

### DESCRIPTION

AMCOM's AM056044SF-4H is a broadband GaN Power Amplifier module designed for general purpose applications. It operates from 0.5 GHz to 6 GHz and typically delivers 28 watts (44.5dBm) of CW output power and 45dB small signal gain. The amplifier module has 6 screw slots for mounting to a heat sink. This amplifier module is compact and light weight at 6" (L) x 4" (W) x 0.75" (H).



### FEATURES

- Wide bandwidth from 0.5 to 6 GHz
- Psat 44.5 dBm, Gain 45dB
- Input / Output matched to 50 Ohms

### APPLICATIONS

- Radar
- Fixed microwave backhaul
- Instrumentation and measurements
- Military and Aerospace

### TYPICAL PERFORMANCE \* (Quiescent bias is +48V, I<sub>ddq</sub>= 1.8A)

Parameters	Minimum	Typical **	Maximum
Frequency	0.75-5.75 GHz	0.5 - 6 GHz	
Small Signal Gain	42 dB	47 dB	
Gain Ripple		± 3 dB	
P <sub>1dB</sub>		39 dBm	
P <sub>5dB</sub>	42.5 dBm	44.5 dBm	
Current @ P <sub>5dB</sub>		2.8 A	
Noise Figure		6 dB	
IP3		50 dBm	
Input Return Loss		10 dB	
Output Return Loss		6 dB	
Switching Time		CW	

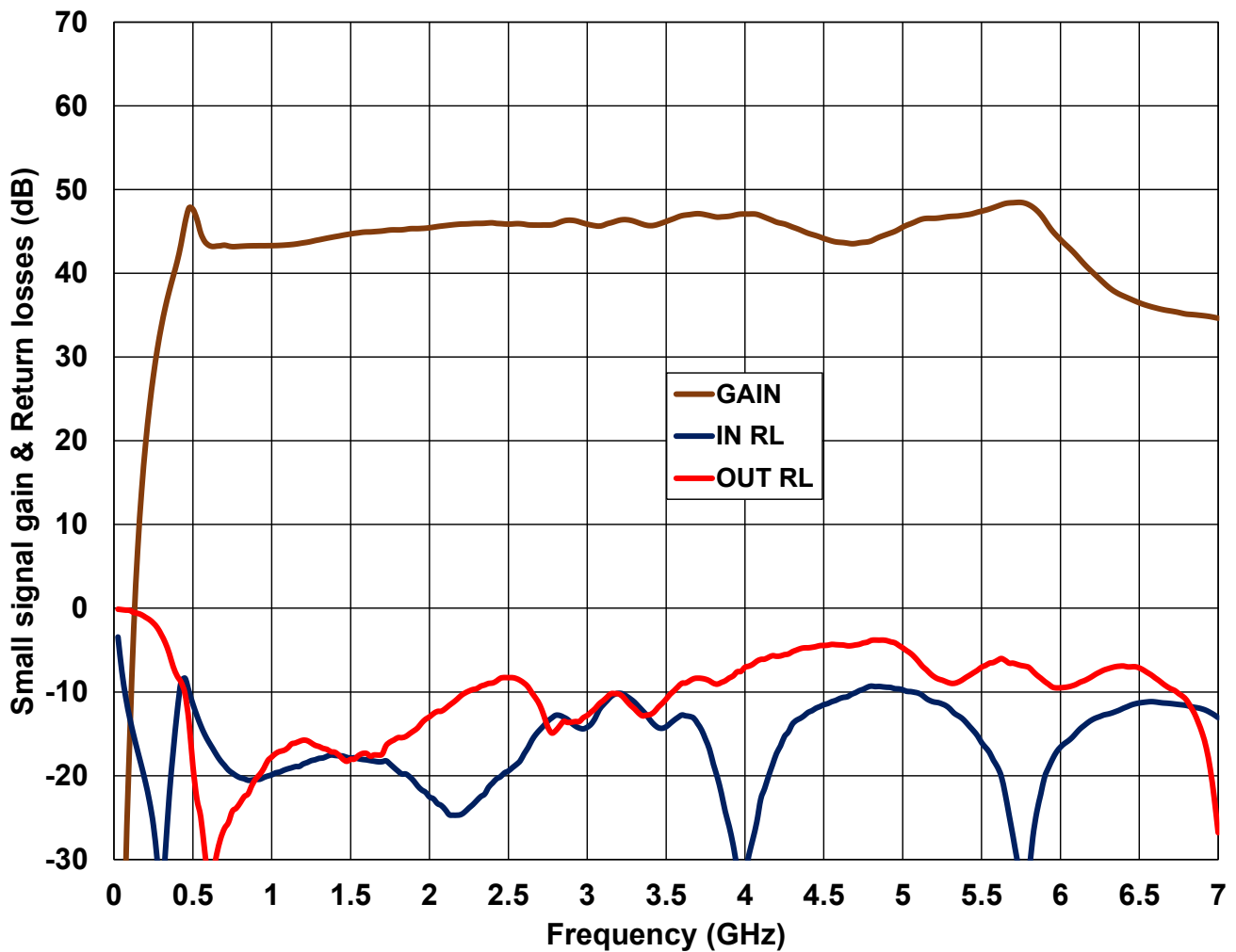
\* Notes:

