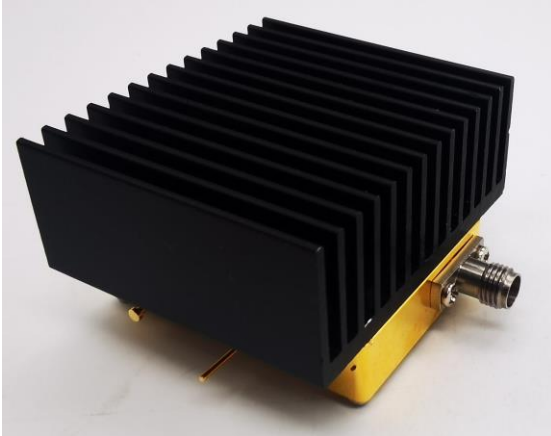


## 6-18GHz Broadband Amplifier, +27dBm



### Product Overview

AT-PA-0618-3827X is high gain power amplifier with +27dBm output power in the frequency of 6-18GHz. The DC power requirement is +10V/350mA. The module is with SMA connector.

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: 6-18GHz
- ✓ Psat:+27dBm
- ✓ Small signal gain: 40dB
- ✓ Single Power Supply

### Application

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

### Key Features

Parameter	Min	Typical	Max
Frequency		6-18GHz	
Gain	36Db	38Db	
Gain Flatness		+/-1dB	
P1dB		+26dBm	
Psat	+25.5dBm	+27dBm	
NF		2dB	3dB
Drain Supply		+10V	+12V
Current		350 mA	
Input Return Loss		-10dB	
Output Return Loss		-10dB	
Spec Temp		25C	





# AT-PA-0618-3827X

## 6-18GHz Power Amplifier

### Mechanical Information

Item	Description
Input Port	SMA Female
Output Port	SMA Female
Case Material	Copper
Finish	Gold Plated
Weight (Without Heatsink)	150g
Size:	45x34x9.5 mm

### Absolute Maximum Ratings Table

Parameter	Value
Drain Supply	+13V
RF Input Power	+15 dBm
Operating Temperature	-20 to +70C
Storage Temperature	-65 to +150C

#### Caution:

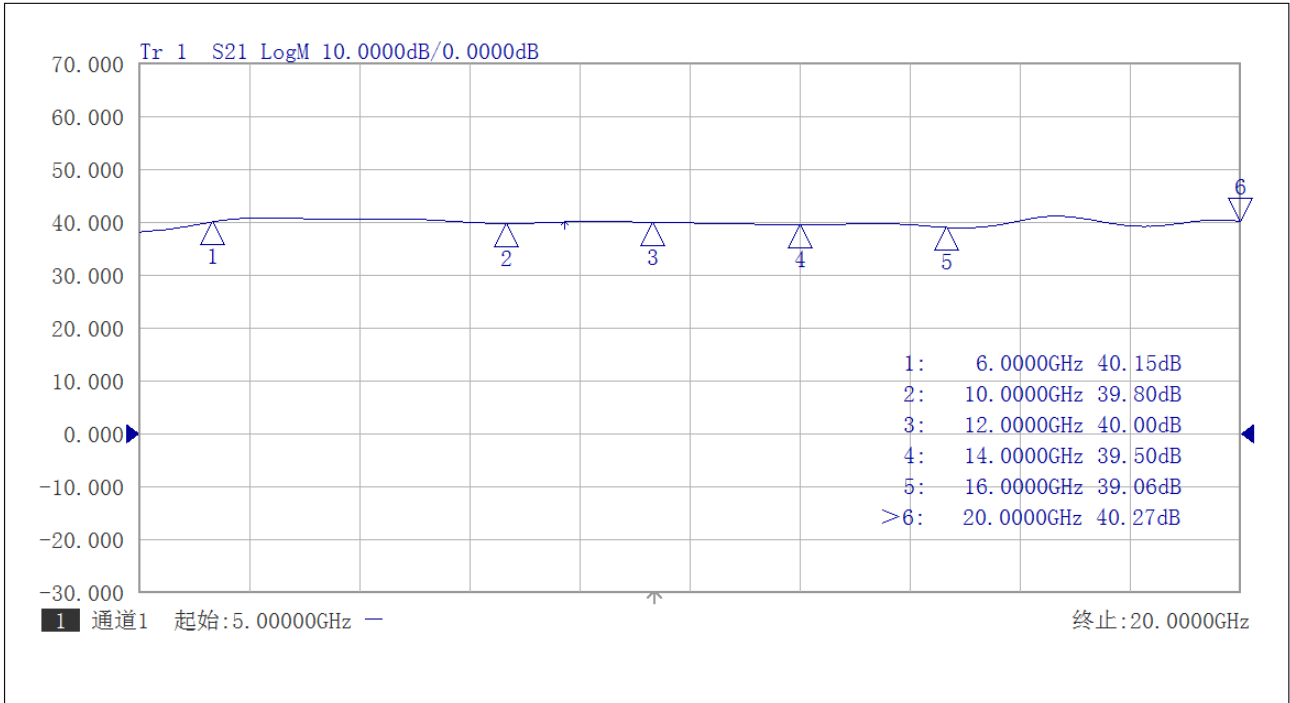
Please pay attention to the case temperature. If case temperature exceed higher than +50C, heat sink and fan are required, or the amplifier may be damaged.

