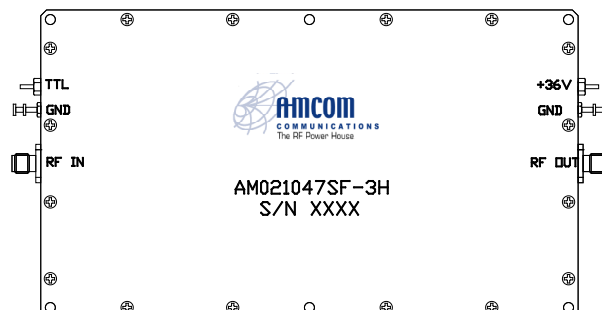


DESCRIPTION

AMCOM's AM021047SF-3H is a broadband GaN Power Amplifier module designed for general purpose applications. It operates from 0.15GHz to 1.1GHz and typically delivers 50 watts (47dBm) of CW output power and 46dB 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 7.0" (L) x 4.0" (W) x 0.76" (H).



FEATURES

- Wide bandwidth from 0.15 to 1.1GHz
- Psat 47dBm
- Gain 40dB
- Input / Output matched to 50 Ohms
- TTL control

APPLICATIONS

- Radar
- Communication systems
- Instrumentation and measurements
- Military and Aerospace

TYPICAL PERFORMANCE * (Quiescent bias is +36V, I_{ddq}= 1.1A)

Parameters	Minimum	Typical **	Maximum
Frequency	0.2 – 1.0 GHz	0.15 – 1.1 GHz	
Small Signal Gain	36 dB	40 dB	44 dB
Gain Ripple		± 1.5dB	± 3.0 dB
P _{1dB}		40 dBm	
P _{sat}	46 dBm	47 dBm	
Current @ P _{sat}		7A	8A
Noise Figure		TBD	
IP3		50 dBm	
Input Return Loss		15 dB	
Output Return Loss		7dB	
TTL RF ON/OFF	<1V for OFF , >2.5 V for ON		
Switching speed		3 μs	6 μs

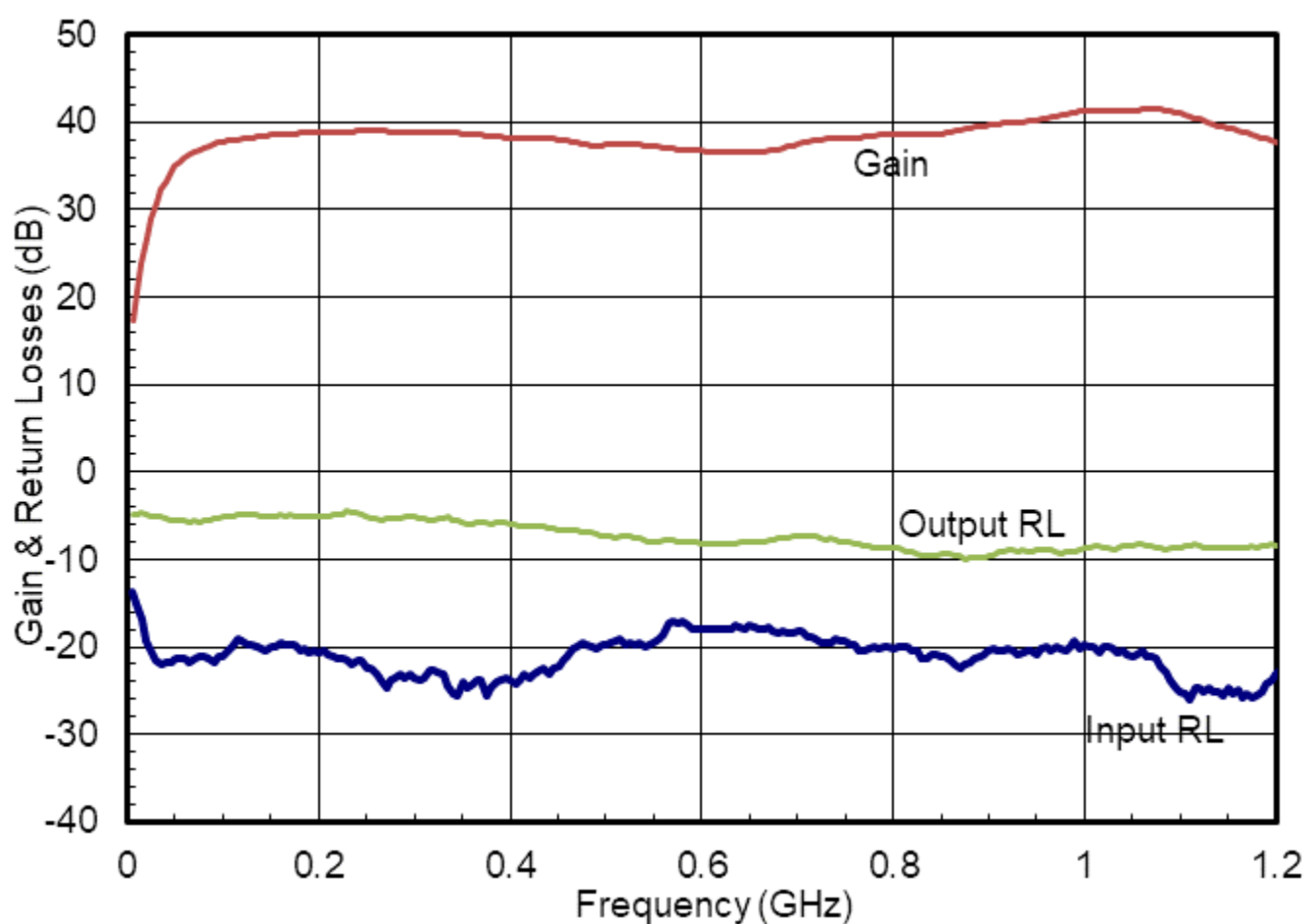
* Notes:

1- Specifications are subject to change without notice.

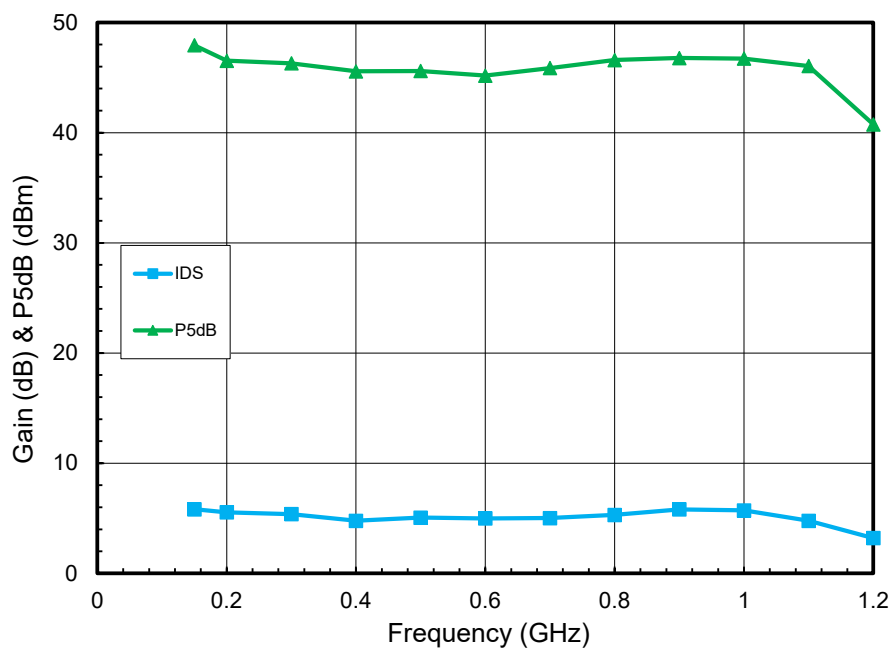
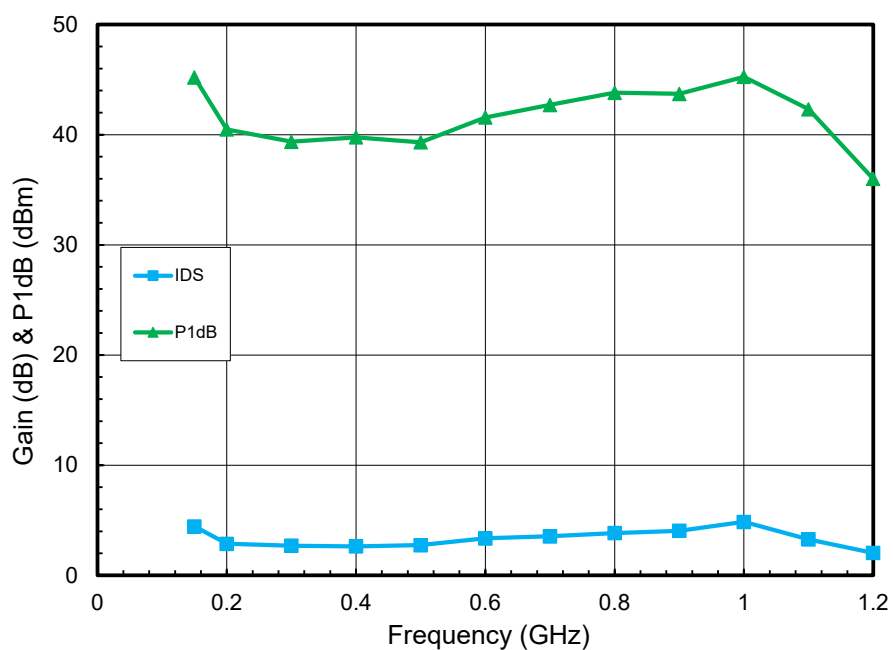
2- Proper heat sink should be used to remove heat from bottom of package.