- 1- Specifications are subject to change without notice.
- 2- Proper heat sink should be used to remove heat from bottom of package.

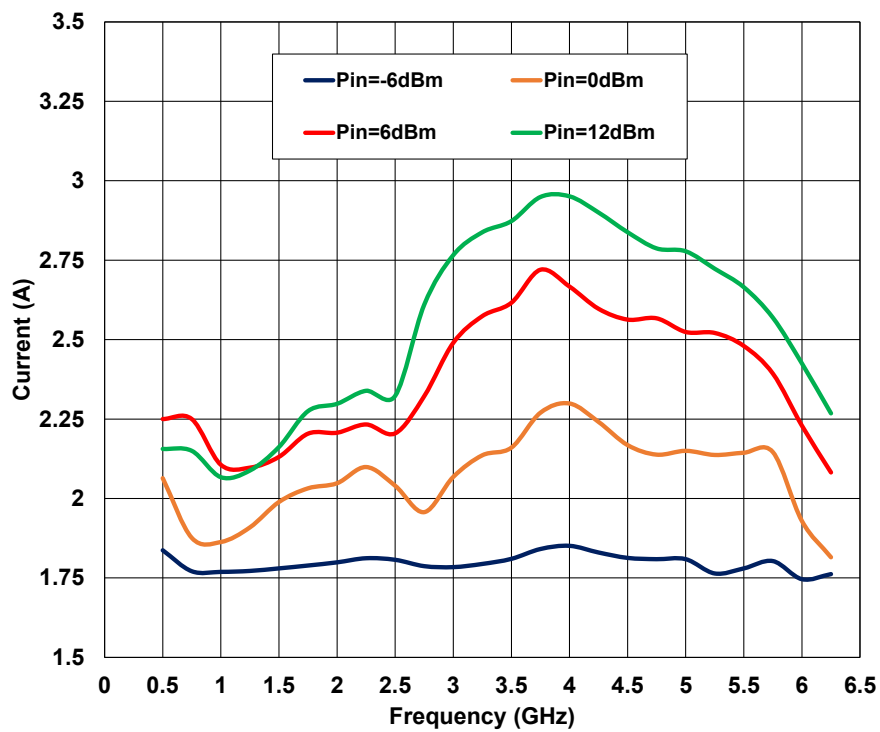
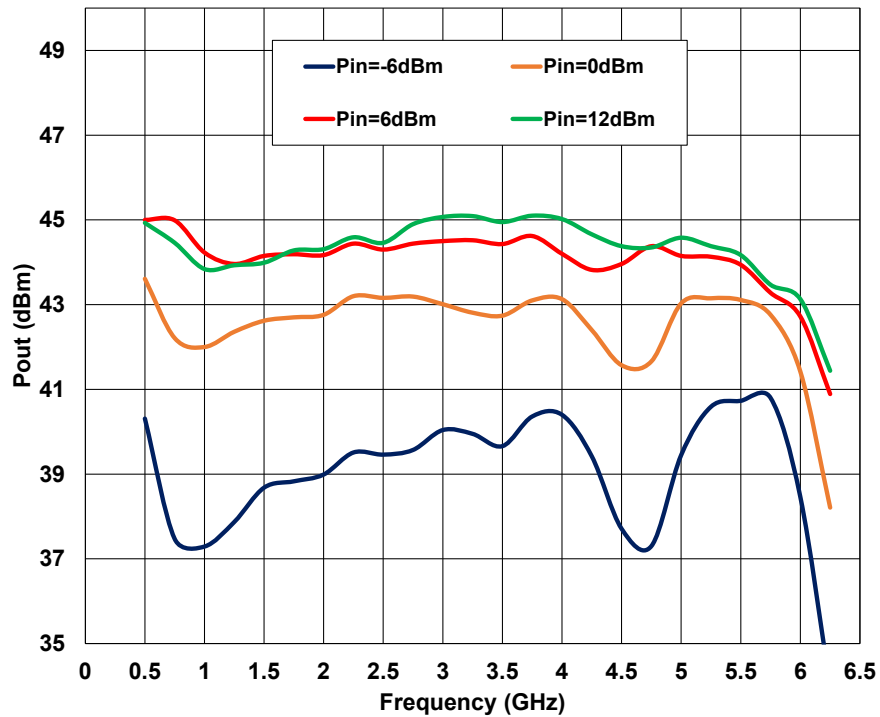
**ABSOLUTE MAXIMUM RATING**

