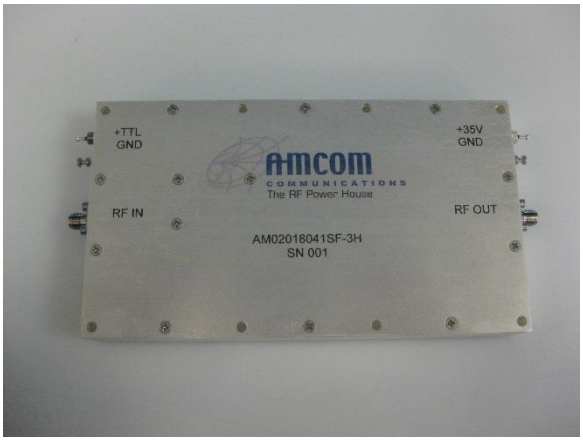
Power Amplifier Module
2 – 18GHz, 26dB, 12W

AM02018041SF-3H
Oct 2019
REV 0

DESCRIPTION

AMCOMôs AM02018041SF-3H is a broadband GaN Power Amplifier module. It is designed for general purpose applications. It operates from 2GHz to 18GHz and typically delivers 12 watts (41dBm) of CW output power and 26dB small signal gain. The module has a built-in TTL On/Off control. The amplifier module has 8 screw slots for mounting to a heat sink, and operates using a +32V supply. This amplifier module is compact at 6.0ò(L) x 3.36ò(W) x 0.75ò(H).



FEATURES

- Broadband from 2 to 18 GHz
- 41dBm of saturated CW output power
- Gain, 26dB
- Input / Output matched to 50 Ohms

APPLICATIONS

- Lab Work
- Test and Measurements
- Instrumentation & control

TYPICAL PERFORMANCE * Quiescent bias is (32V, I_{dq}= 2.4A)

Parameters	Minimum	Typical **	Maximum
Frequency	2-16GHz	2-18 GHz	
Small Signal Gain	20 dB	26	33 dB
Gain Ripple		± 5.0 dB	
P_{5dB}	38 dBm	41 dBm	
P_{1dB}		36.5 dBm	
Ids @ P_{5dB}		3.2A	
Ids @ P_{1dB}		3A	
Noise Figure		8 dB	13
Input Return Loss		10 dB	
Output Return Loss		10 dB	
TTL ON/OFF Control		OFF < 0.5V, ON > 1.5V	

