Power Amplifier Module
800-960 MHz

AM081033PA-P2
September 2020
Rev 0

DESCRIPTION

AMCOM's AM081033PA-P2 is a Power Amplifier module. It is designed for general purpose applications. It operates from 800 MHz to 960 MHz.The module operates using a +12V supply and uses SMA connectors for input and output.

FEATURES

- Frequency Range: 800-960MHz
- Gain: 36dB
- Pout: +33dBm (2Watt)
- IP3: +42dBm
- Noise Figure: 1.3dB
- DC Power: +12V
- DC Reverse Protected
- Internal Voltage Regulated
- SMA Connector

APPLICATIONS

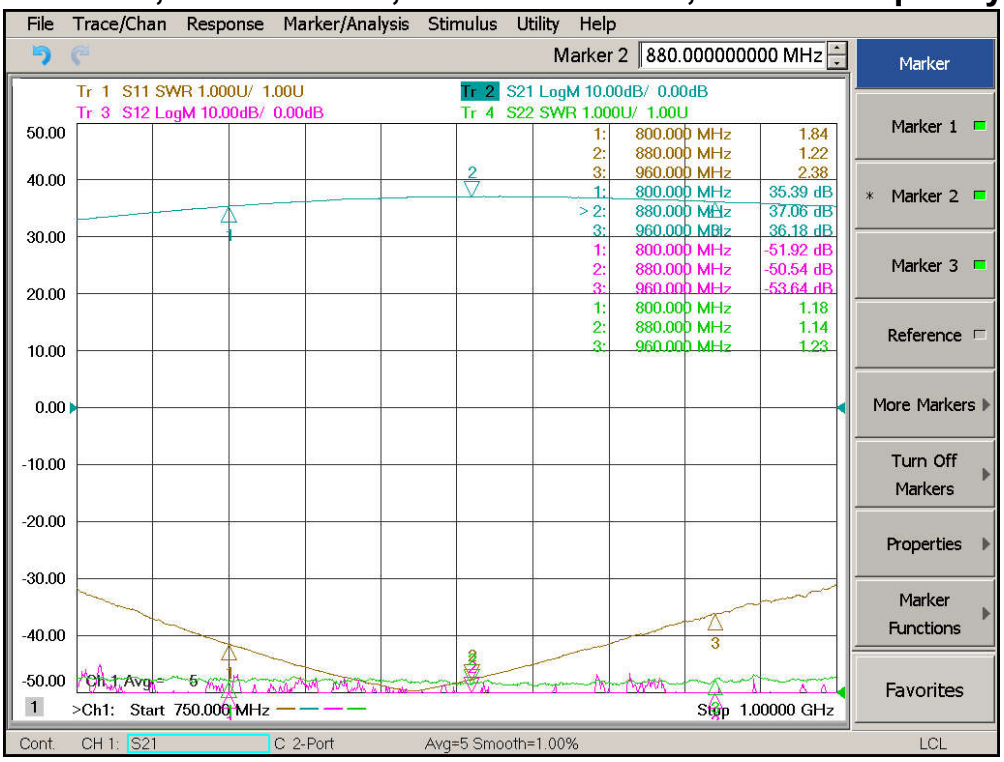
- Wireless Infrastructure
- Military & Aerospace
- Test and Measurement

Electrical Specifications @ +25°C, $Z_{IN} = Z_{OUT} = 50\Omega$, DC Supply = +12V

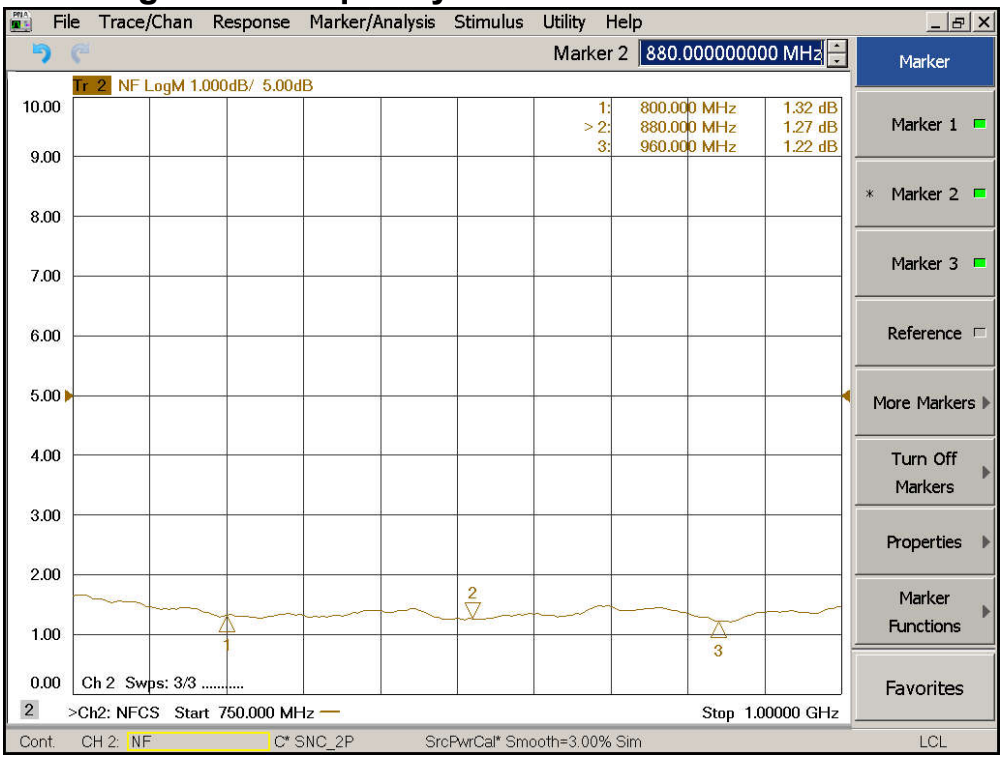
Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	MHz	800		960
Small Signal Gain S_{21} f = 880MHz	dB	34	36	
Gain Flatness	dB		± 0.8	± 1.2
Output Power P_{3dB} f = 880MHz	dBm	+32	+33	
Output IP3 f = 880MHz	dBm	+40	+42	
Reverse Isolation S_{12}	dB	-45	-50	
Noise Figure	dB		1.3	1.8
VSWR Input VSWR S_{11} Output VSWR S_{22}			1.5:1 1.2:1	2.5:1 2.0:1
DC Power Supply	V	9	12	15
Quiescent Current with No Input Current @ P_{out} = +33dBm	mA mA		600 1100	750 1250
Size (Excluding SMA Connector)	inch	3.750" x 2.000" x 1.813"		
Weight	Oz.	8		

