Power Amplifier Module
50-1500 MHz

AM001530PA-P2
September 2020
Rev 0

DESCRIPTION

AMCOM's AM001530PA-P2 is a Power Amplifier module. It is designed for general purpose applications. It operates from 50 MHz to 1500 MHz.The module operates using a 12V ~ 18V supply and uses SMA connectors for input and output.

FEATURES

- Frequency Range: 50-1500MHz
- Gain: 36dB
- P1dB: +30dBm (1Watt)
- IP3: +43dBm
- Noise Figure: 1.1dB
- DC Power: +12V to +18V
- DC Reverse Protected
- Internally Voltage Regulated
- SMA Connector

Performance measured @ 800MHz

APPLICATIONS

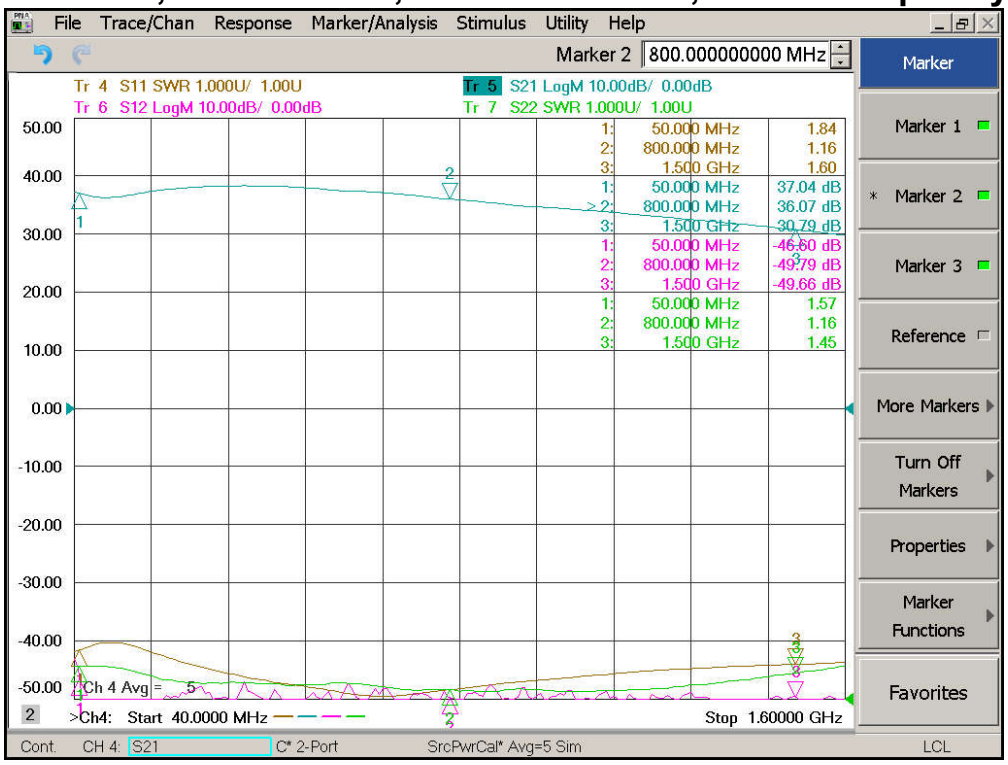
- Wireless Infrastructure
- Military & Aerospace
- Test and Measurement

Electrical Specifications @ +25°C, $Z_{IN} = Z_{OUT} = 50\Omega$, DC Supply = +15V

