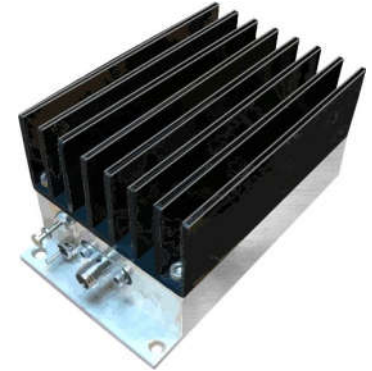


## DESCRIPTION

AMCOM's AM001029PA-P2 is a Power Amplifier module. It is designed for general purpose applications. It operates from 1 MHz to 1000 MHz. The module operates using a +12V supply and uses SMA connectors for input and output.



## FEATURES

- Frequency Range: 1-1000MHz
- Gain: 40dB
- P1dB: +30dBm (1Watt)
- IP3: +43dBm
- Noise Figure: 3.5dB
- DC Power: +12V
- DC Reverse Protected
- SMA Connector

Performance measured @ 500MHz

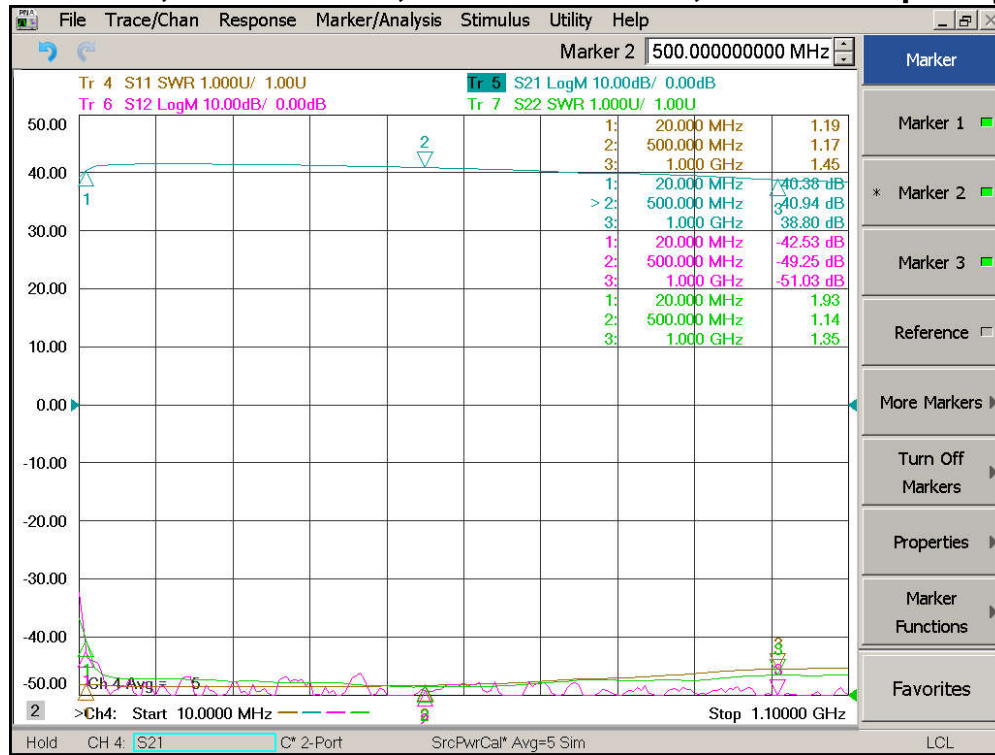
## APPLICATIONS

- Wireless Infrastructure
- Military & Aerospace
- Test and Measurement

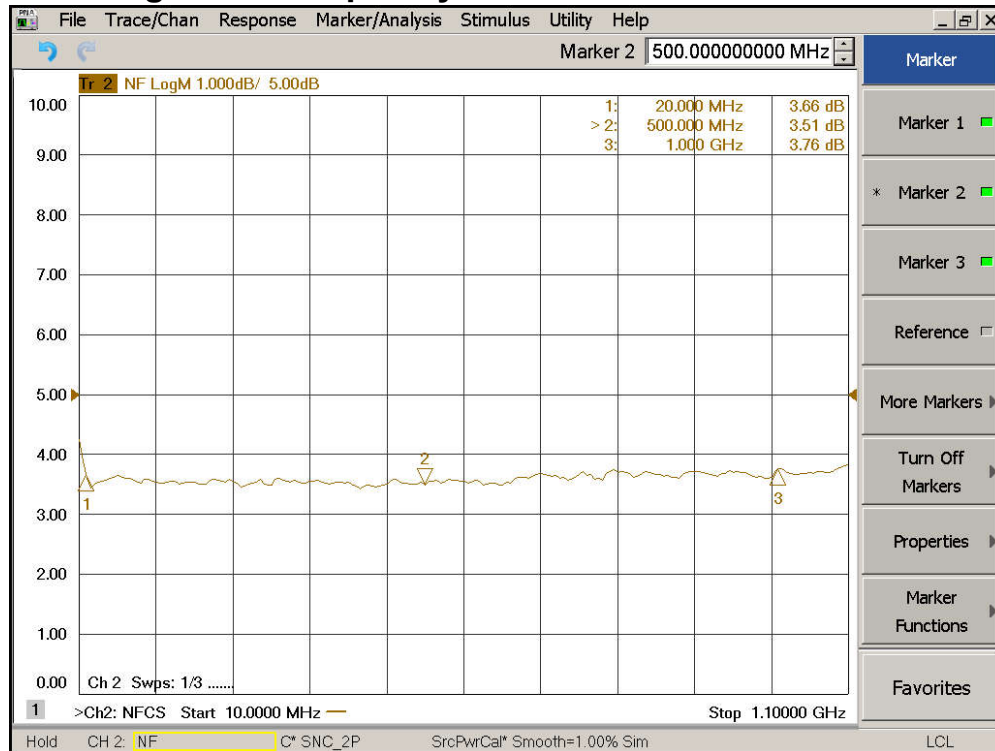
