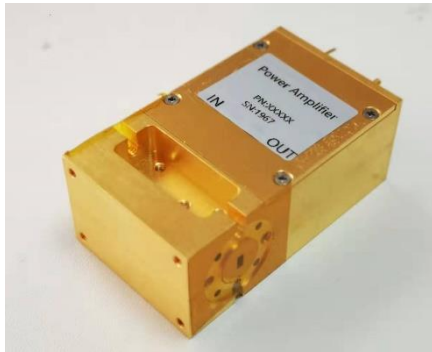


## E1 Band High Power Amplifier

### Product Overview



AT-PA-7176-2028 is power amplifier with +28dBm output power in the frequency of 71-76GHz. The DC power requirement is +5/1400mA. 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 68-79Hz with some variation of performance.

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

### Advantages

- ✓ Frequency: 71-76GHz
- ✓ Psat:+28dBm
- ✓ Small signal gain: 20dB
- ✓ Single Power Supply

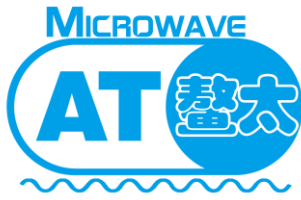
### Application

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

### Key Features

Parameter	Min	Typical	Max
Frequency		71-76GHz	
Gain		20dB	
Drain Supply		+5V	+6V
P1dB	+25dBm	+26dBm	
Psat	+27	+28dBm	
Idd NO RF		1.4A	
IDD Psat(see curve)		1.7A	2A
Input Return Loss		-5 dB	
Output Return Loss		-5 dB	
Spec Temp		25C	





# AT-PA-7176-2028

71-76GHz Power Amplifier, Psat=+28dBm

## Mechanical Information

Item	Description
Input Port	WR-12
Output Port	WR-12
Case Material	Copper
Finish	Gold Plated
Weight (Without Heatsink)	221g
Size:	57.5x33x22.4mm

## Absolute Maximum Ratings Table

Parameter	Value
Drain Supply	+7V
RF Input Power	+18dBm
Operating Temperature	0 to +50C
Storage Temperature	-65 to +150C

### Caution:

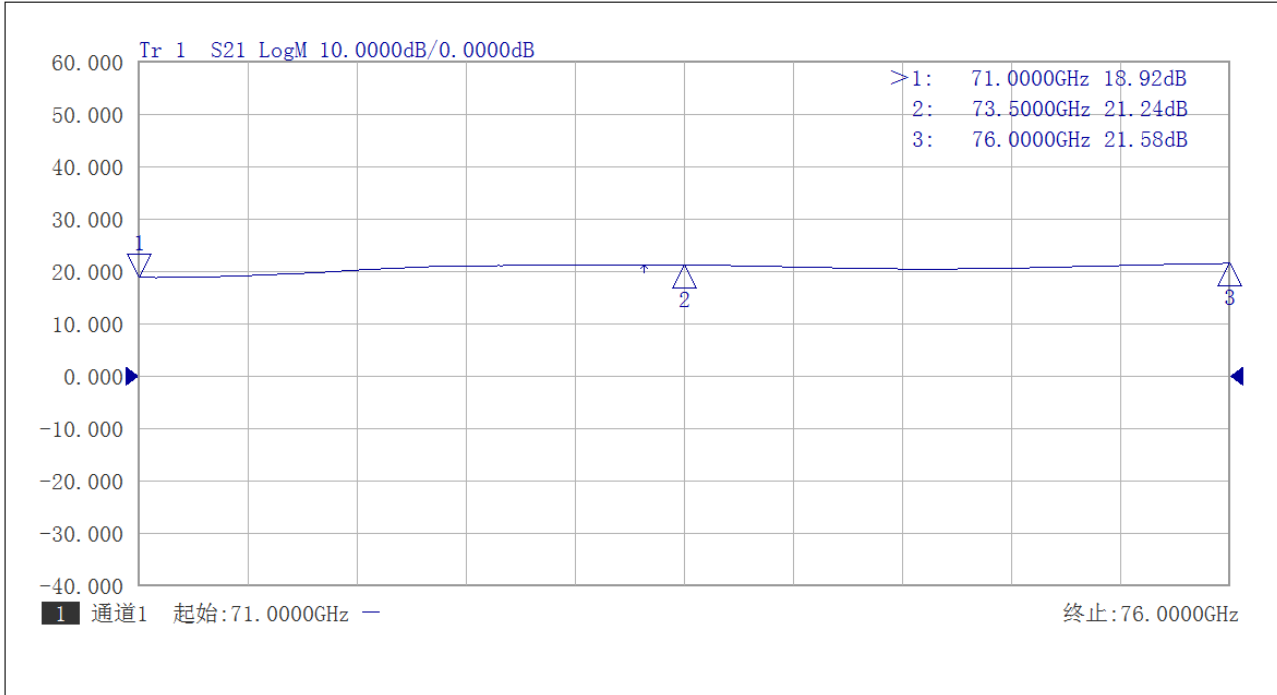
Please pay attention to the case temperature. If case temperature exceed higher than +50C, heat sink and fan are required, or the amplifier may be damaged.

