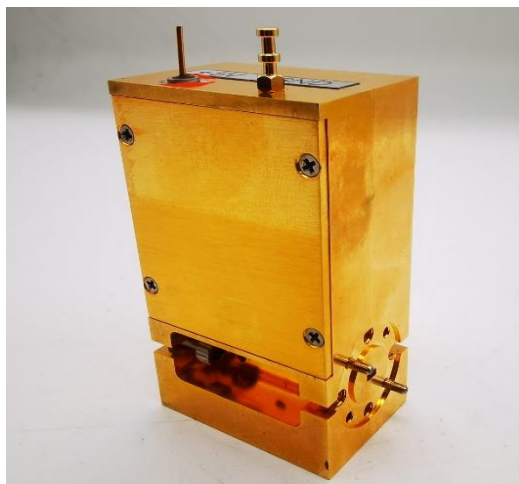


## Full W Band Power Amplifier

### 75-110GHz, Gain=18dB, Pout=+22dBm



#### Product Overview

AT-PA-75110-1822GN is power amplifier with +22dBm output power in the frequency of 75-110GHz. The DC power requirement is +9V/500mA. 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: 75-110GHz
- ✓ Psat:+22dBm
- ✓ Small signal gain: 18dB
- ✓ 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		75-110GHz	
Gain	15dB	18dB	
Drain Supply		+9V	+12V
Quiescent Current/A (NO RF)		0.35A	
PSAT Current/A		0.5A	0.6A
P1dB		+16dBm	
Psat	+19dBm	+22dBm	
Input Return Loss		-5dB	
Output Return Loss		-10dB	
Temp Spec		25C	

Note: Heatsink and fan are required.





# AT-PA-75110-1822GN

75-110GHz Power Amplifier, Psat=+22dBm

## Mechanical Information

Item	Description
Input Port	WR-10
Output Port	WR-10
Case Material	Copper
Finish	Gold Plated
Weight (Without Heatsink)	201g
Size:	See outline

## Absolute Maximum Ratings Table

Parameter	Value
Drain Supply	+12V
RF Input Power	+15dBm
Operating Temperature	0 to +50C
Storage Temperature	-65 to +150C

## 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.

## Part Number Selection Guide

Item	Description
PN	Standard Module with DC Power Supply
<b>PN-LCBT</b>	<b>L</b> ow Cost, <b>C</b> ompact <b>B</b> ench- <b>T</b> op, +220V Supply with AC/DC Adapter

