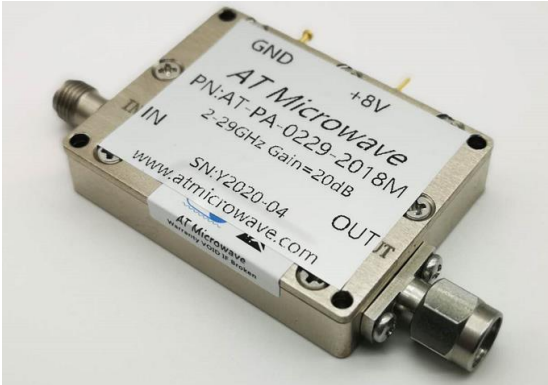


## 2-29GHz Low Phase Noise Amplifier



### Product Overview

AT-PA-0229-2018M is high power amplifier with +18dBm output power in the frequency of 2-29GHz. The DC power requirement is +8V/150mA. The module is with 2.92mm connector. It's with very low phase noise, and can be used as driver for mixers.

The power amplifier has high gain, high linearity, low input/output return loss and flat gain response.

More information, please visit [www.atmicrowave.com](http://www.atmicrowave.com)

### Advantages

- ✓ Frequency: 2-29GHz
- ✓ Psat:+18dBm
- ✓ Small signal gain: 20dB
- ✓ Single Power Supply
- ✓ Low Phase Noise -165dBc@10k offset

### Application

- ✓ 5G Communication
- ✓ Test Equipment
- ✓ ROF (RF Over Fiber)
- ✓ Radar System

### Key Features

Parameter	Min	Typical	Max
Frequency		2-26.5GHz	29GHz
Gain		20dB	
P1dB		2-20GHz: +16dBm 20-29GHz: +15dBm	
Psat		2-20GHz: +18dBm 20-29GHz: +16dBm	
Drain Supply		+8V	+9V
Current		150 mA	
Input VSWR		1.5	2.5
Output VSWR		1.5	2.5
Low Phase Noise		-165dBc/Hz 10k offset	
Spec Temp		25C	





# AT-PA-0229-2018M

2-29GHz Low Phase Noise Amplifier

## Mechanical Information

Item	Description
Input Port	SMA Female
Output Port	SMA Female
Case Material	Copper
Finish	Nickel Plated
Weight (Without Heatsink)	150g
Size:	45X34X8.5 mm

## Absolute Maximum Ratings Table

Parameter	Value
Drain Supply	+9V
RF Input Power	+12dBm
Operating Temperature	-20 to +70C
Storage Temperature	-65 to +150C

### Caution:

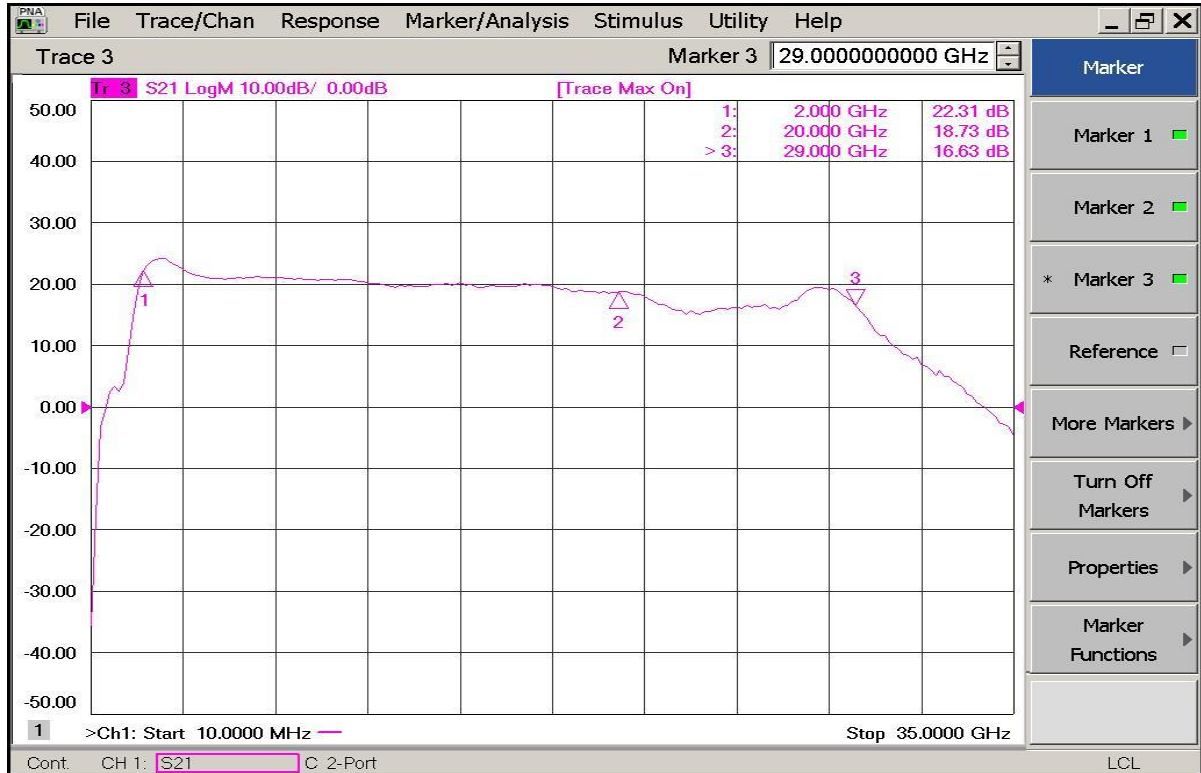
Please pay attention to the case temperature. If case temperature exceed higher than +50C, heat sink and fan are required, or the amplifier may be damaged.

