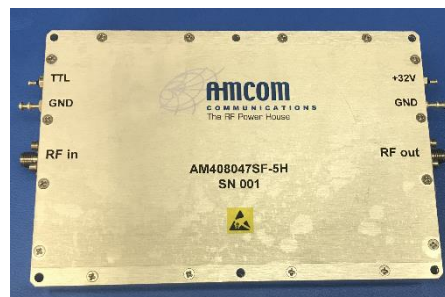


DESCRIPTION

AMCOM's AM408047SF-5H is a broadband GaN Power Amplifier module designed for general purpose applications. It operates from 4 GHz to 8 GHz and typically delivers 55 watts (47.5dBm) of CW output power and 55dB 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 4 to 8 GHz
- Psat 47.5 dBm, Gain 55dB
- Input / Output matched to 50 Ohms
- TTL control

APPLICATIONS

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

TYPICAL PERFORMANCE * (Quiescent bias is +32V, I_{ddq}= 6.5A)

Parameters	Minimum	Typical **	Maximum
Frequency	4 – 7.75 GHz	3.75 – 8.0 GHz	
Small Signal Gain	50 dB	55 dB	59 dB
Gain Ripple		± 2 dB	± 3.0 dB
P _{1dB}		42.5 dBm	
P _{5dB}	45.5 dBm	47.5 dBm	
Current @ P _{5dB}		10A	
Noise Figure		5.5 dB	
IP3		52.5 dBm	
Input Return Loss		10 dB	
Output Return Loss		7 dB	
Switching Time		5 µS	
TTL RF ON/OFF	<1V for OFF , >2.5 V for ON		

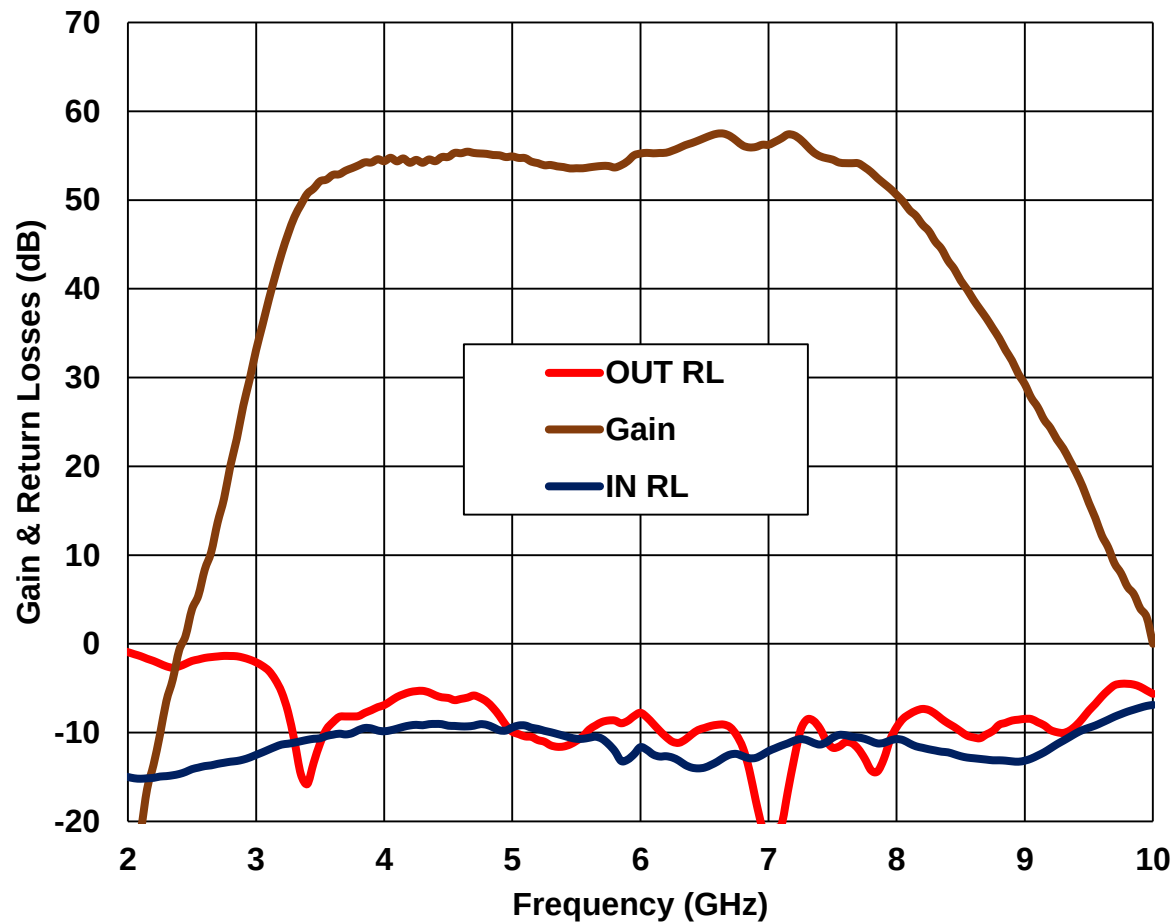
* Notes:

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

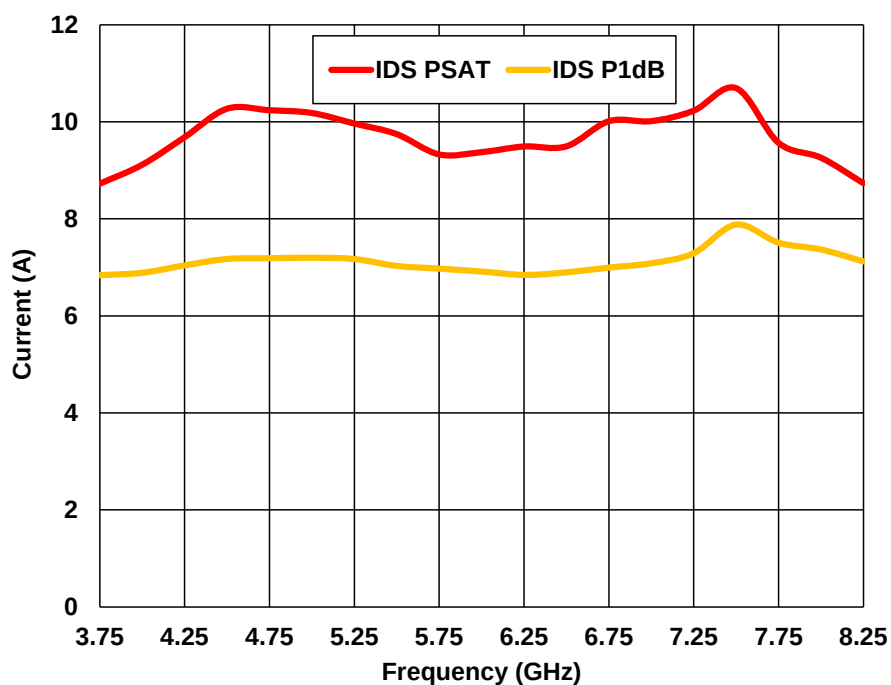
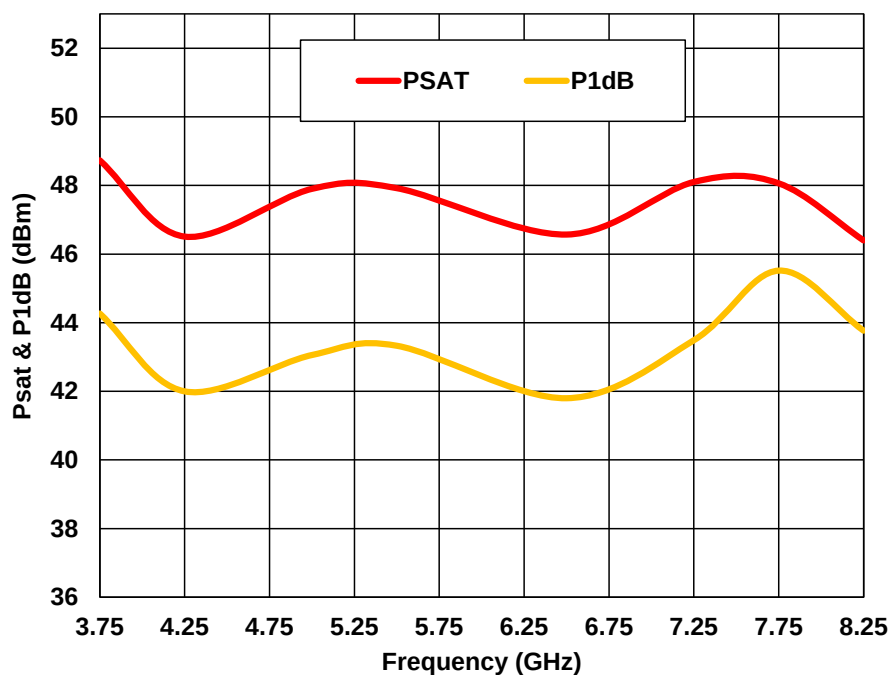
ABSOLUTE MAXIMUM RATING

