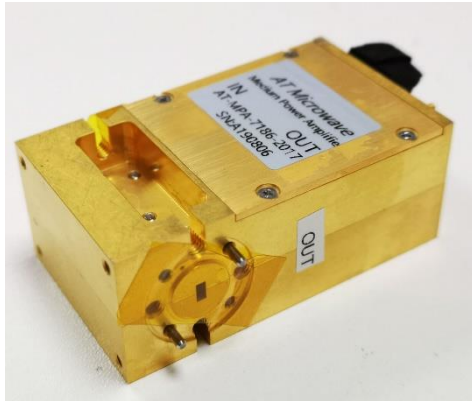


### E Band Broadband Power Amplifier



#### Description:

AT-PA-7186-2017 is power amplifier with +17dBm output power in the frequency of 71-86GHz. The DC power requirement is +5/400mA. The module is with a standard WR-12 waveguide.

The power amplifier has high gain, high linearity, low input/output return loss and flat gain response. It can also be used from 68-89Hz with some variation of performance.

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

#### Feature

- ✓ Frequency: 71-86GHz
- ✓ Psat:+17dBm
- ✓ Small signal gain: 20dB
- ✓ Single Power Supply

#### Application

- ✓ E Band Point to Point Communication
- ✓ FOD (Foreigner Objects Debris)
- ✓ Test Equipment
- ✓ ROF (RF Over Fiber)
- ✓ Radar System

#### Electronical Specifications:

Parameter	Min	Typical	Max
Frequency	68	71-86GHz	89
Gain		20dB	
Drain Supply		+5V	+8V
Current Id		400 mA	
P1dB		+15dBm	
Psat		+17dBm	
Input Return Loss		-7 dB	
Output Return Loss		-7 dB	
Spec Temp		25C	





# AT-PA-7186-2017

71-86GHz Power Amplifier,  $P_{sat}=+17\text{dBm}$

## Mechanical Information

Item	Description
Input Port	WR-12
Output Port	WR-12
Case Material	Copper
Finish	Gold Plated
Weight (Without Heatsink)	221g
Size:	See outline

## Absolute Maximum Ratings Table

Parameter	Value
Drain Supply	+9V
RF Input Power	+12dBm
Operating Temperature	0 to +50C
Storage Temperature	-65 to +150C

### Caution:

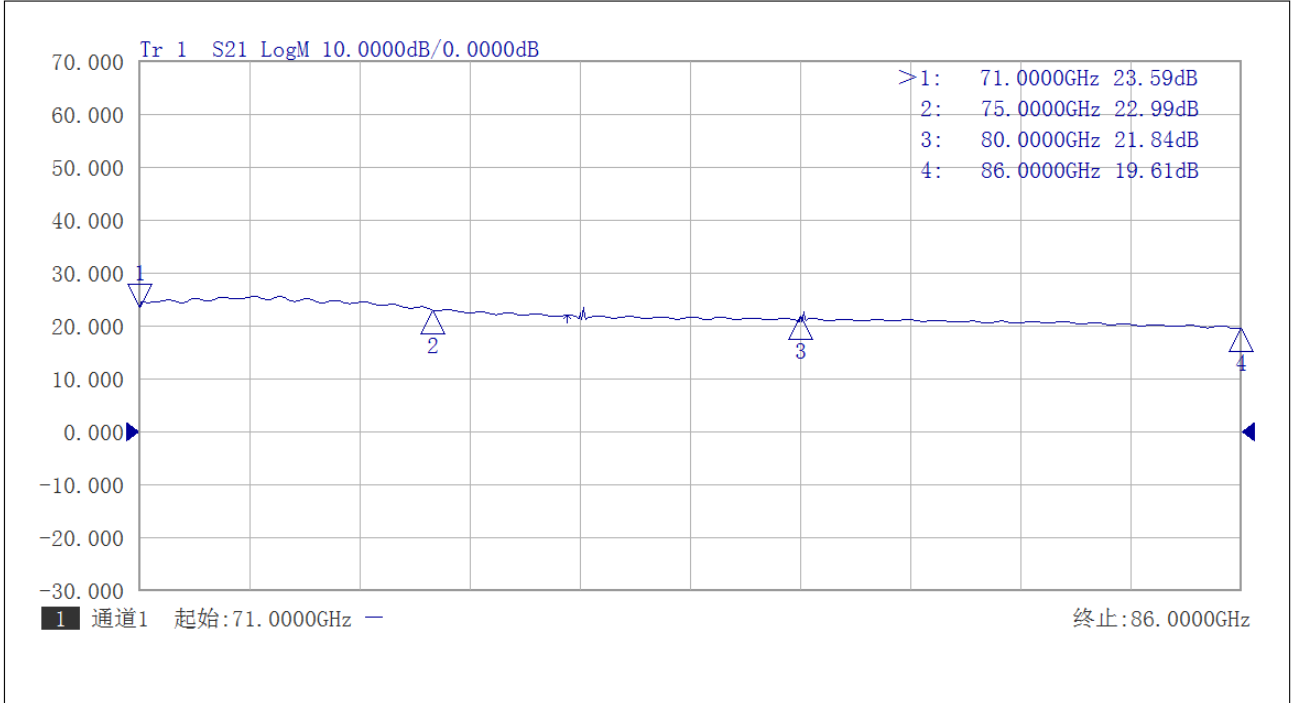
Please pay attention to the case temperature. If case temperature exceeds higher than +50C, heat sink and fan are required, or the amplifier may be damaged.

