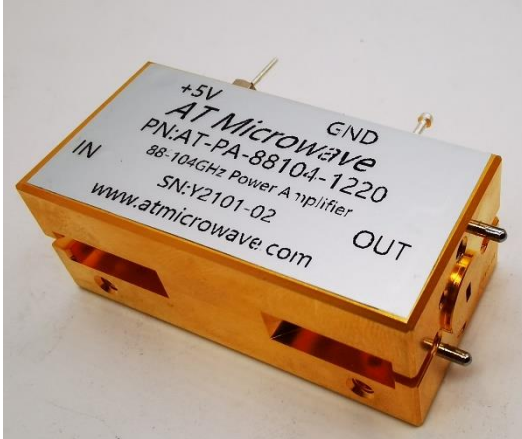


# AT-PA-88104-1220

88-104GHz Power Amplifier,  $P_{sat}=+20dBm$

## W Band Broadband Power Amplifier



### Product Overview

AT-PA-88104-1220 is power amplifier with +20dBm output power in the frequency of 88-104GHz. The DC power requirement is +5V/350mA. The module is with a standard WR-10 waveguide.

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: 88-104GHz
- ✓  $P_{sat}$ : +20dBm
- ✓ Small signal gain: 12dB
- ✓ Single Power Supply

### Application

- ✓ W band Imaging
- ✓ FOD (Foreigner Objects Debris)
- ✓ Test Equipment
- ✓ ROF (RF Over Fiber)
- ✓ Radar System

## Key Features

Parameter	Min	Typical	Max
Frequency		88-104GHz	
Gain	10	12dB	
Drain Supply		+5V	+8V
Quiescent Current/A		0.35A	
$P_{sat}$ Current/A		0.45A	
P1Db		+18 dBm	
$P_{sat}$		+20dBm	
Input Return Loss		-5dB	
Output Return Loss		-7dB	
Spec Temp		25C	

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# AT-PA-88104-1220

88-104GHz Power Amplifier,  $P_{sat}=+20\text{dBm}$

## Mechanical Information

Item	Description
Input Port	WR-10
Output Port	WR-10
Case Material	Copper
Finish	Gold Plated
Weight (Without Heatsink)	128g
Size:	50X25X20 mm

## Absolute Maximum Ratings Table

Parameter	Value
Drain Supply	+9V
RF Input Power	+15dBm
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.

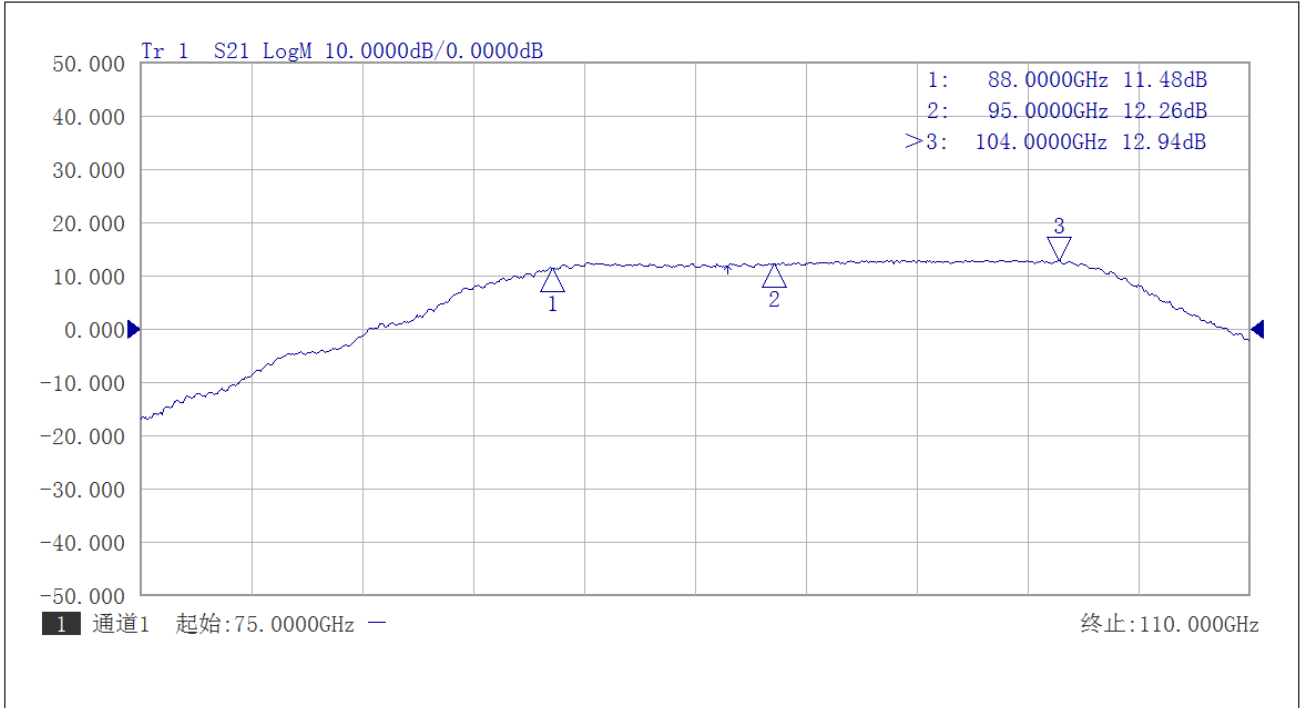
### Notes:

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.

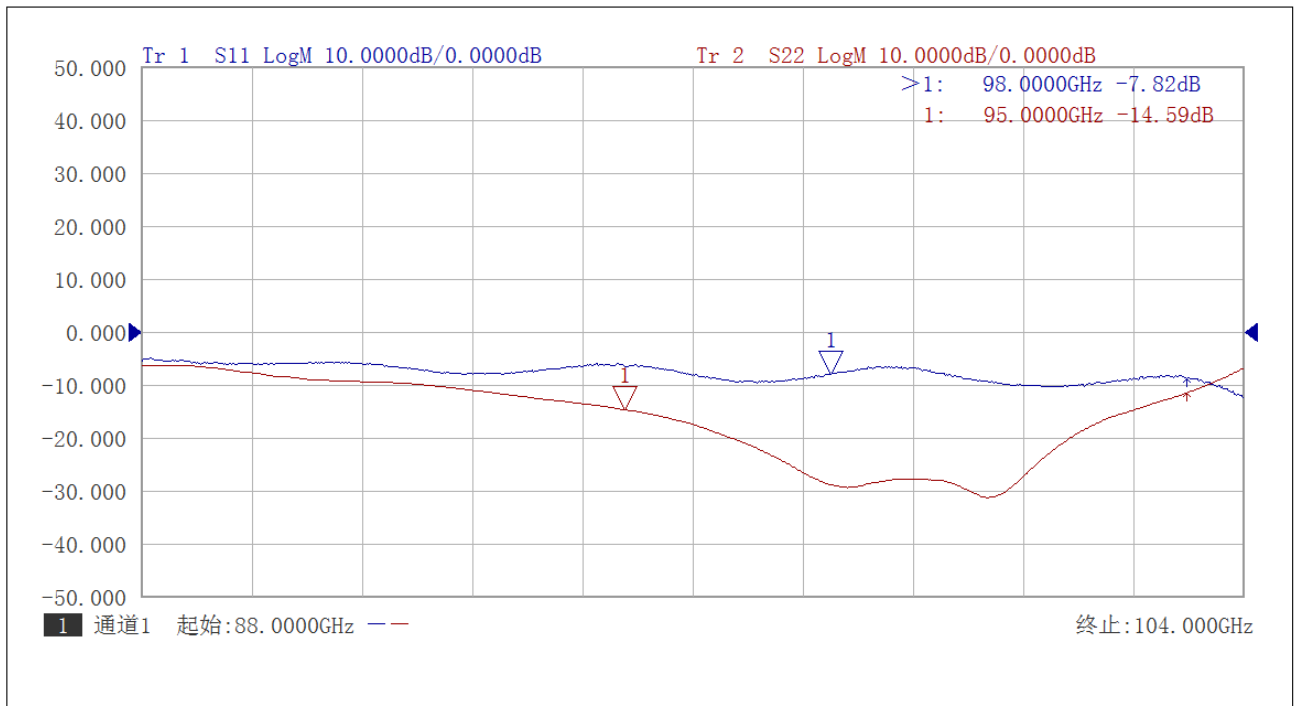
Please contact AT Microwave team to make sure you have the most current data.