## Notes:

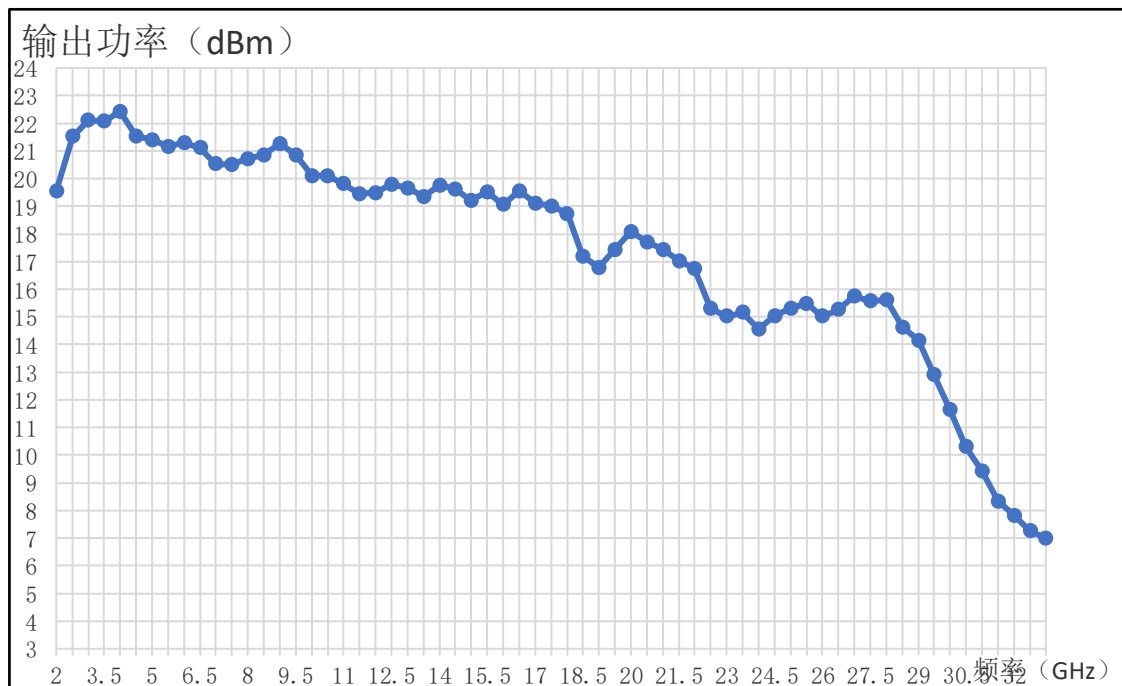
1. Datasheet may be changed according to update of MMIC, Raw materials , process, and so on.
2. This data is only for reference, not for guaranteed specifications.
3. Please contact AT Microwave team to make sure you have the most current data.