### Notes:

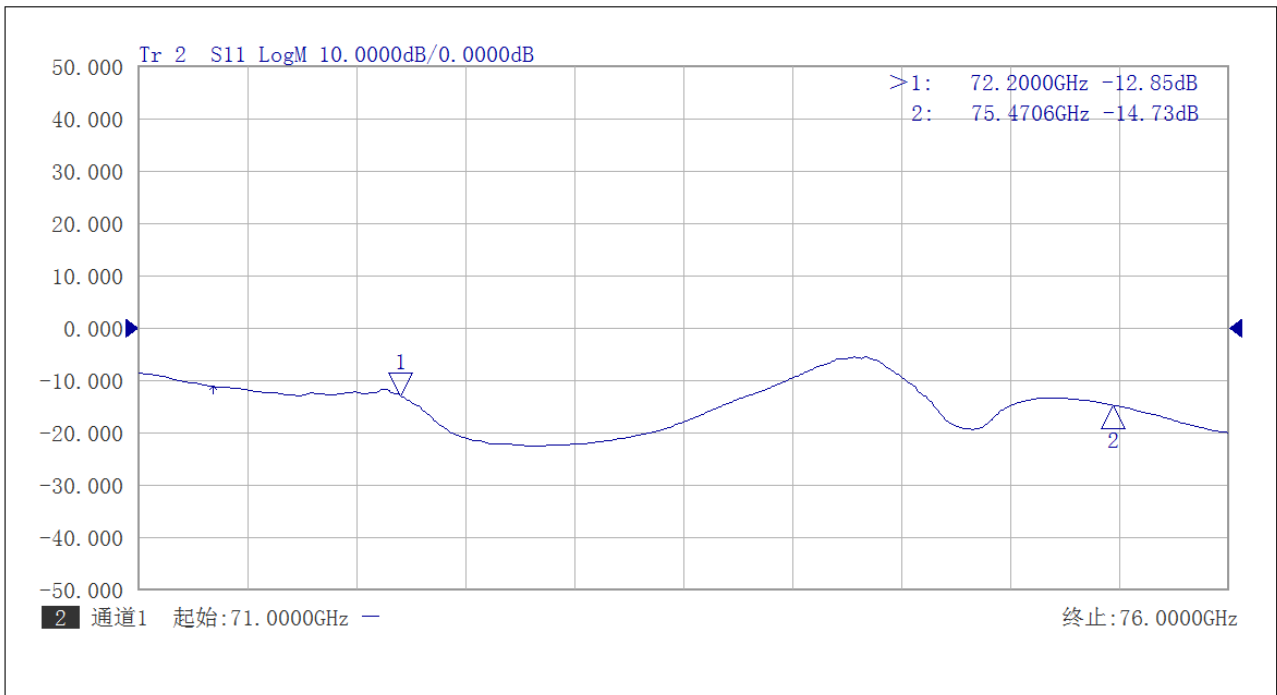
1. Datasheet may be changed according to update of MMIC, Raw materials , process, and so on.
2. This data is only for reference, not for guaranteed specifications.
3. Please contact AT Microwave team to make sure you have the most current data.