Parameters	Symbol	Rating
Maximum RF input	$RF_{in\ Max}$	+3 dBm
Drain source voltage	V_{dd}	36V
Continuous dissipation at 25°C	P_t	370W
Operating temperature	T_{op}	-40°C to +85°C
Storage temperature	T_{sto}	-55°C to +135°C

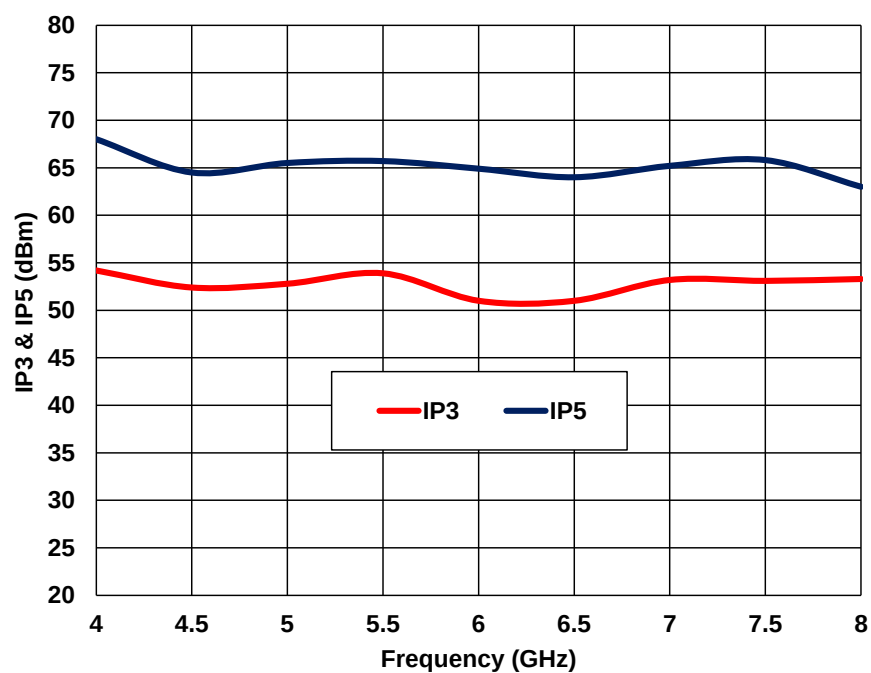
SMALL SIGNAL DATA



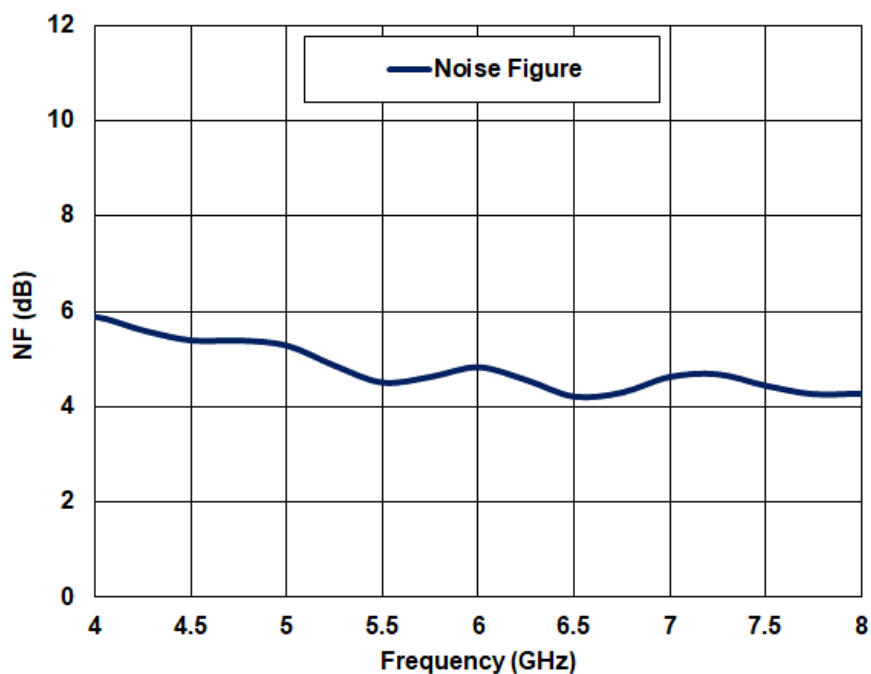
POWER DATA



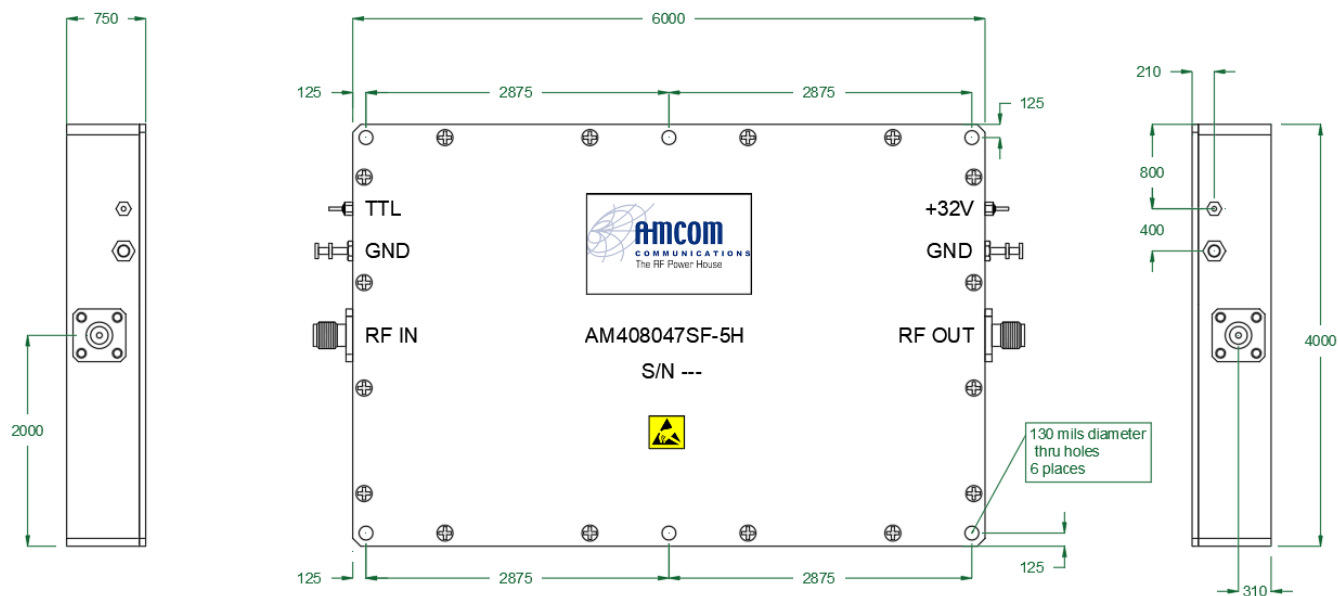
INTERMODULATION DISTORTION



NOISE FIGURE



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.