#### Notes:

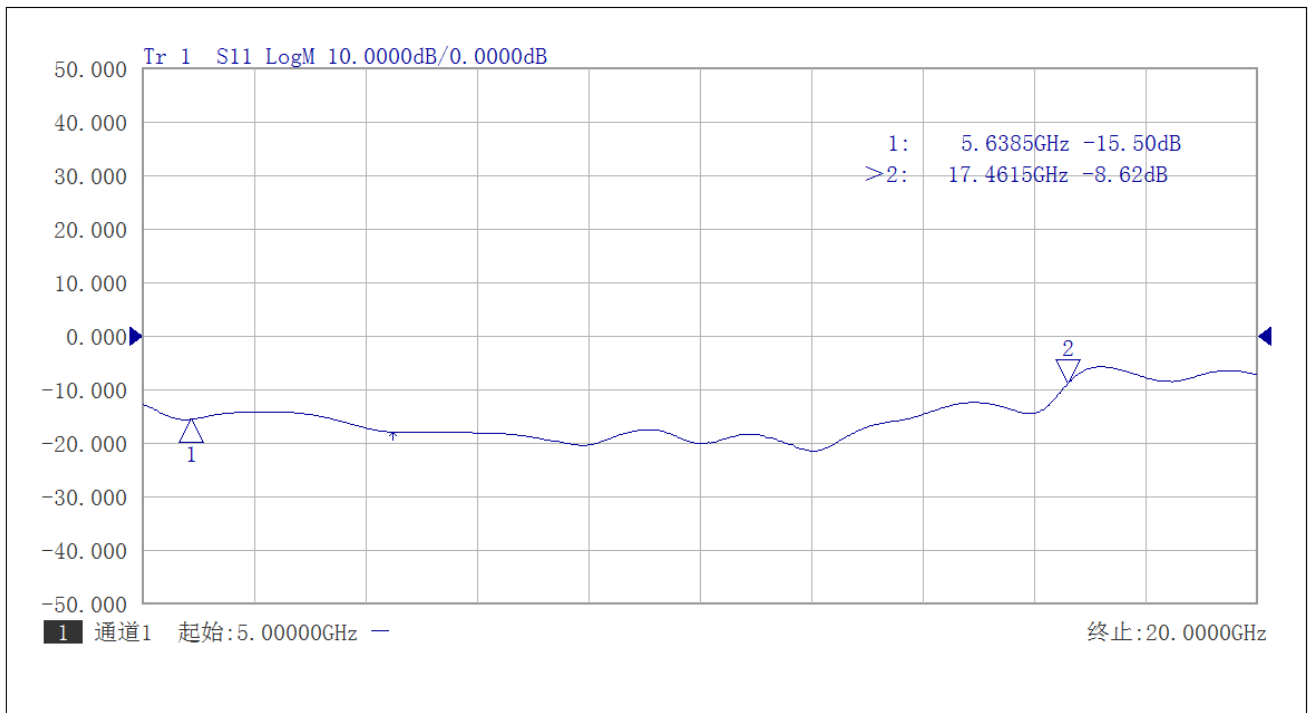
1. Datasheet may be changed according to update of MMIC, Raw materials , process, and so on.
2. This data is only for reference, not for guaranteed specifications.
3. Please contact AT Microwave team to make sure you have the most current data.