### Notes:

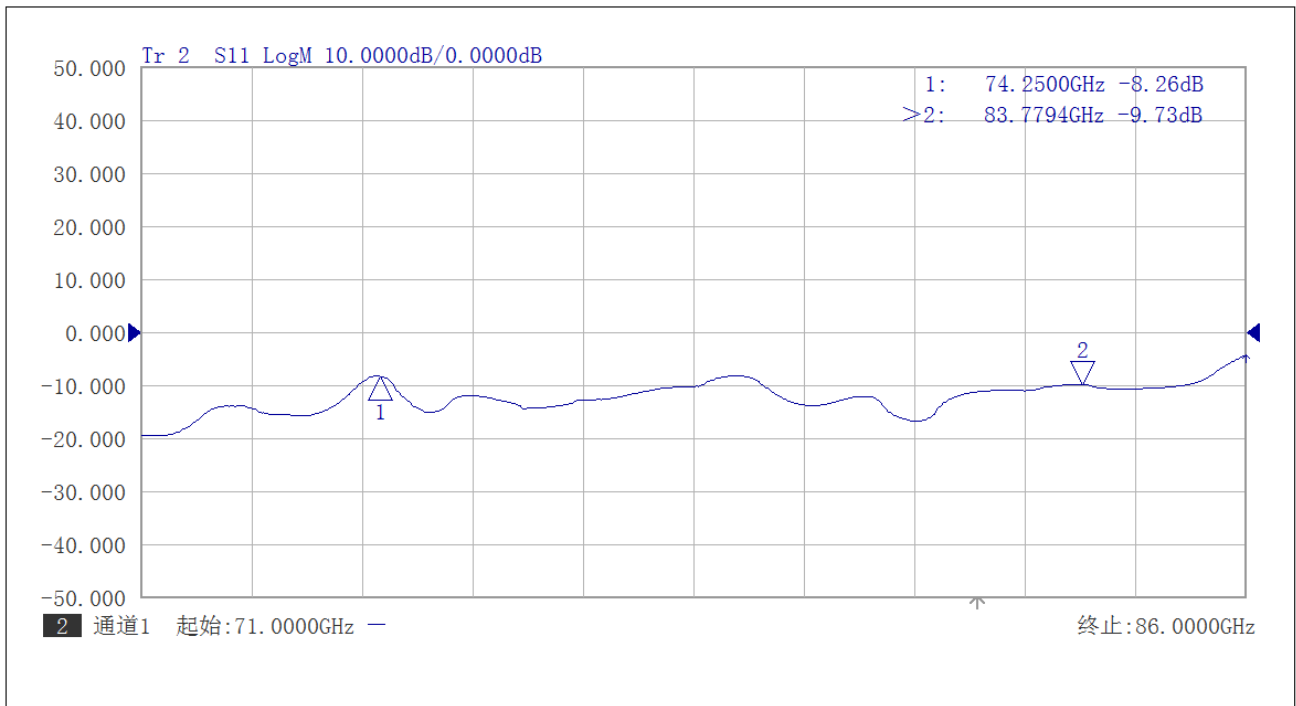
1. Datasheet may be changed according to update of MMIC, Raw materials , process, and so on.
2. This data is only for reference, not for guaranteed specifications.
3. Please contact AT Microwave team to make sure you have the most current data.