Email: info@amcomusa.com
Website: www.amcomusa.com
Tel. (301) 353-8400 Fax. (301) 353-8401
401 Professional Drive, Gaithersburg, MD20879

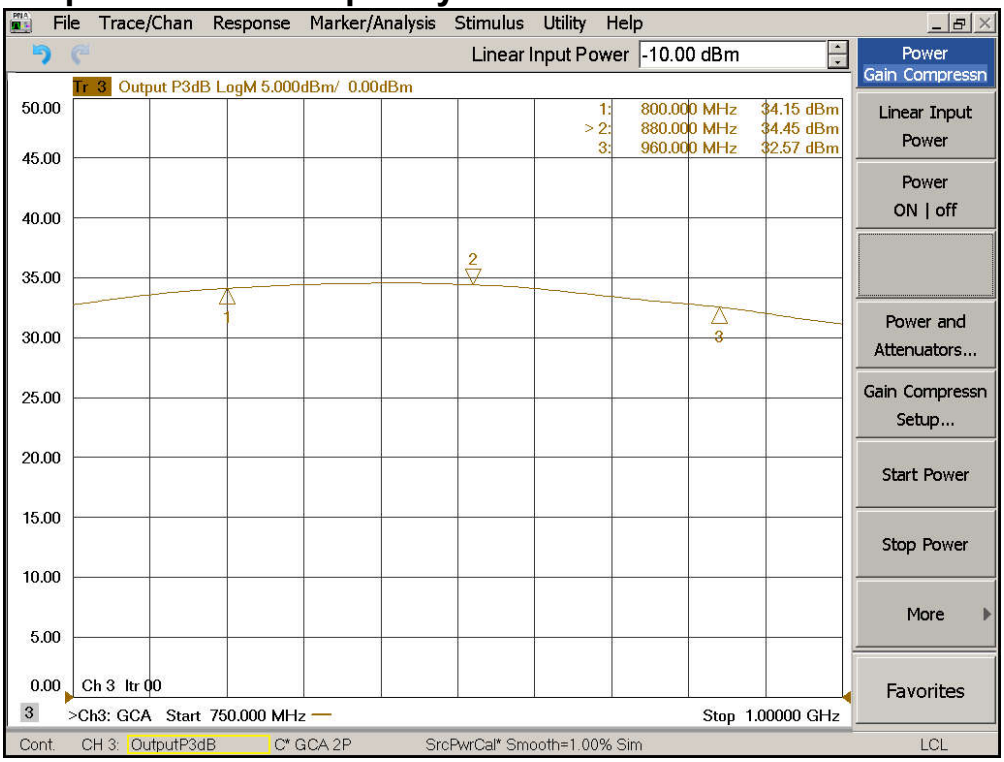
Gain S21, Isolation S12, Return Loss S11, S22 vs Frequency