### Test Data:

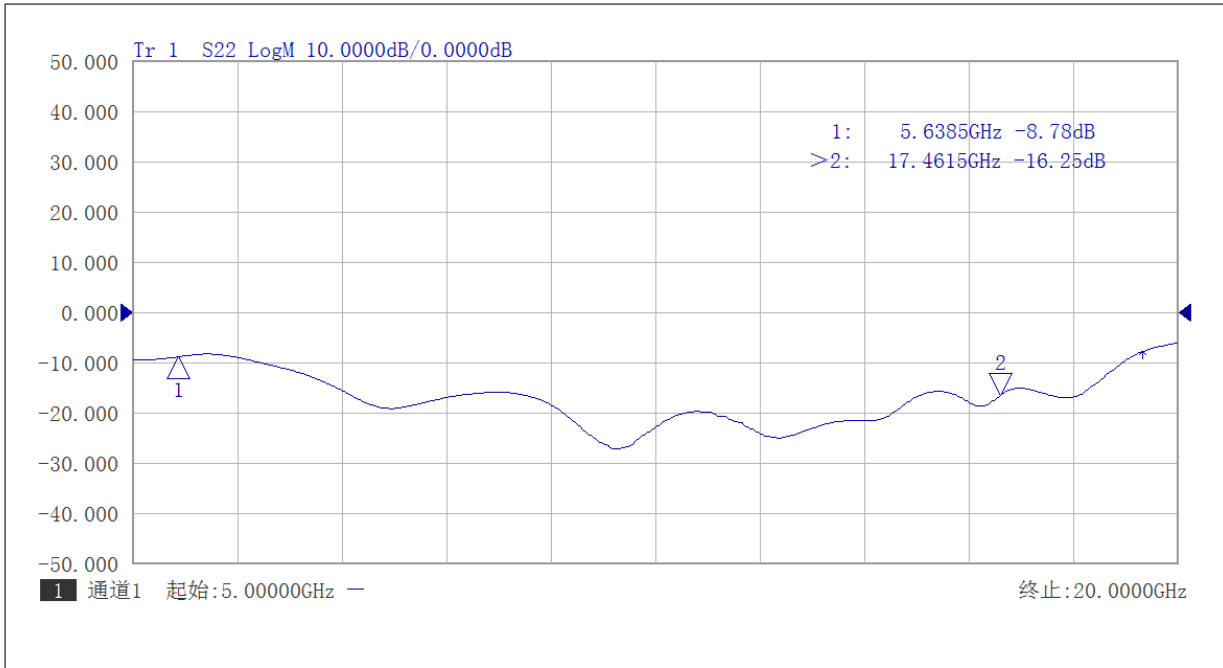


Gain vs Frequency

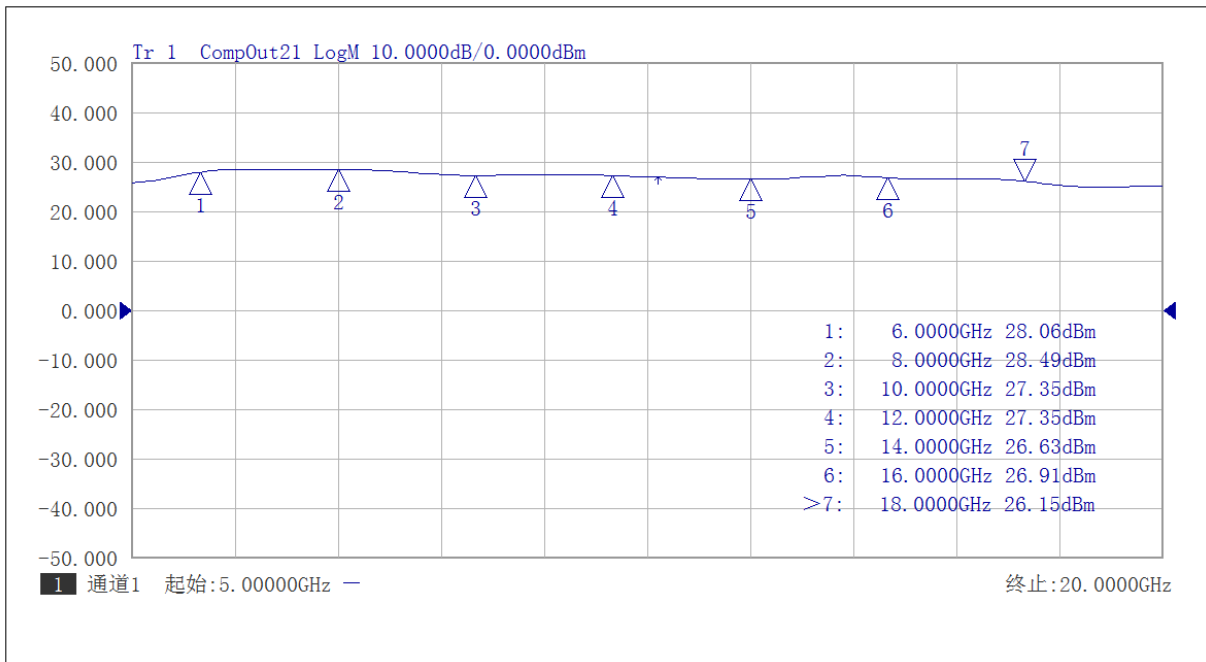


Input Return Loss vs Frequency





Output Return Loss vs Frequency