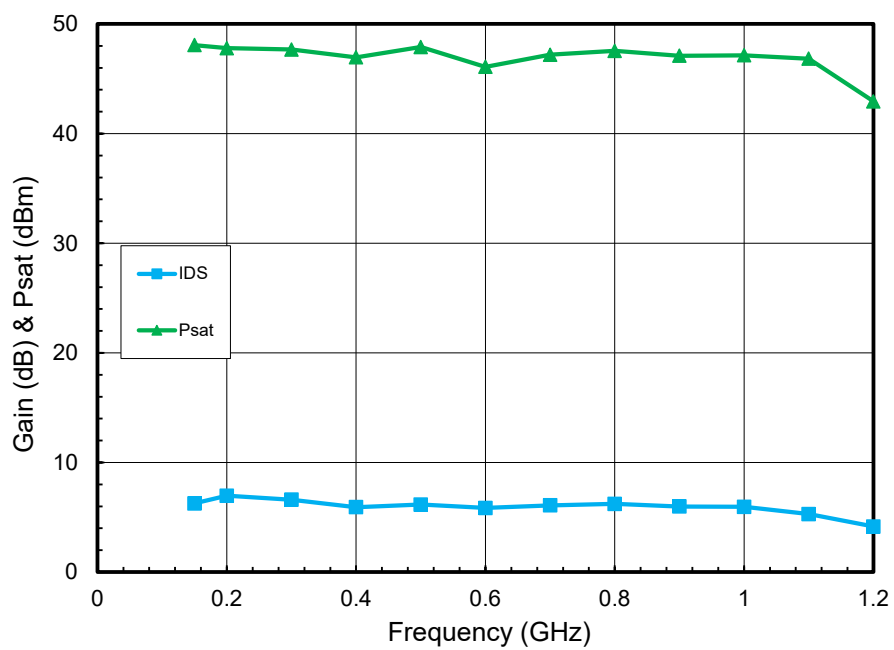
ABSOLUTE MAXIMUM RATING

Parameters	Symbol	Rating
Maximum RF input	$RF_{in\ max}$	+20 dBm
Drain source voltage	V_{dd}	38V
Continuous dissipation at 25°C	P_t	280W
Operating temperature	T_{op}	-40°C to +85°C
Storage temperature	T_{sto}	-55°C to +135°C

SMALL SIGNAL DATA

POWER DATA





The drawing shows a rectangular PCB with overall dimensions of 760,000 (width) by 1,300,000 (length). The central area is 3,375,000 wide and 3,750,000 high. Key features include:

- RF IN** and **RF OUT** connectors on the left and right sides, respectively.
- TTL** and **GND** pins on the left edge.
- +36 V** and **GND** pins on the right edge.
- 6 x 130 mils diameter thru holes** for mounting.
- AMCOM COMMUNICATIONS** logo and **AM021047SF-3H S/N XXXX** text in the center.

- 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.