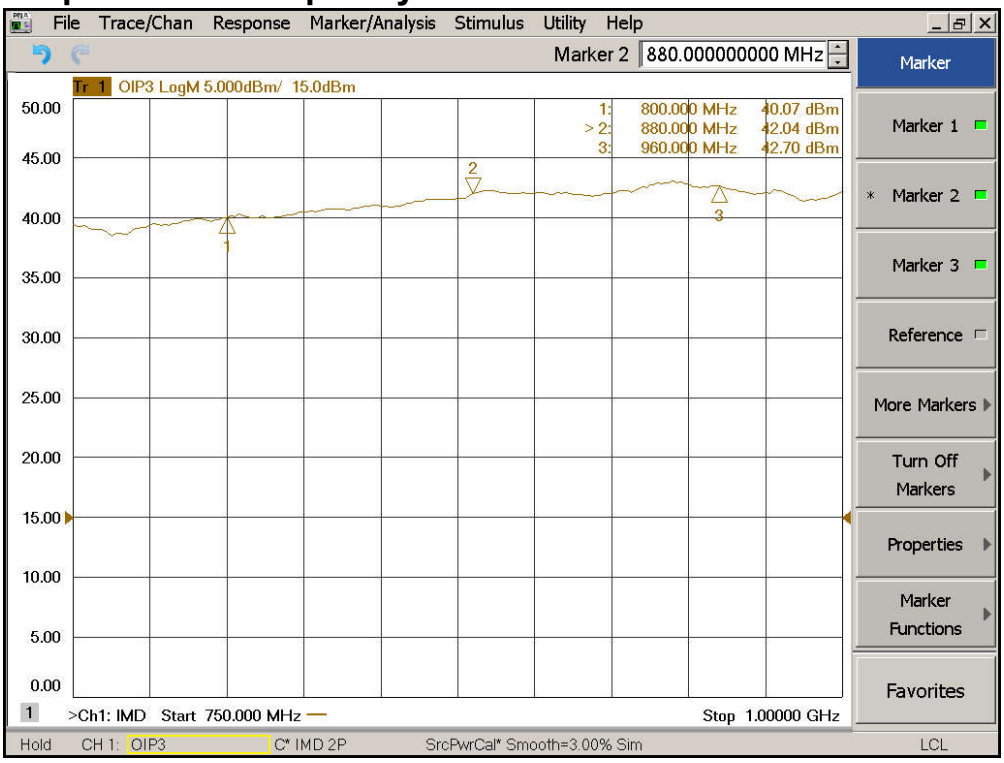
Noise Figure vs Frequency



Output P3dB vs Frequency



Output IP3 vs Frequency

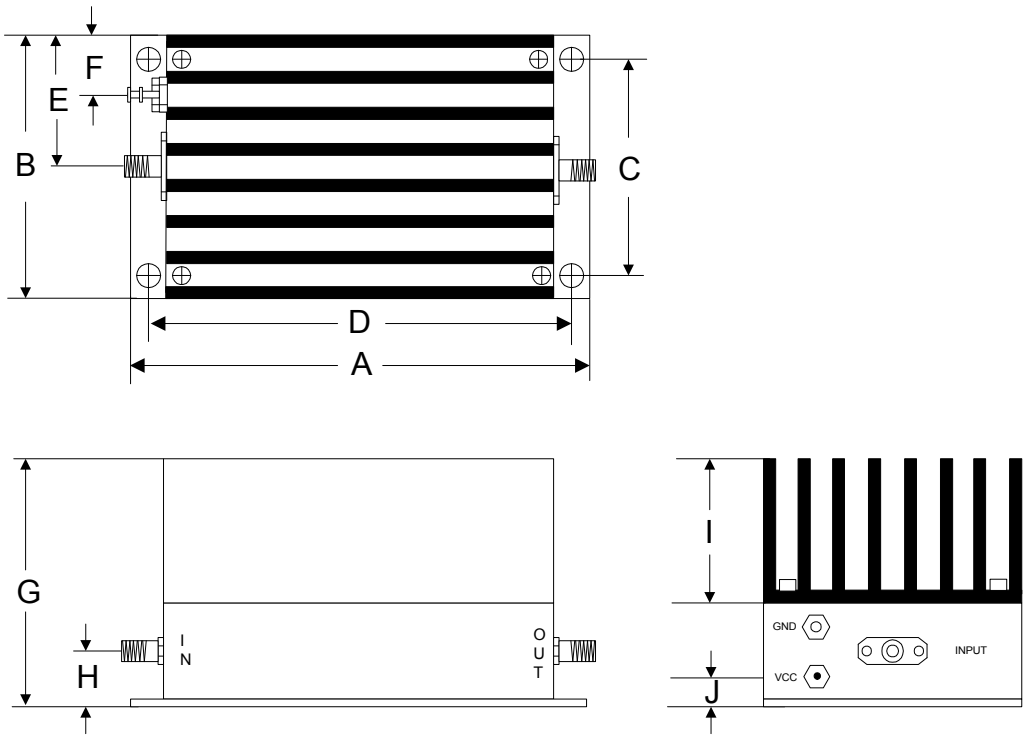


Absolute Maximum Ratings

Parameter	Absolute Maximum
RF Input Power	+23dBm
DC Supply Voltage	+18V
Operating Temperature	-40 °C to +85 °C
Storage Temperature	-55 °C to +125 °C

ESD Sensitive Material

Outline



	A	B	C	D	E	F	G	H	I	J
Inch	3.750	2.000	1.750	3.400	1.000	0.400	1.813	0.375	1.000	0.238
mm	92.25	50.80	44.45	86.36	25.40	10.16	46.05	9.53	25.40	6.03