Parameters	Symbol	Rating
Maximum RF input	RF <sub>in</sub> Max	+13 dBm
Drain source voltage	V <sub>dd</sub>	52V
Continuous dissipation at 25°C	P <sub>t</sub>	160W
Operating temperature	T <sub>op</sub>	-40°C to +85°C
Storage temperature	T <sub>sto</sub>	-55°C to +135°C

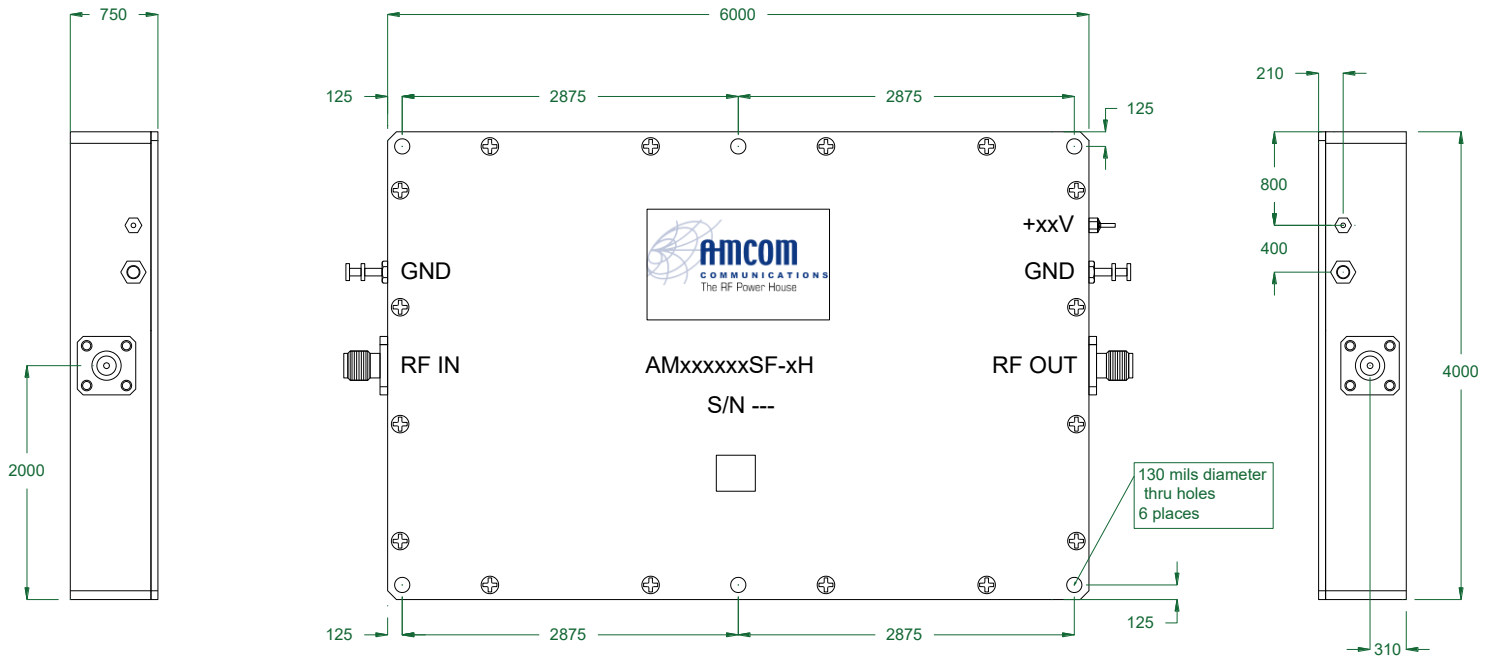
**SMALL SIGNAL MEASUREMENTS**



POWER DATA | Vds= +48V



PACKAGE OUTLINE



NOTES:

- 1- Dimensions are in mils.
- 2- Aluminum housing with silver nickel plating.
- 3- Female SMA for RF input and output.
- 4- Use a heat sink to remove heat from the module.