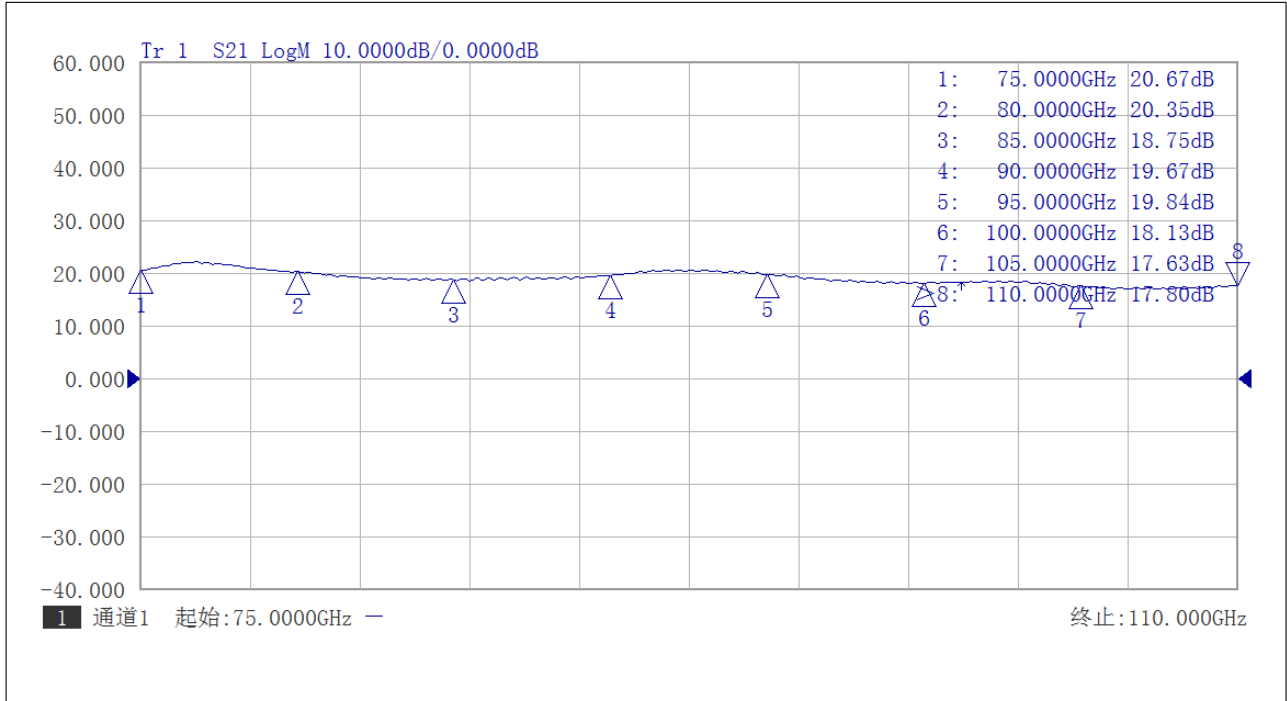




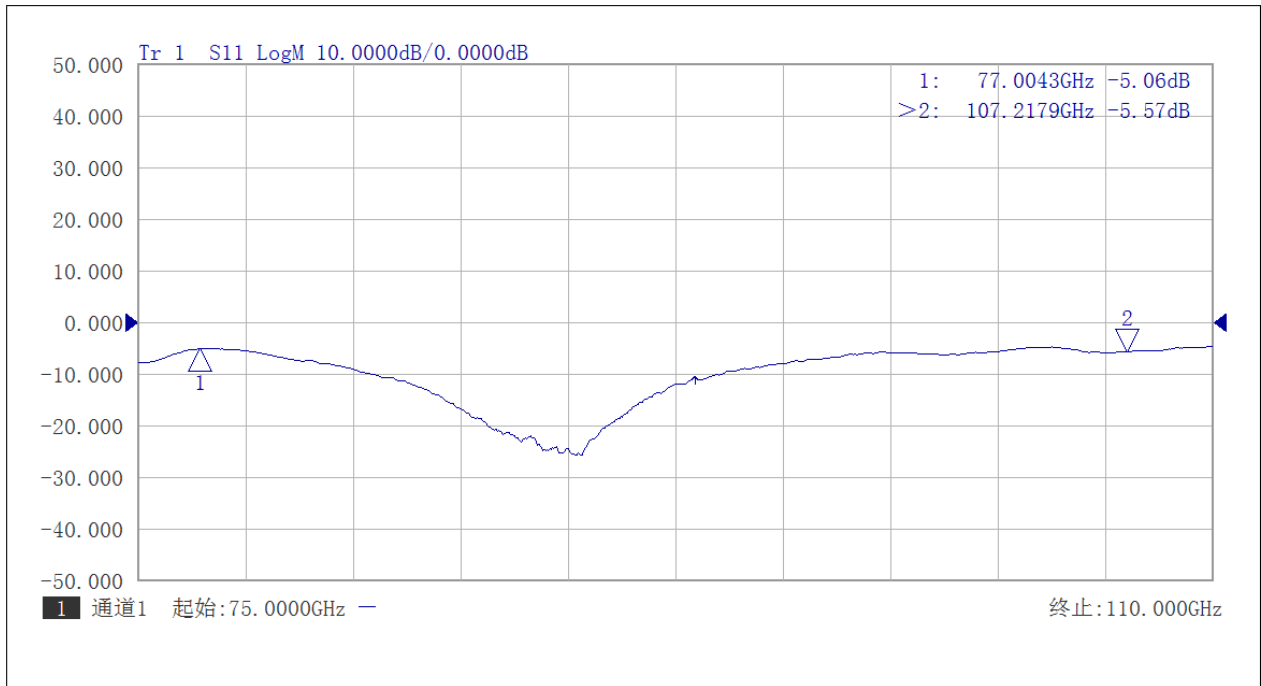
# AT-PA-75110-1822GN

75-110GHz Power Amplifier, Psat=+22dBm

## Test Data

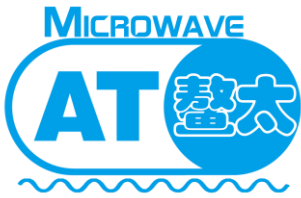