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

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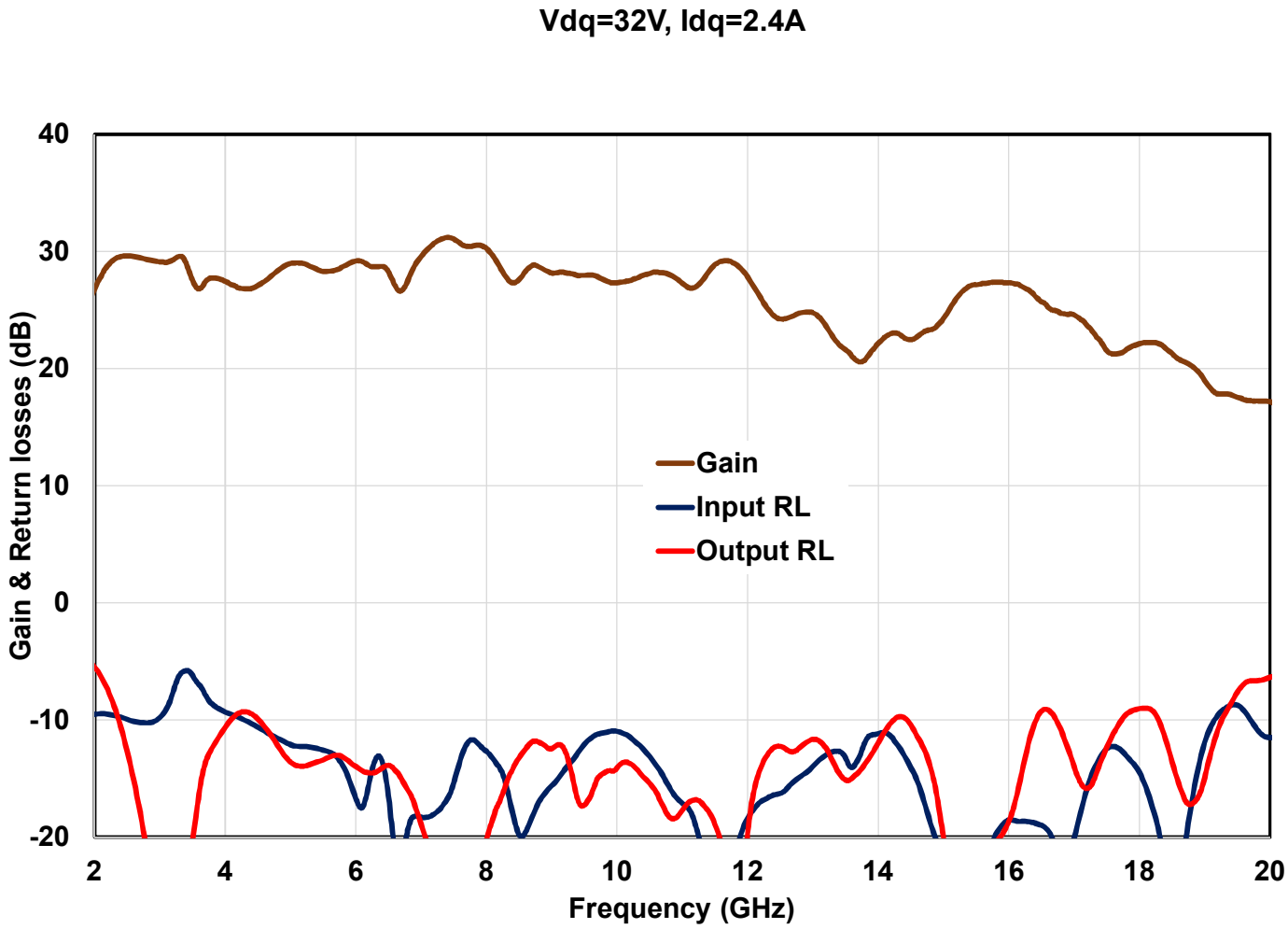
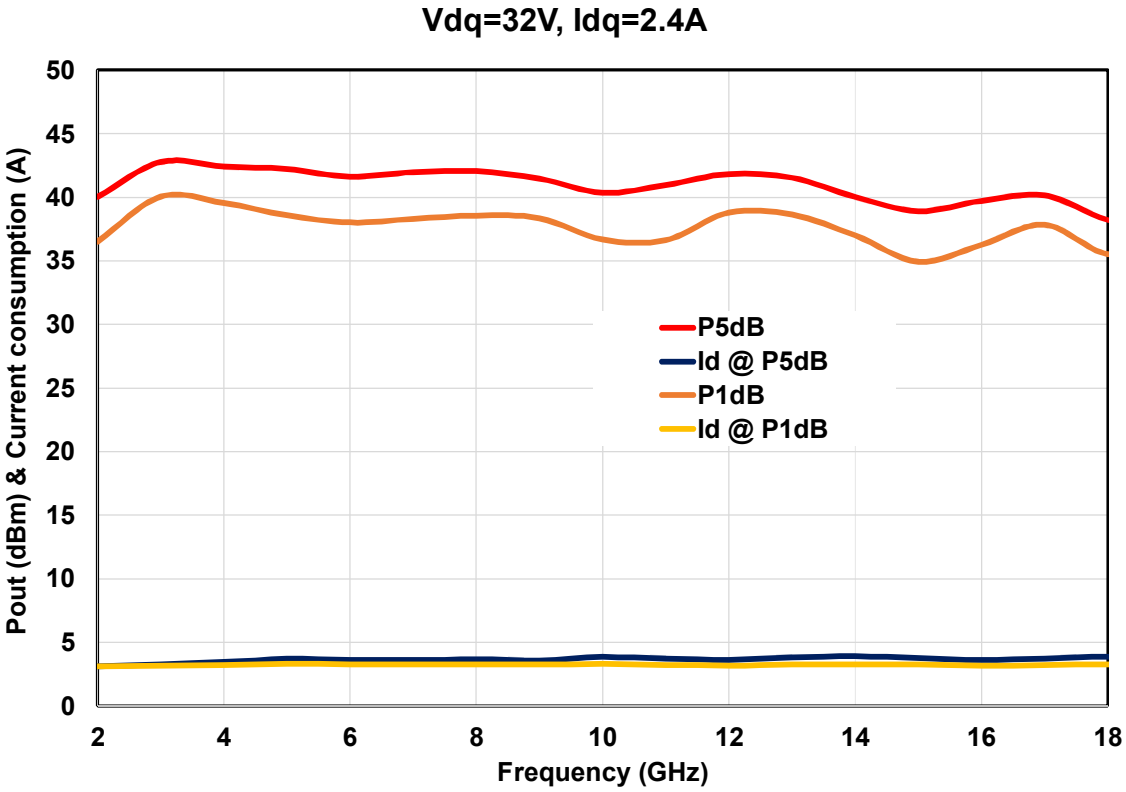
ABSOLUTE MAXIMUM RATING

Parameters	Symbol	Rating
Drain source voltage	V_{dq}	35V
Continuous dissipation at 25ºC	P_t	160W
Operating temperature	T_{op}	-40°C to +85°C
Storage temperature	T_{sto}	-55°C to +135°C