### TEST DATA(23C)

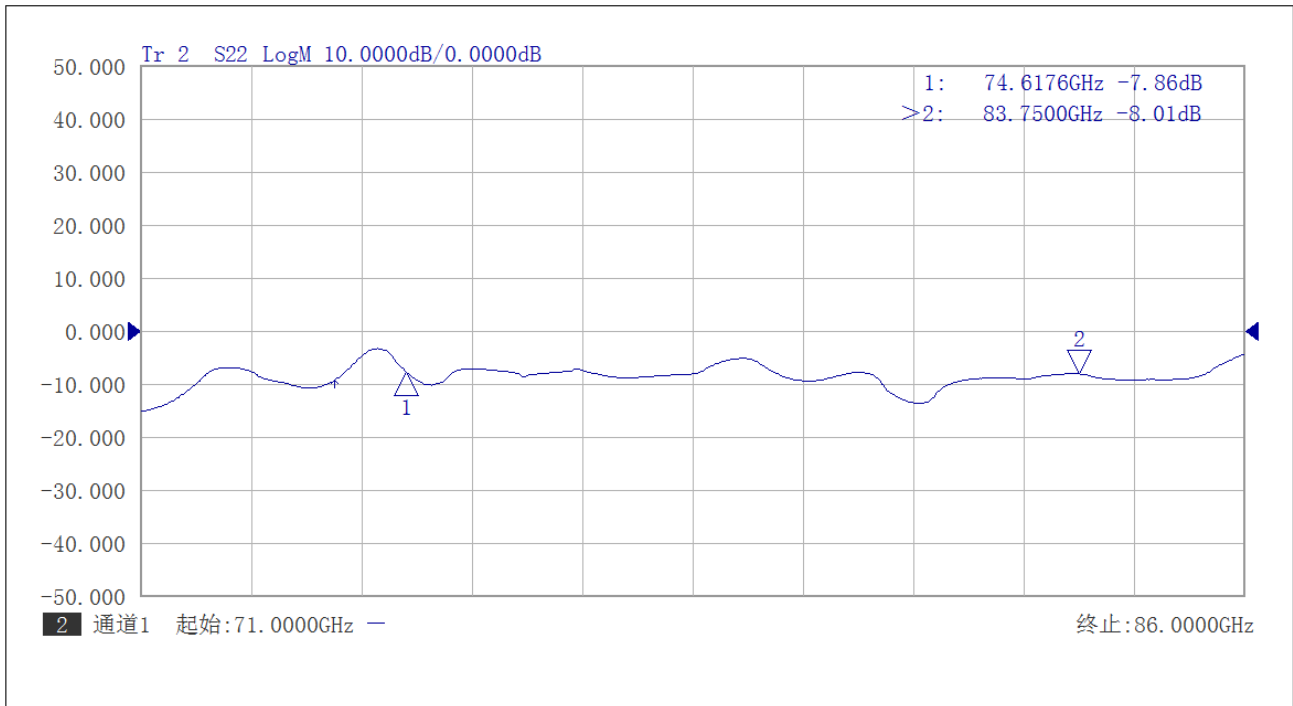


Gain Vs Frequency 71-86GHz

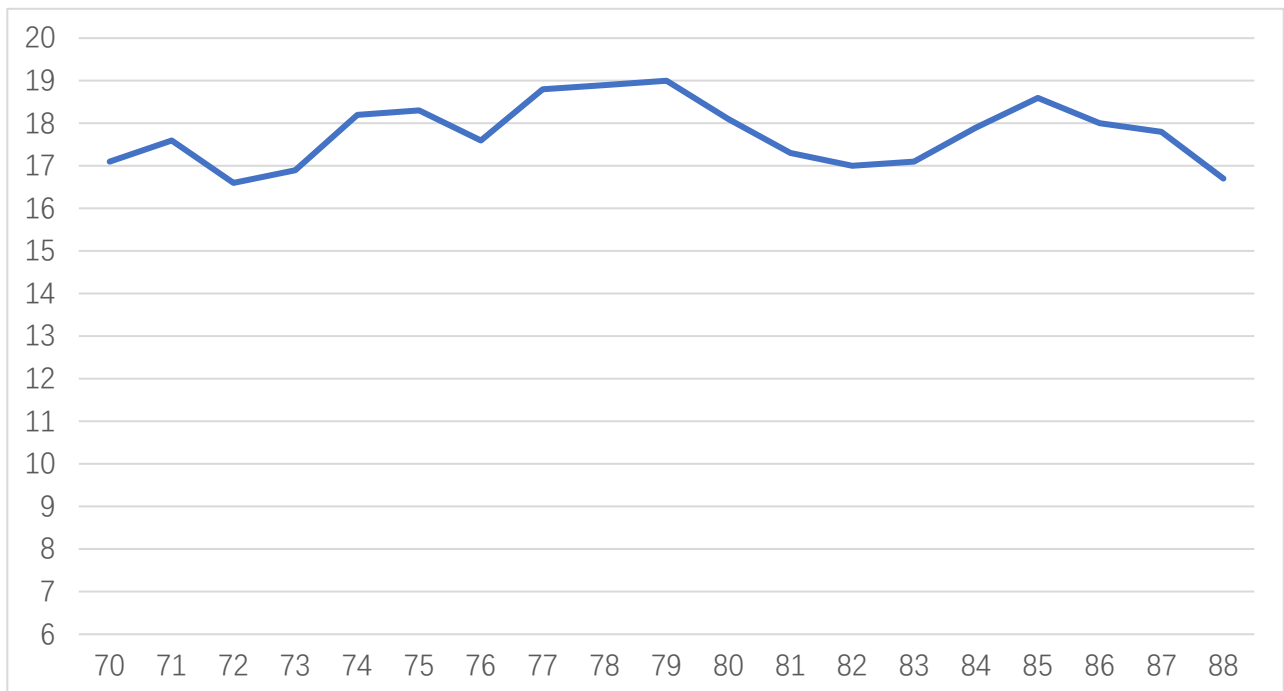


Input Return Loss