### Test Data:



Gain vs Frequency



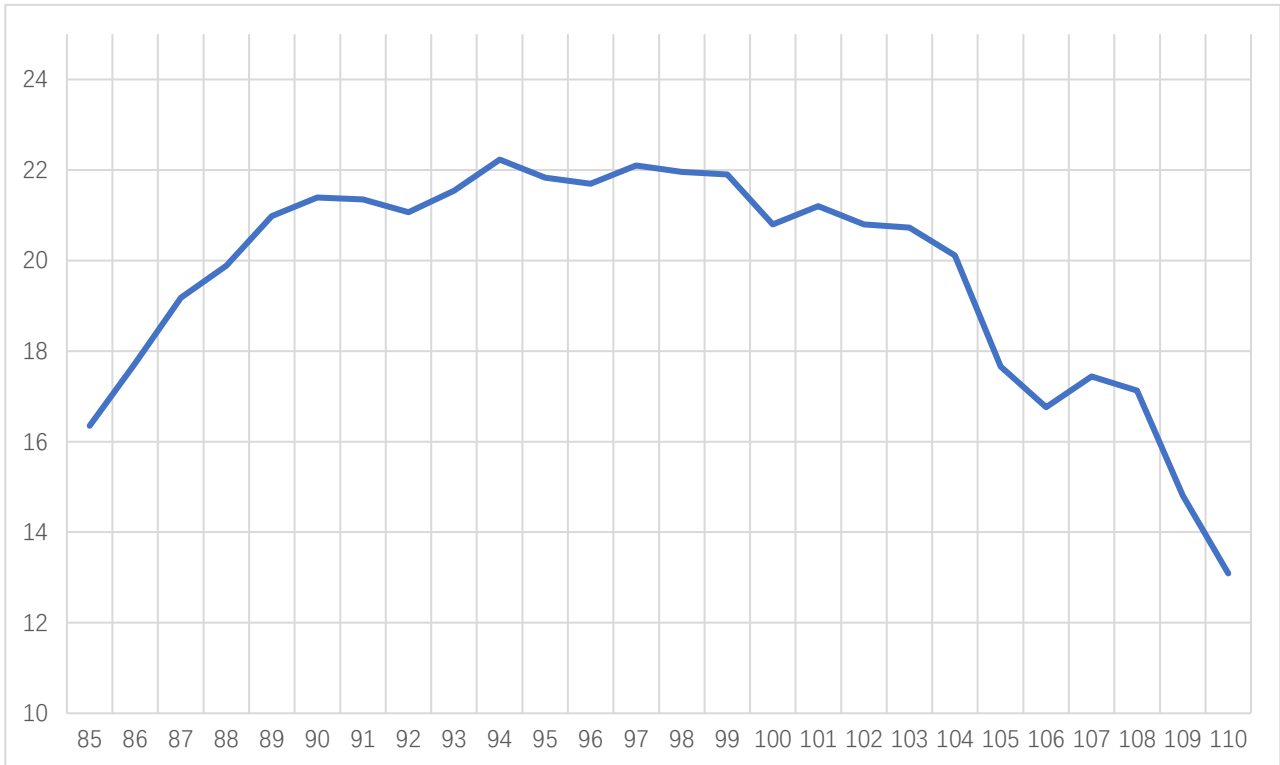
Input and Output Return Loss



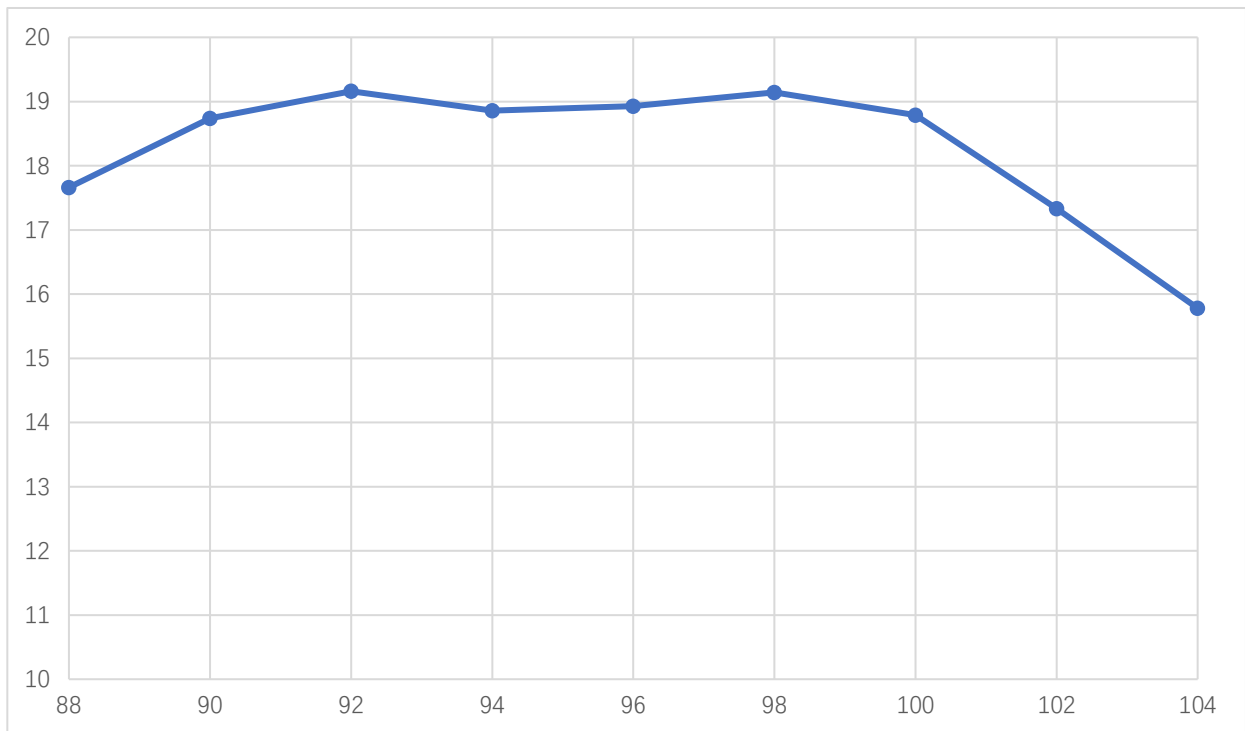