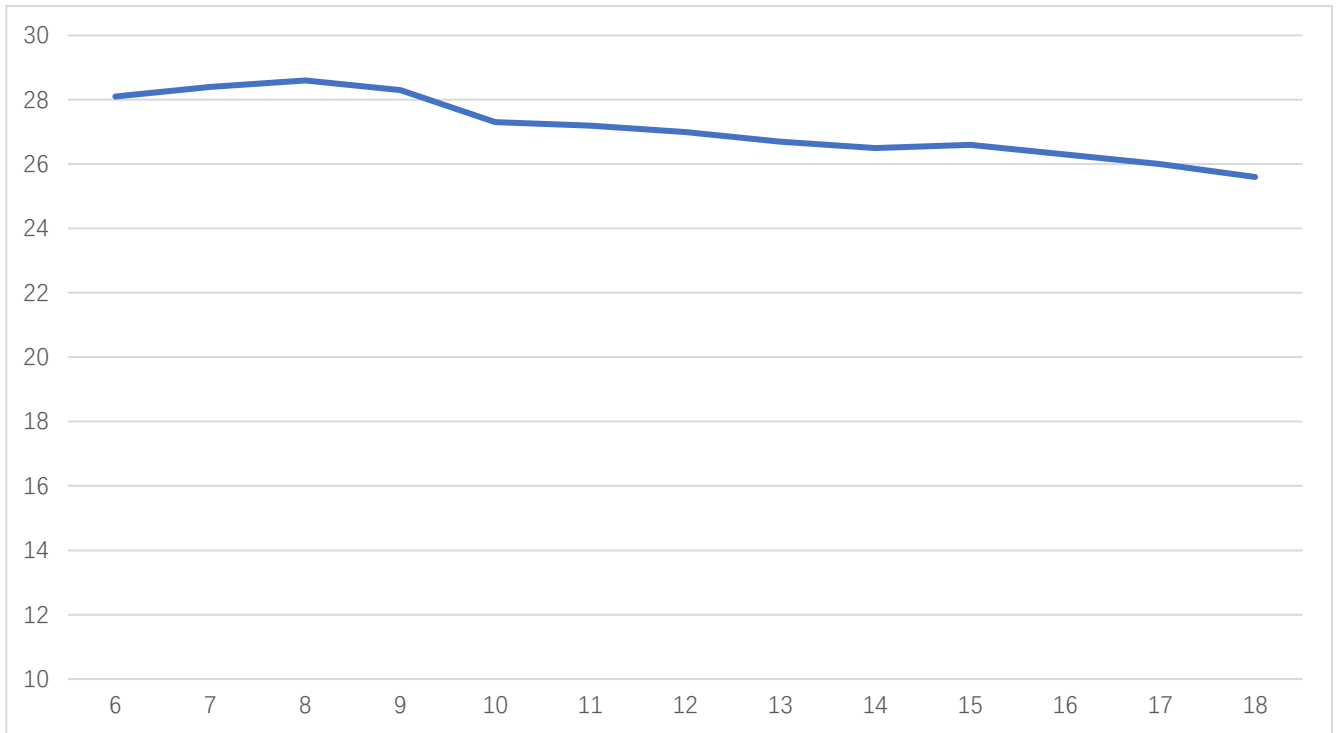
P1dB vs Frequency



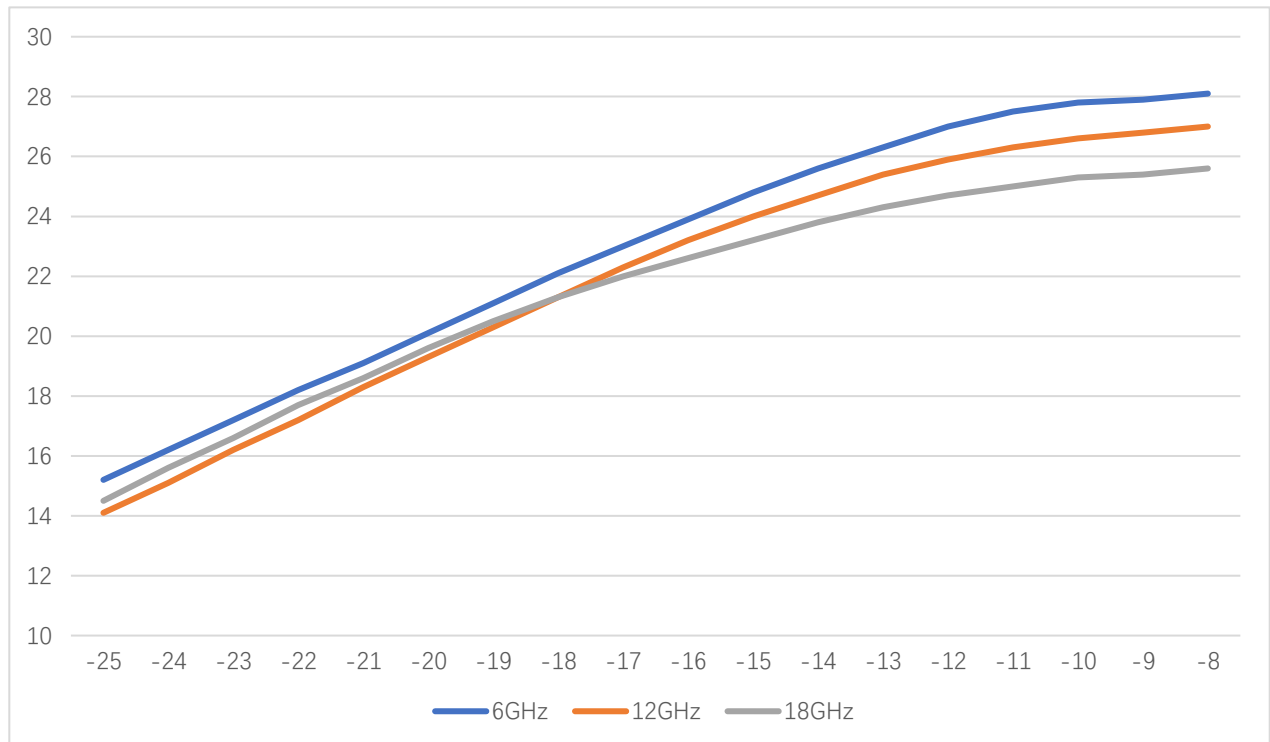


# AT-PA-0618-3827X

6-18GHz Power Amplifier



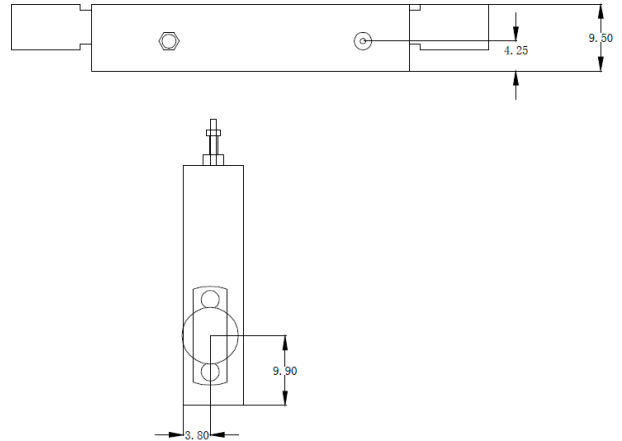
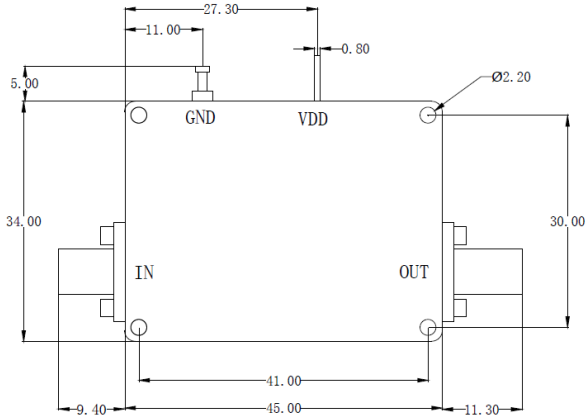