## Electrical Specifications @ +25°C, $Z_{IN} = Z_{OUT} = 50\Omega$ , DC Supply = +12V

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	MHz	1		1000
Small Signal Gain $S_{21}$	f = 1MHz	dB	39	40
	f = 10MHz	dB	39	40
	f = 500MHz	dB	39	40
	f = 800MHz	dB	38	39
	f = 1000MHz	dB	37	38
Gain Flatness	dB		$\pm 1.5$	$\pm 2.0$
Output Power $P_{1dB}$	f = 500MHz dBm	+29	+30	
Output IP3	f = 500MHz dBm	+41	+43	
Reverse Isolation $S_{12}$	f = 500MHz dB	-40	-45	
Noise Figure	f = 500MHz dB		3.5	4.5
VSWR	Input VSWR $S_{11}$ f = 500MHz		1.2:1	2.0:1
	Output VSWR $S_{22}$ f = 500MHz		1.2:1	2.0:1
DC Power Supply	V	11	12	13
DC Current	mA		360	450

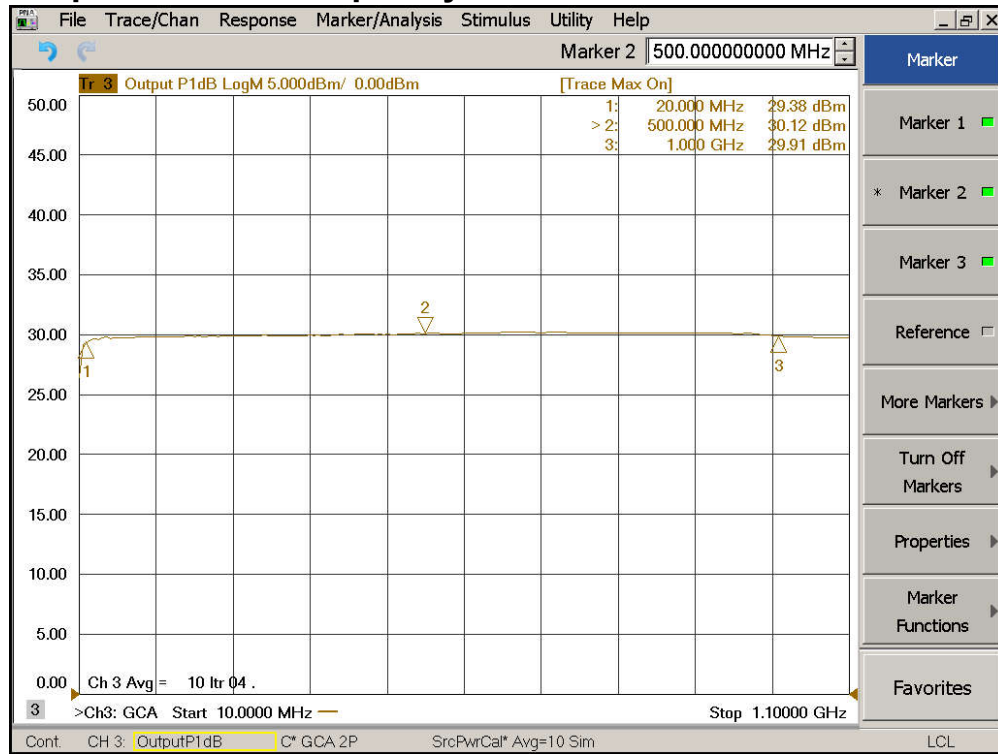
### Gain S21, Isolation S12, Return Loss S11, S22 vs Frequency