Gain vs Frequency



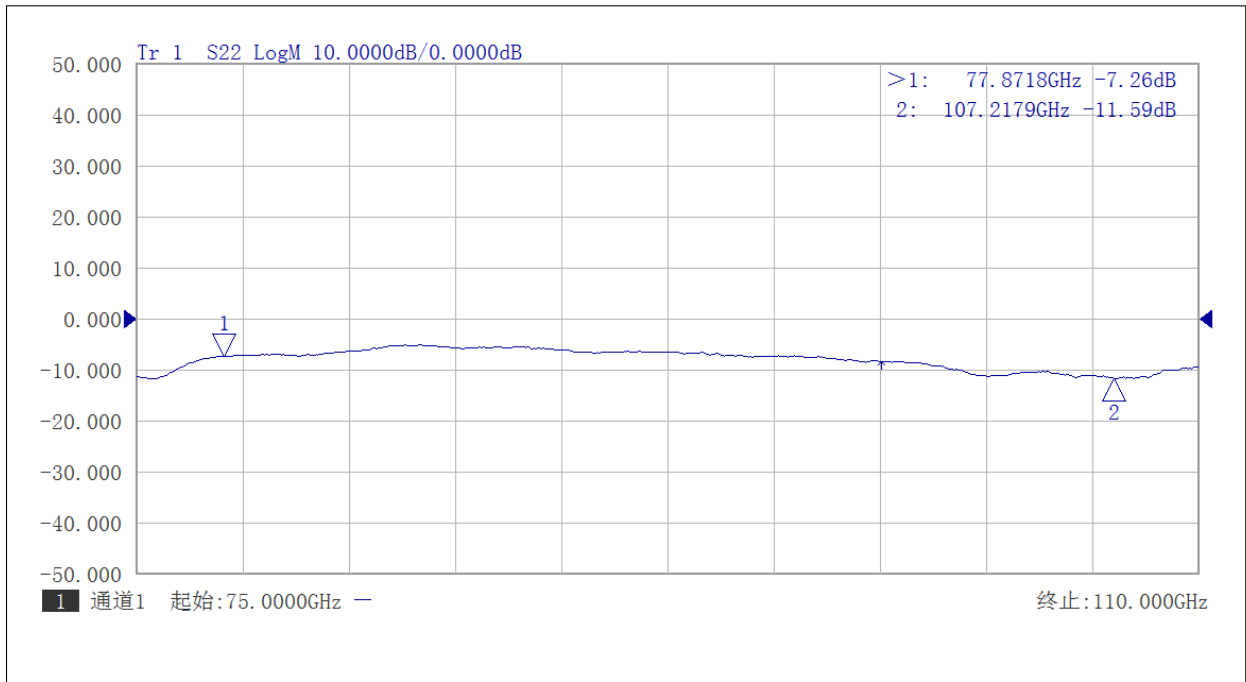
Input Return Loss vs Frequency



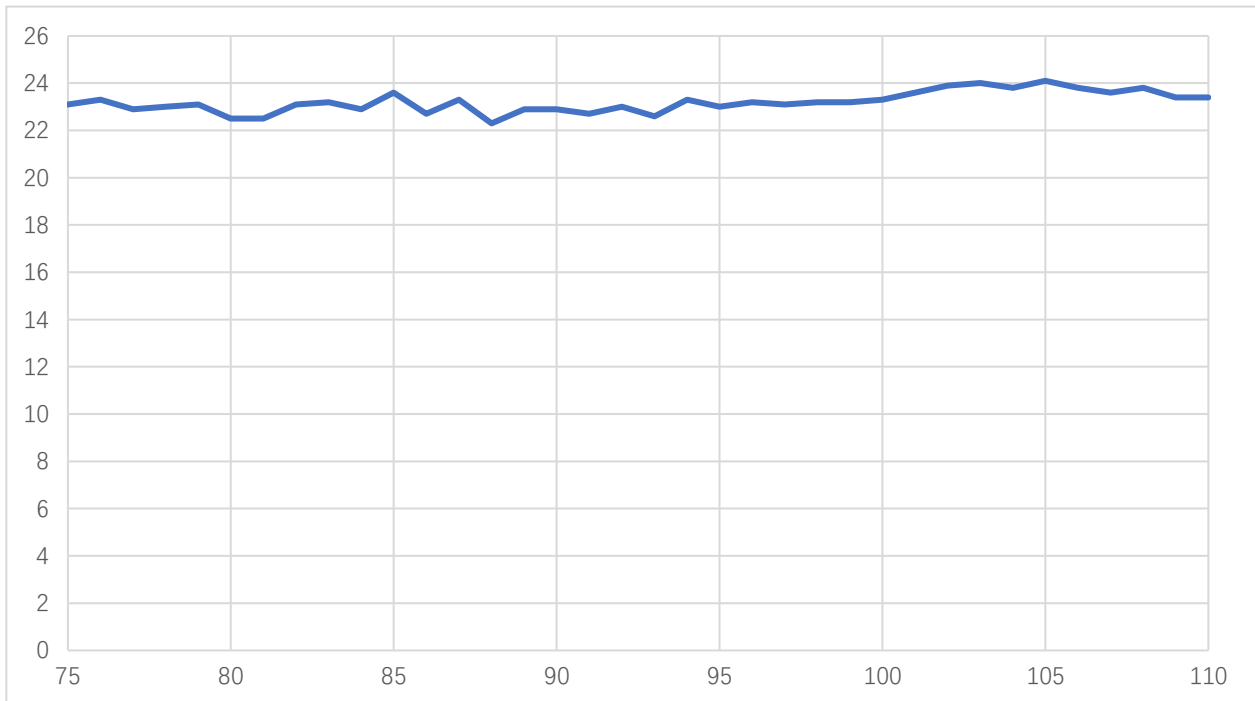


# AT-PA-75110-1822GN

75-110GHz Power Amplifier, Psat=+22dBm