# AT-PA-88104-1220

88-104GHz Power Amplifier,  $P_{sat}=+20\text{dBm}$

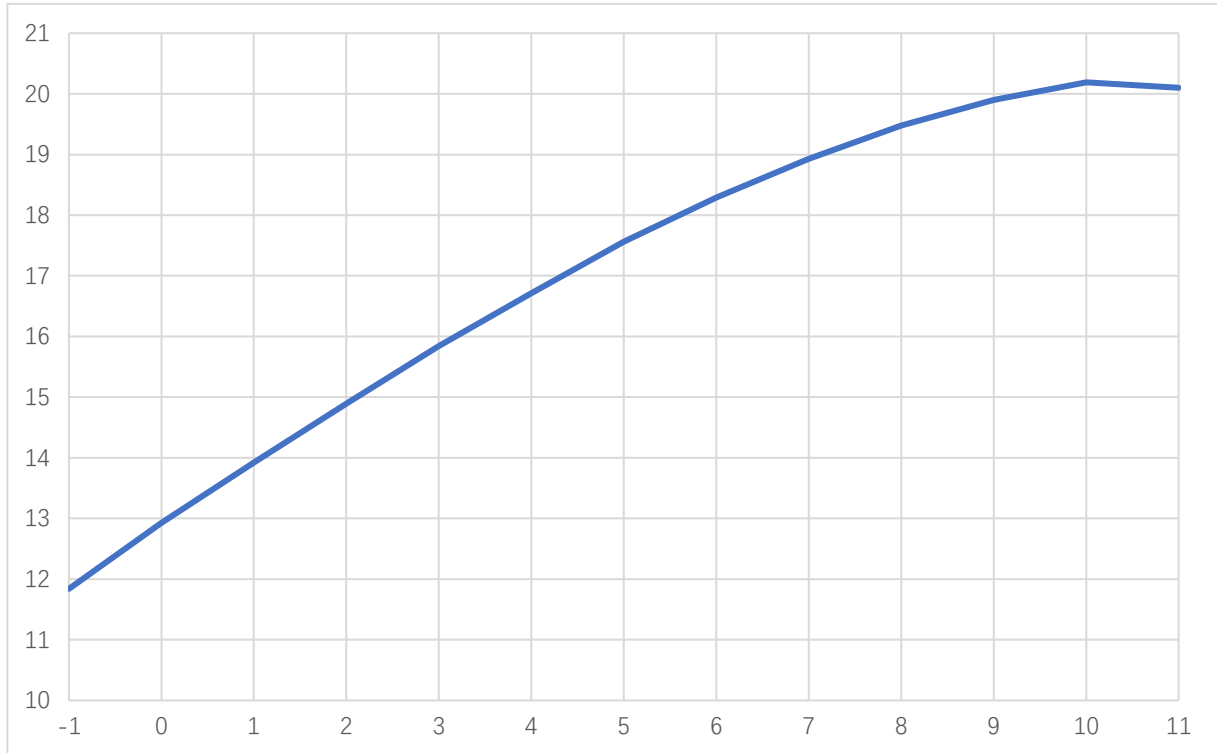


Psat vs Frequency