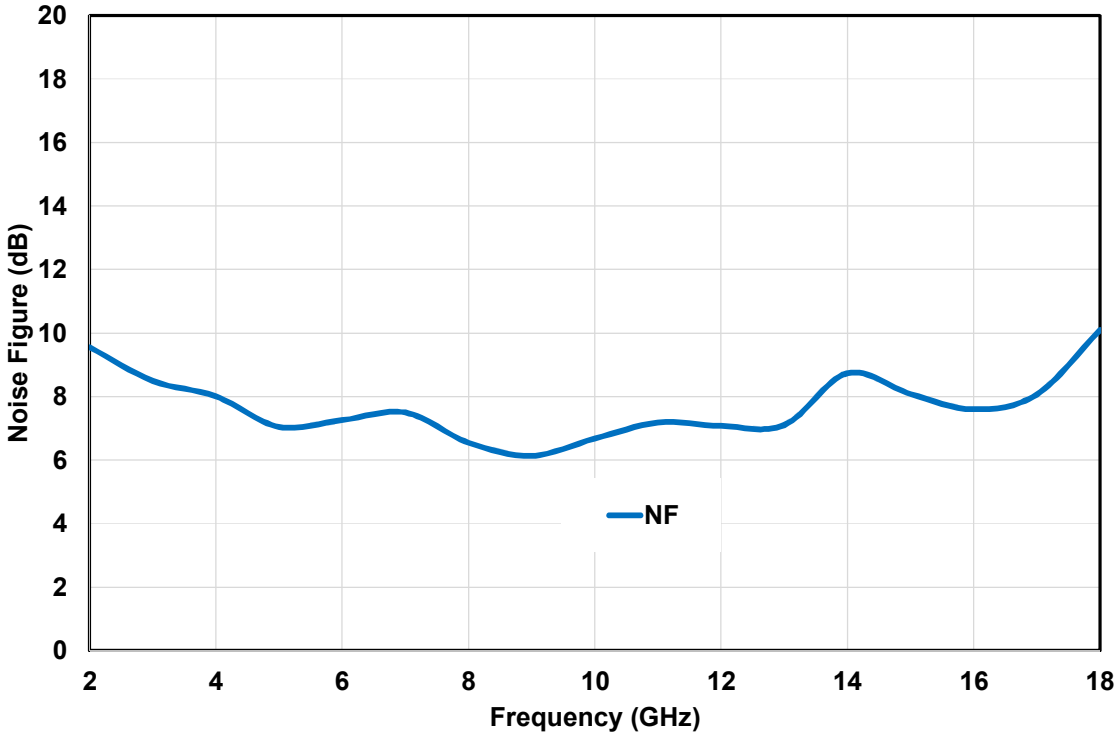
SMALL SIGNAL DATA



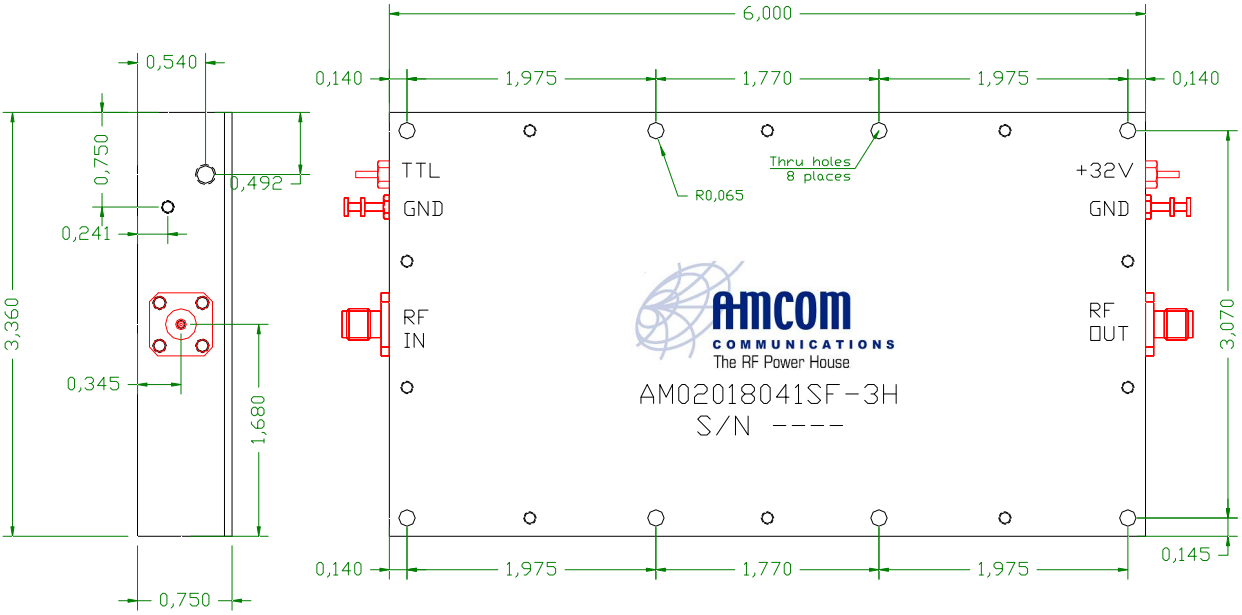
POWER DATA



NOISE FIGURE



PACKAGE OUTLINE



NOTES:

1- Use a heat sink to remove heat from the package bottom.
2- Female SMA for RF input and output.
3- Dimensions in Inches