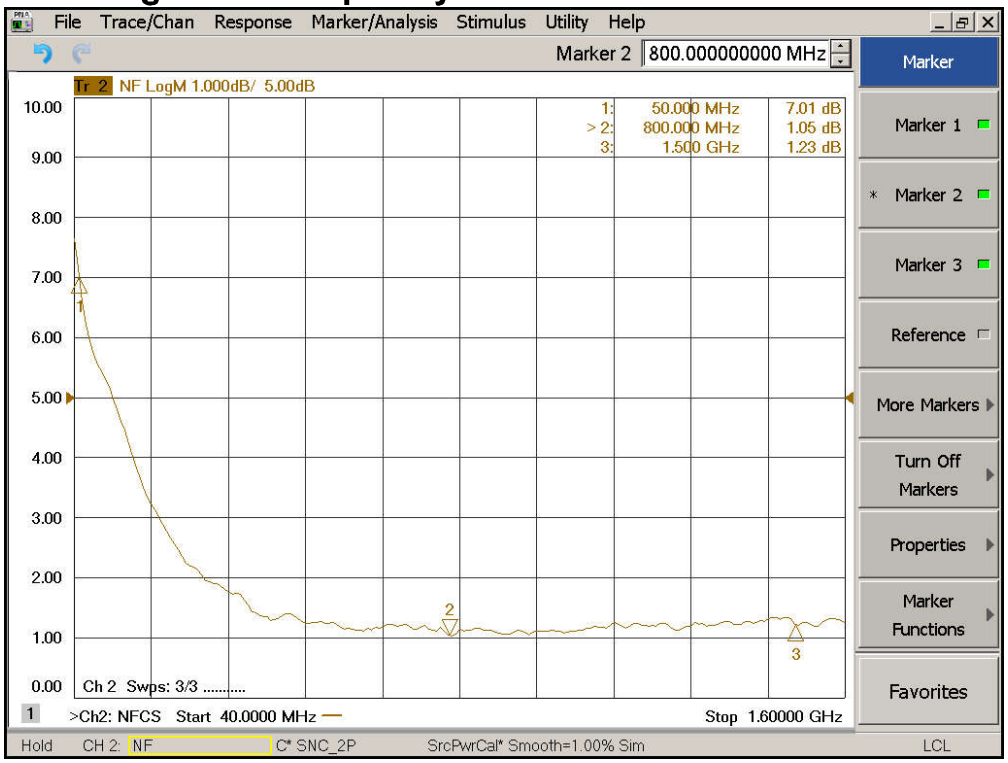
Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	MHz	50		1500
Small Signal Gain S_{21} f = 50MHz f = 800MHz f = 1500MHz	dB dB dB	35 34 28	37 36 30	
Gain Flatness	dB		± 3.5	± 4.5
Output Power P_{1dB} f = 800MHz	dBm	+29	+30	
Output IP3 f = 800MHz	dBm	+41	+43	
Reverse Isolation S_{12} f = 800MHz	dB	-40	-50	
Noise Figure f = 800MHz	dB		1.1	1.5
VSWR Input VSWR S_{11} f = 800MHz Output VSWR S_{22} f = 800MHz			1.2:1 1.2:1	2.0:1 2.0:1
DC Power Supply	V	12	15	18
DC Current	mA		430	480

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

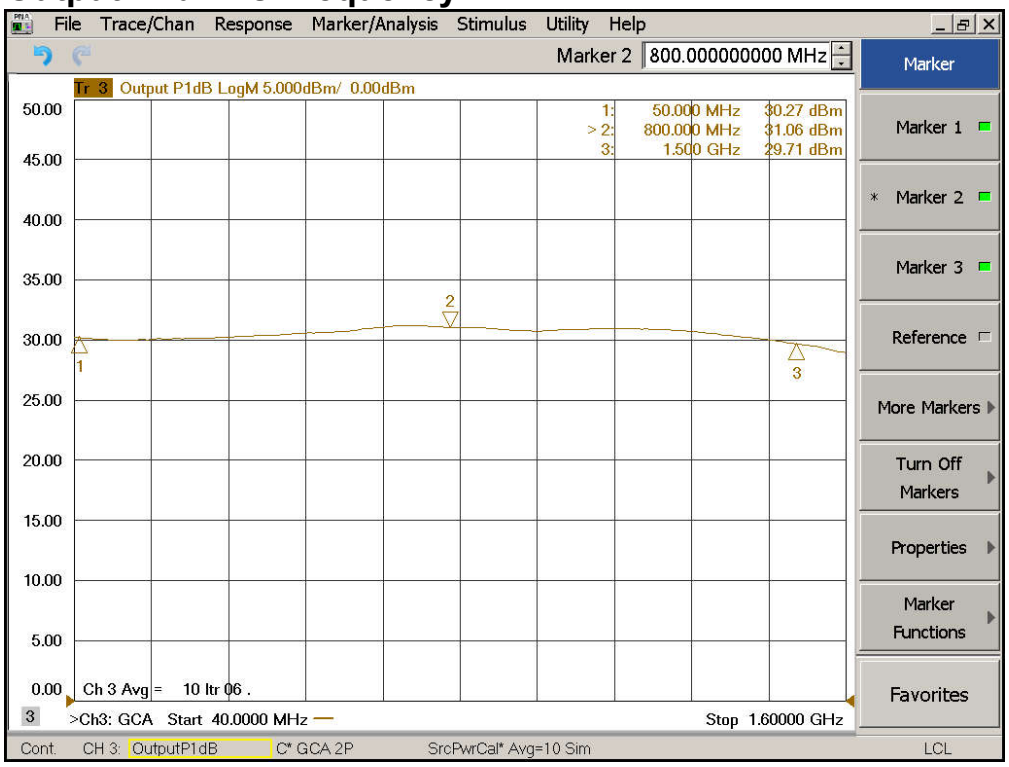
Gain S21, Isolation S12, Return Loss S11, S22 vs Frequency