### Test data

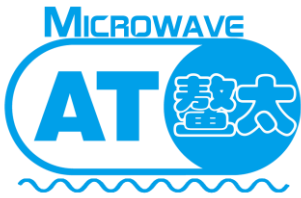


Gain Vs Frequency



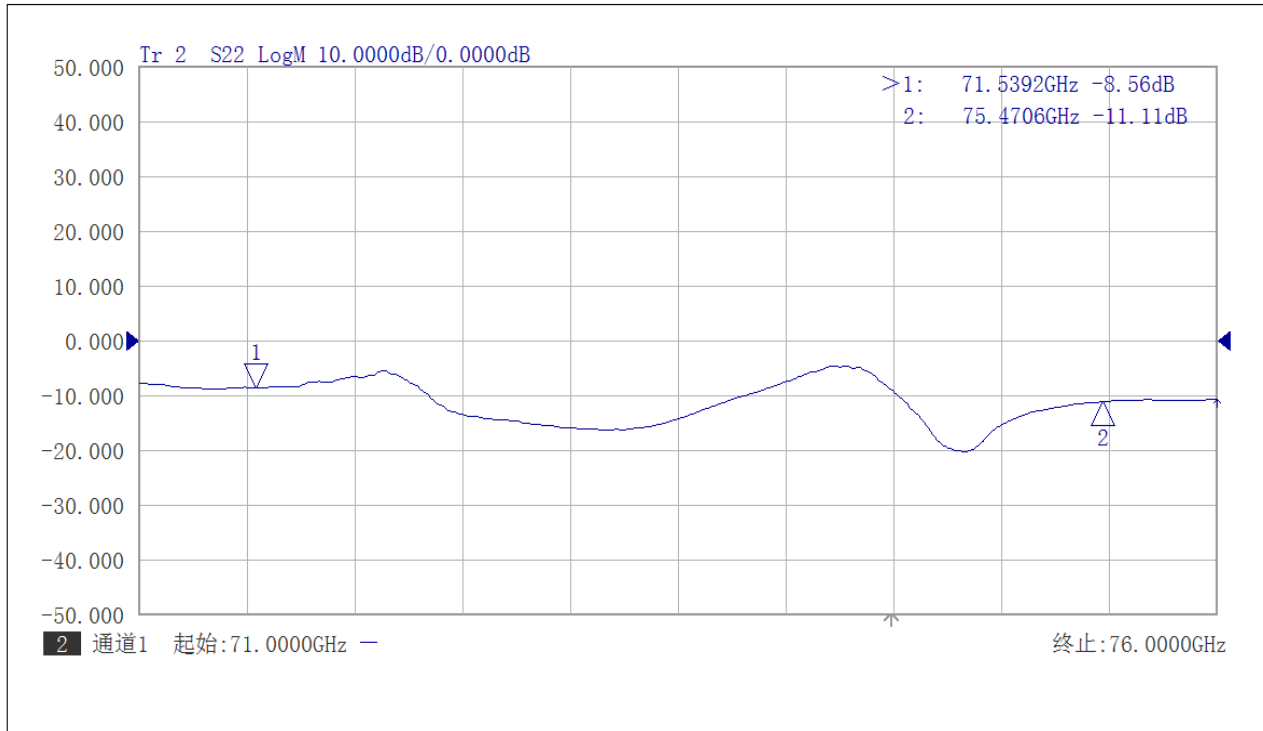
Input Return Loss



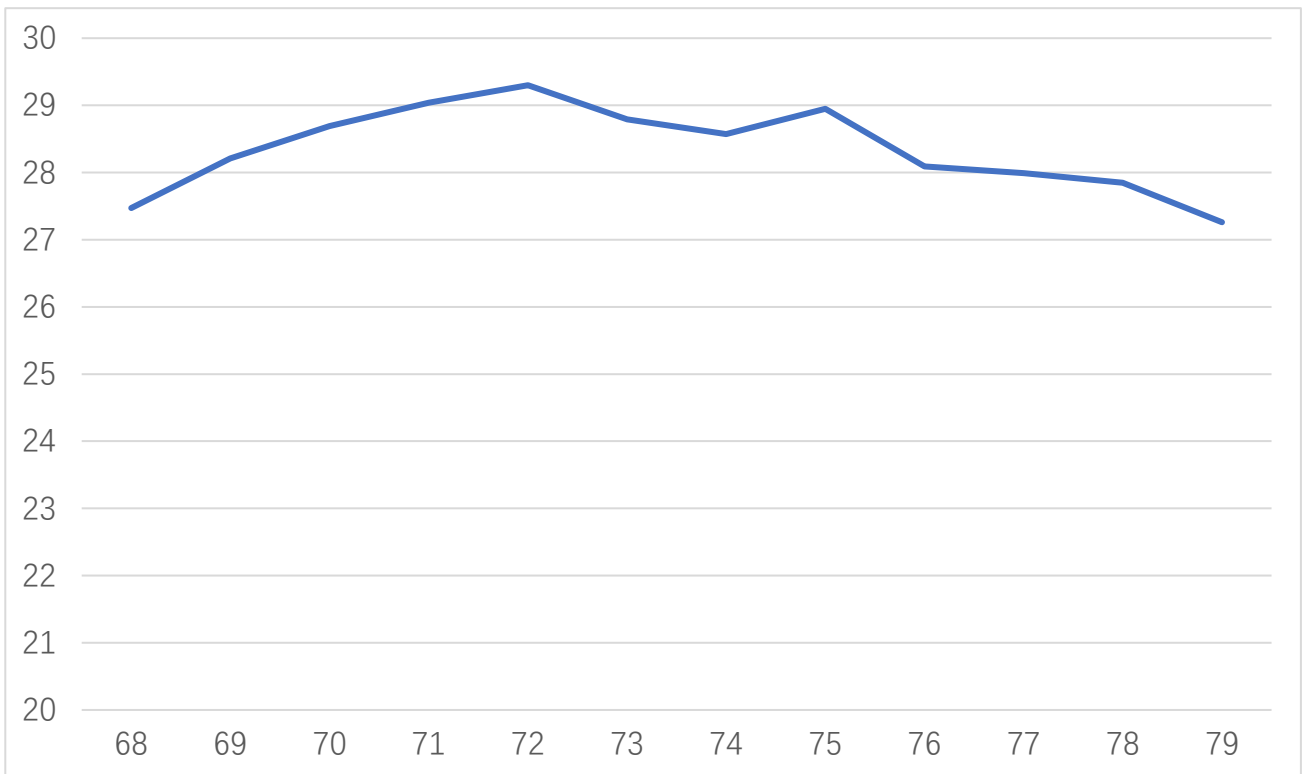


# AT-PA-7176-2028

71-76GHz Power Amplifier,  $P_{sat}=+28\text{dBm}$



Output Return Loss



Pout vs Frequency  $P_{in}=+10\text{dBm}$