Output Return Loss vs Frequency



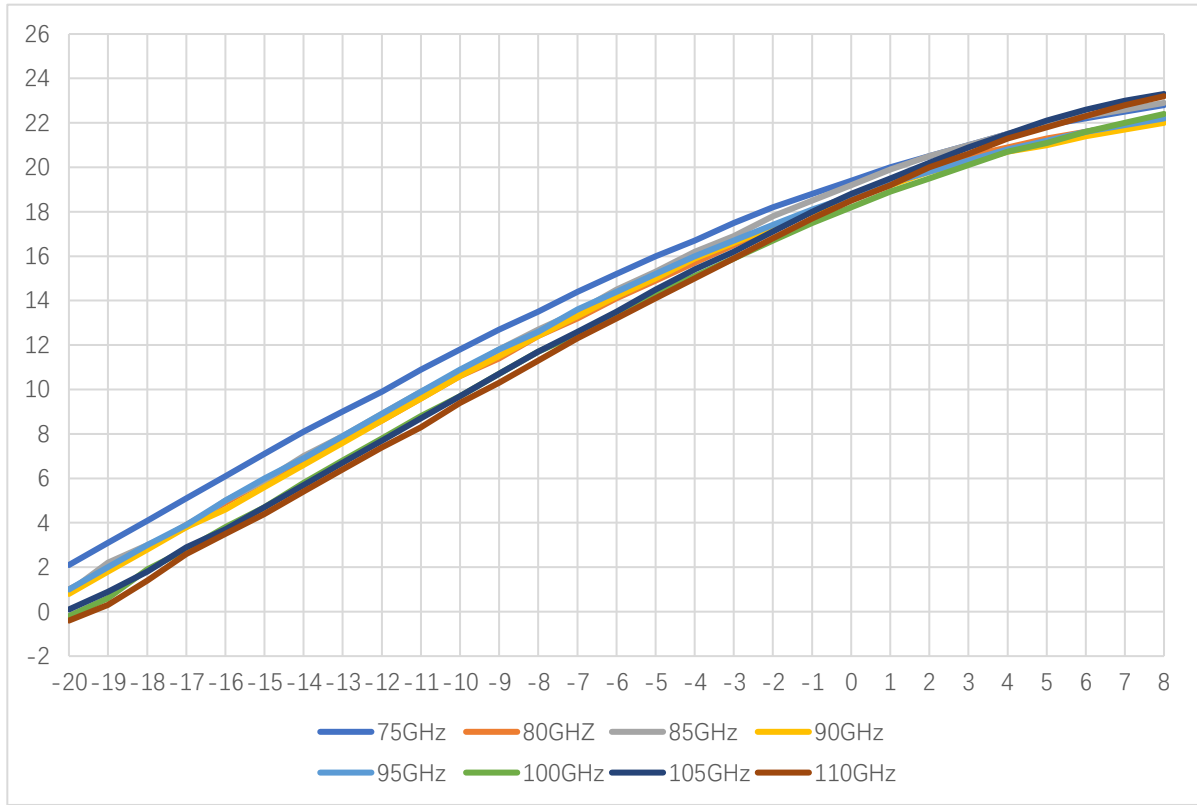
Psat vs Frequency





# AT-PA-75110-1822GN

75-110GHz Power Amplifier,  $P_{sat}=+22dBm$



Pout vs Pin



**Dimension:**(unit in mm)