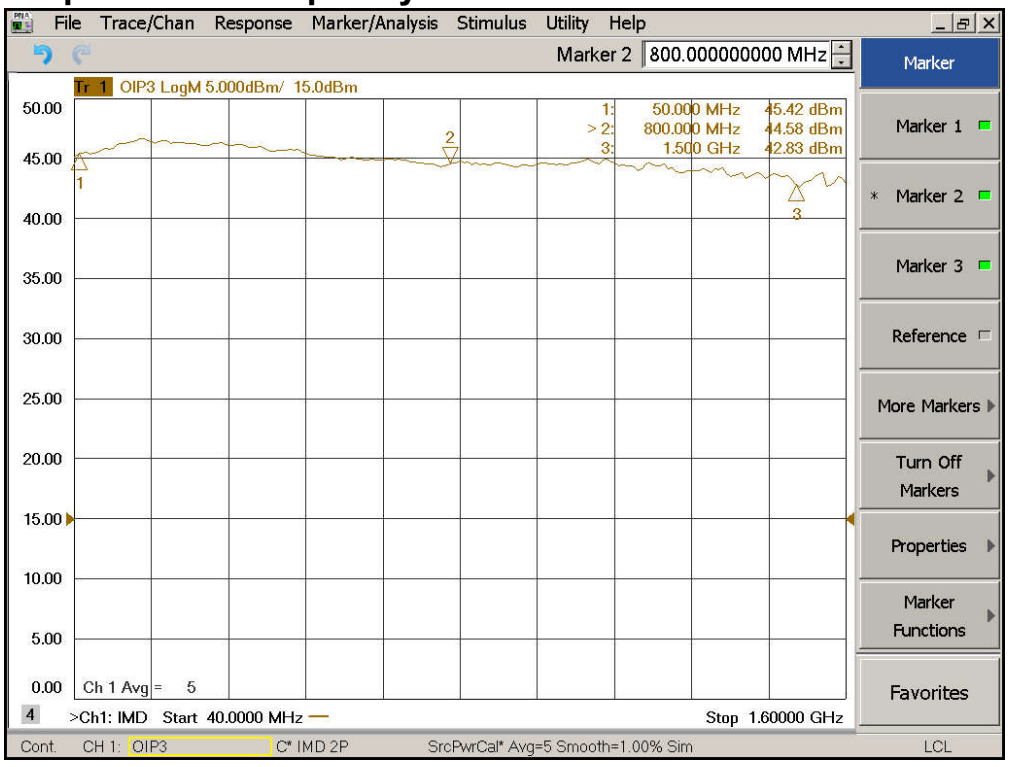
Noise Figure vs Frequency



Output P1dB vs Frequency



Output IP3 vs Frequency

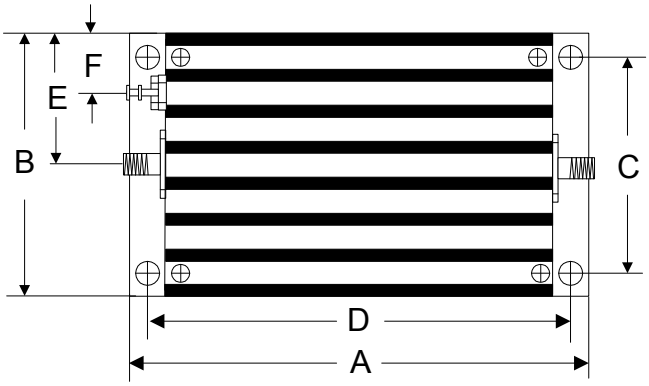


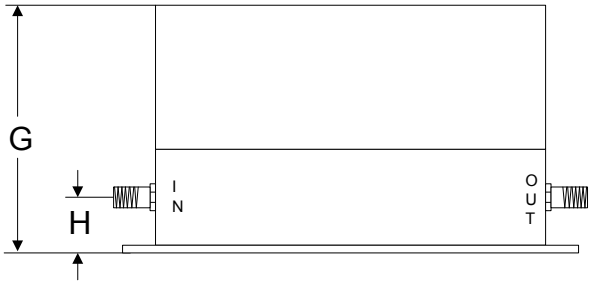
Absolute Maximum Ratings

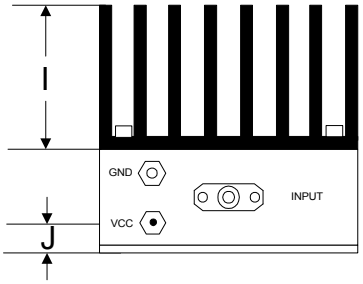
Parameter	Absolute Maximum
RF Input Power	+20dBm
DC Supply Voltage	+30V
Operating Temperature	-40 °C to +70 °C
Storage Temperature	-55 °C to +125 °C

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