### Test data

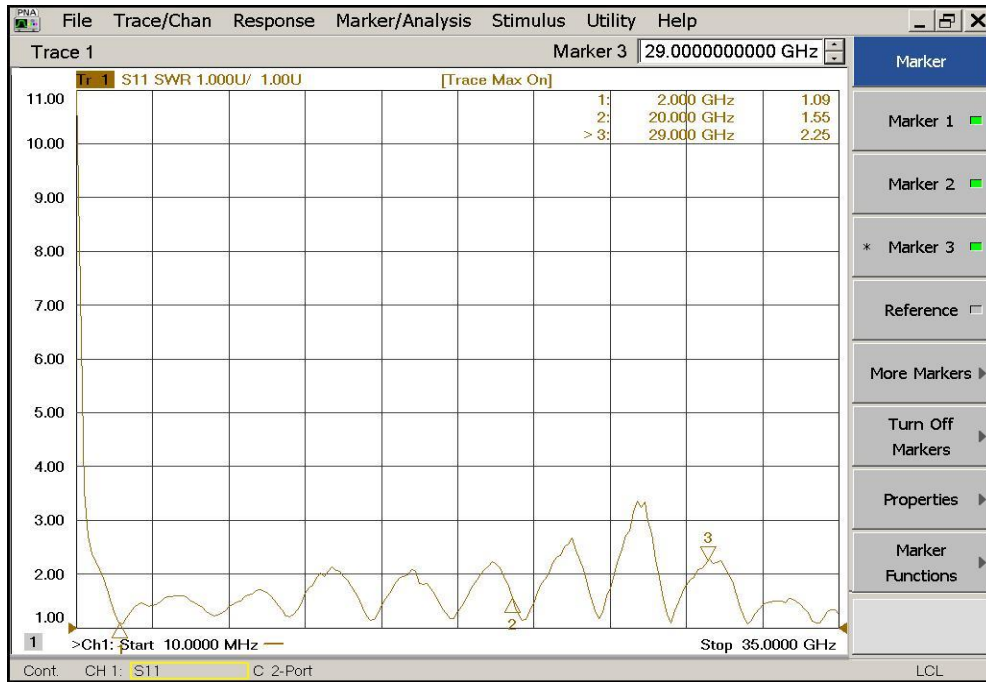


Gain vs Frequency

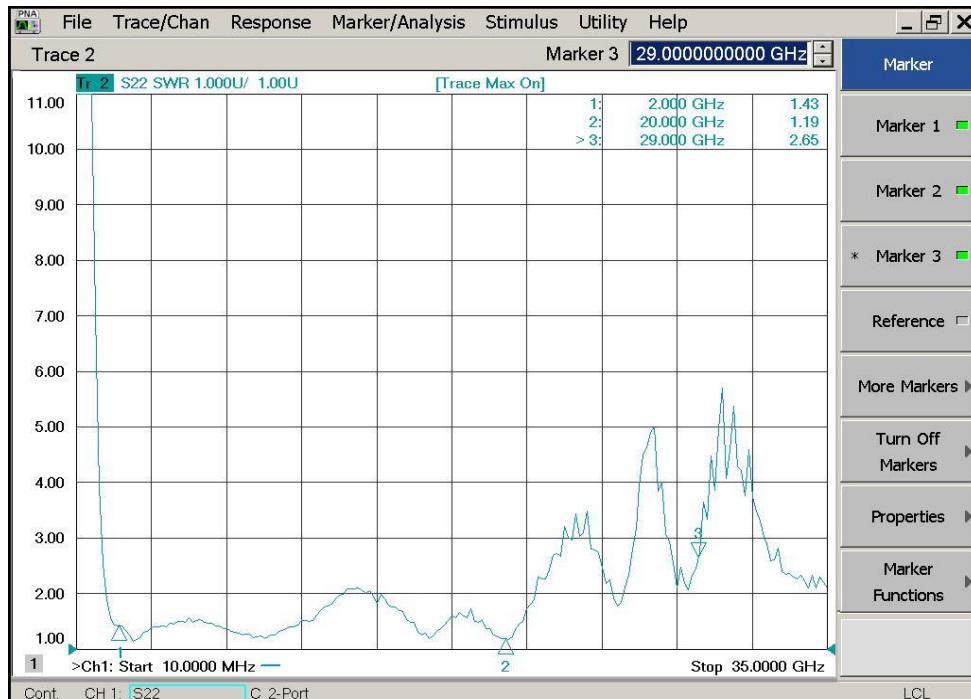


Pout vs Frequency, Pin=+4dBm





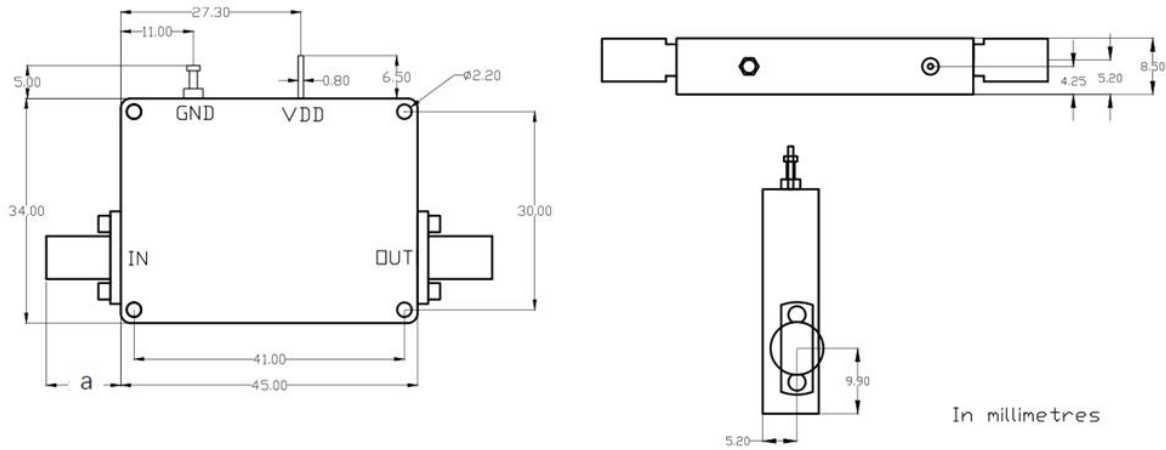
Input VSWR



VSWR Output



### Dimension: (unit in mm)



	<26.5GHz	<40GHz	<50GHz	<67GHz
Connector	SMA	2.92mm	2.4mm	1.85mm
Lenth of a	9.4mm	9.5mm	10.8mm	11.3mm

Note: Female Default. Contact with us for other types.

Heat Sink Required If Case Temp Higher Than 50C

