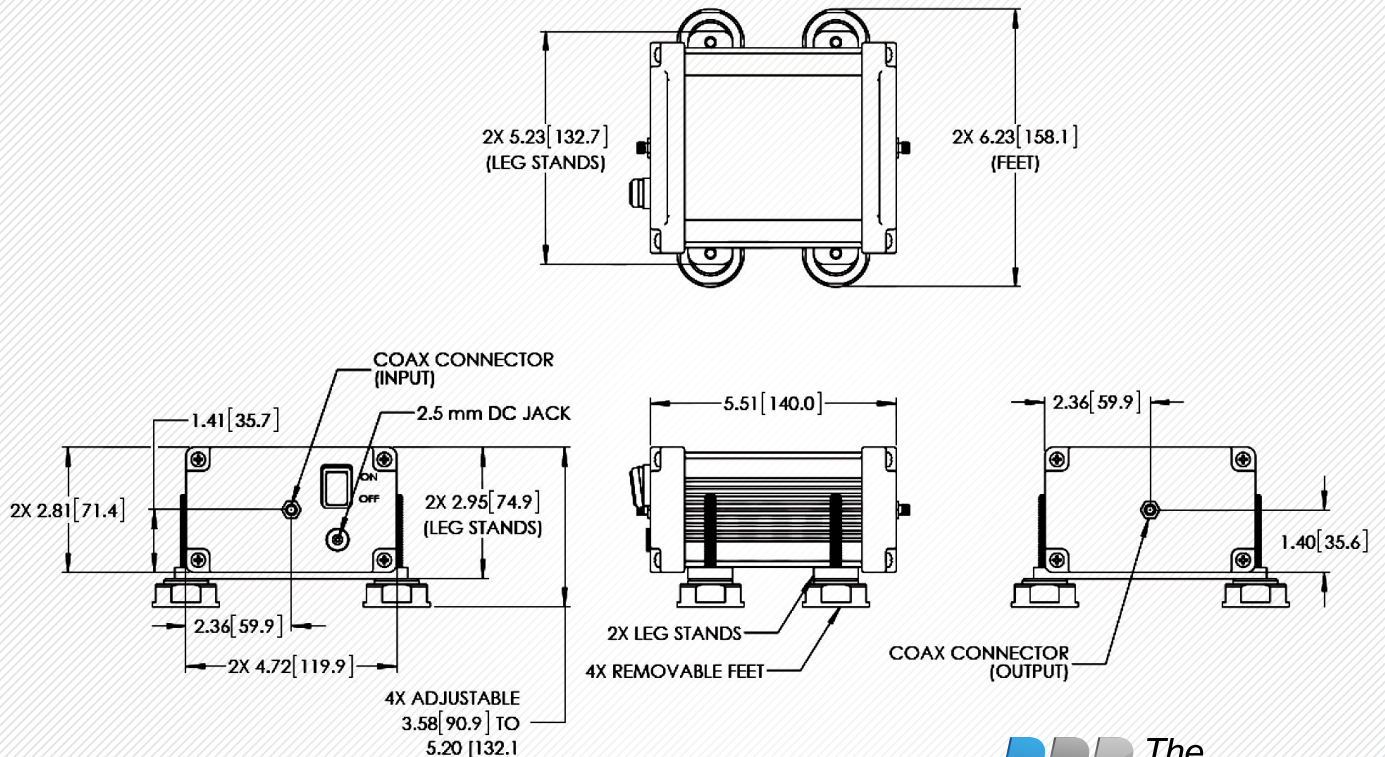


# TYPICAL OUTPUT POWER VS. FREQUENCY

BIAS: +8 V<sub>DC</sub> /200 MA



## MECHANICAL OUTLINE: (UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN INCHES [MILLIMETERS])



WWW.THEEMCSHOP.COM



SALES@THEEMCSHOP.COM



844.423.7435



THE EMC SHOP, 7401 GALILEE RD. #160 ROSEVILLE, CA 95678