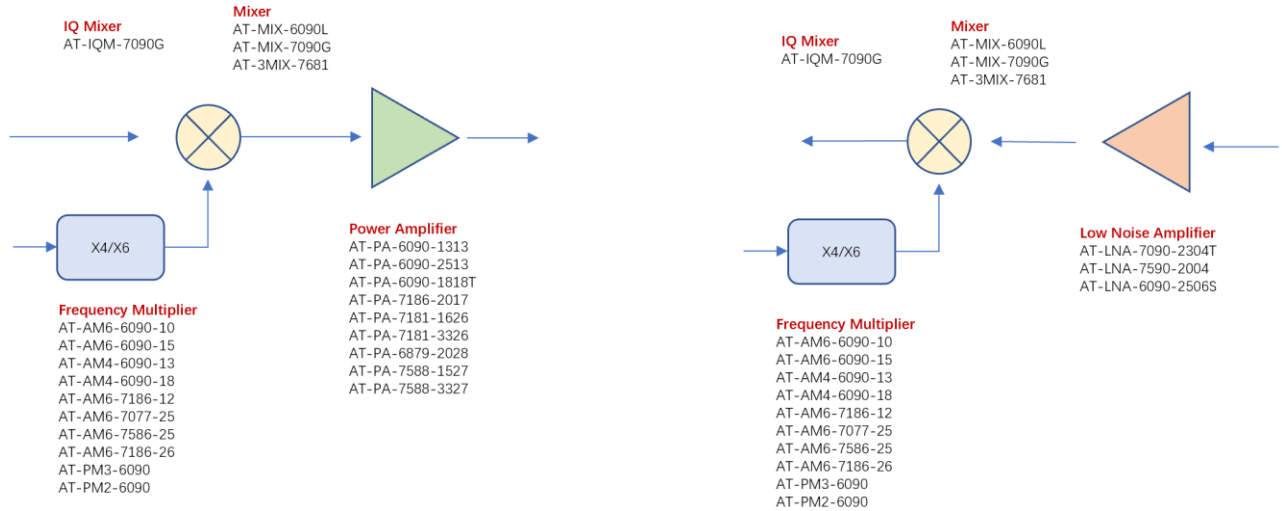
Output Return Loss



Psat Vs Frequency



### E Band 60-90GHz



### Dimension:(unit in mm)