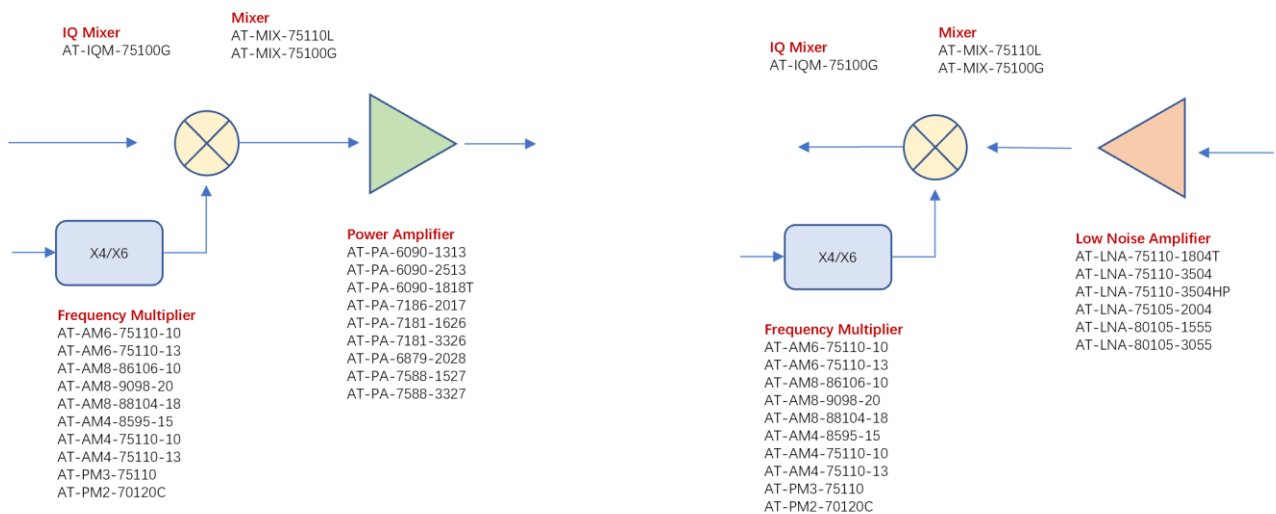
P1dB vs Frequency





Pout vs Pin at 96GHz

### W BAND 75-110GHZ



**Dimension:** (unit in mm)