Psat vs Frequency



Pout vs Pin at 6/12/18GHz

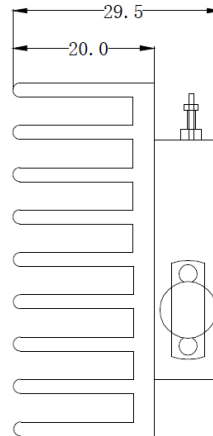
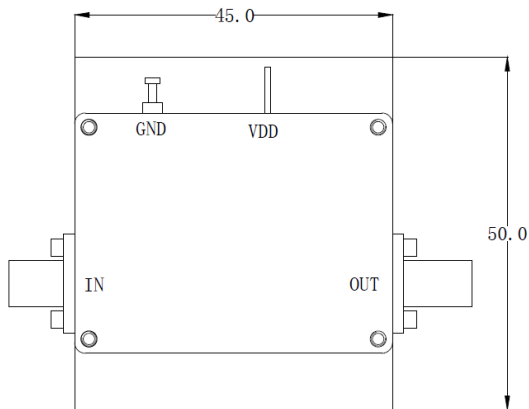


### Dimension: (unit in mm)



	<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.



Including a small heatsink without Fan if output Power higher than +20dBm.  
Customers can removed it or use their own heatsink according to actual situation.

**Heat Sink Required During Operation**