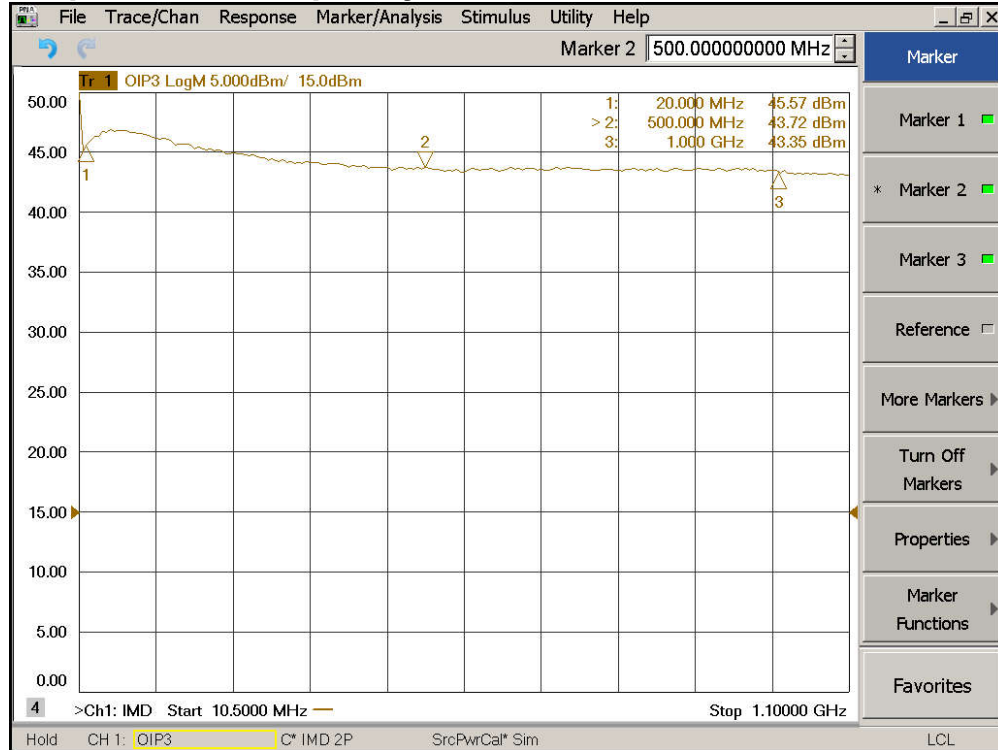
### Noise Figure vs Frequency



### Output P1dB vs Frequency



### Output IP3 vs Frequency



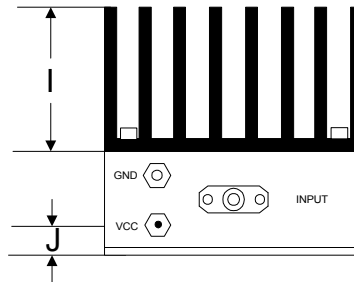
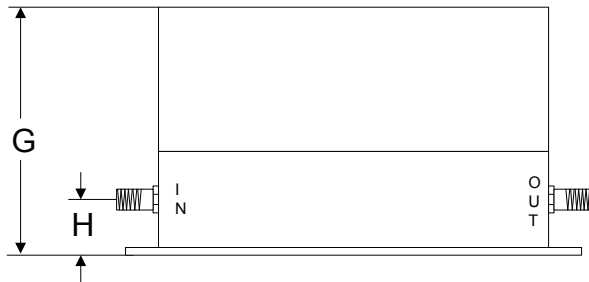
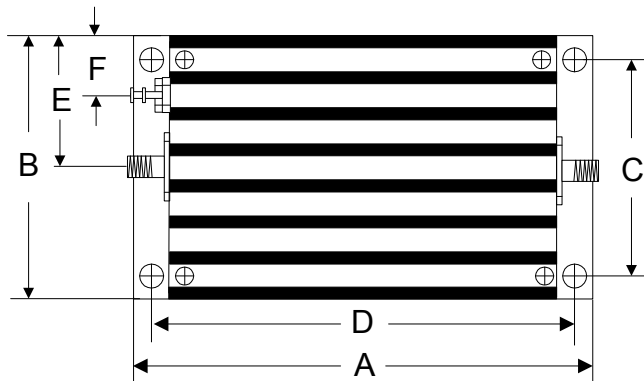
**Absolute Maximum Ratings**

Parameter	Absolute Maximum
RF Input Power	+17dBm
DC Supply Voltage	+13V
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