



# AT-PA-9098-2726

90-98GHz Power Amplifier, Psat=+26dBm

## W Band Power Amplifier, High Gain , Psat +27dBm



### Product Overview

AT-PA-9098-2726 is 27dB high gain power amplifier with +26dBm output power in the frequency of 92-96GHz. The DC power requirement is +5V/2.3A. The module is with a standard WR-10 waveguide. GaAs amplifier chips are used inside.

The power amplifier has high gain, high linearity, low input/output return loss and flat gain response.

It can also be used from 85-100GHz with some variation of performance.

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

### Advantages

- ✓ Frequency: 90-98GHz
- ✓ Psat:+26dBm
- ✓ Small signal gain: 27dB
- ✓ 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		90-98GHz	
Gain (Small Signal Gain)	27	30dB	
Output P1 (dBm)		+25dBm	
Output Saturated Power (dBm)	25	+26dBm	
Supply Voltage (V)		+5V	+6V
Quiescent Current/A (No RF)		2.2A	
Psat Current/A		2.7A	3.2A
Input Return Loss		-5dB	
Output Return Loss		-5dB	
Spec Temp		25C	

Note: Heat Sink is required.

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[www.atmicrowave.com](http://www.atmicrowave.com)





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90-98GHz Power Amplifier,  $P_{sat}=+26\text{dBm}$

## Mechanical Information

Item	Description
Input Port	WR-10
Output Port	WR-10
Case Material	Copper
Finish	Gold Plated
Weight (Without Heatsink)	270g
Size:	See outline

## Absolute Maximum Ratings Table

Parameter	Value
Drain Supply	+7V
RF Input Power	+12dBm
Operating Temperature	0 to +50C
Storage Temperature	-65 to +150C

### Caution:

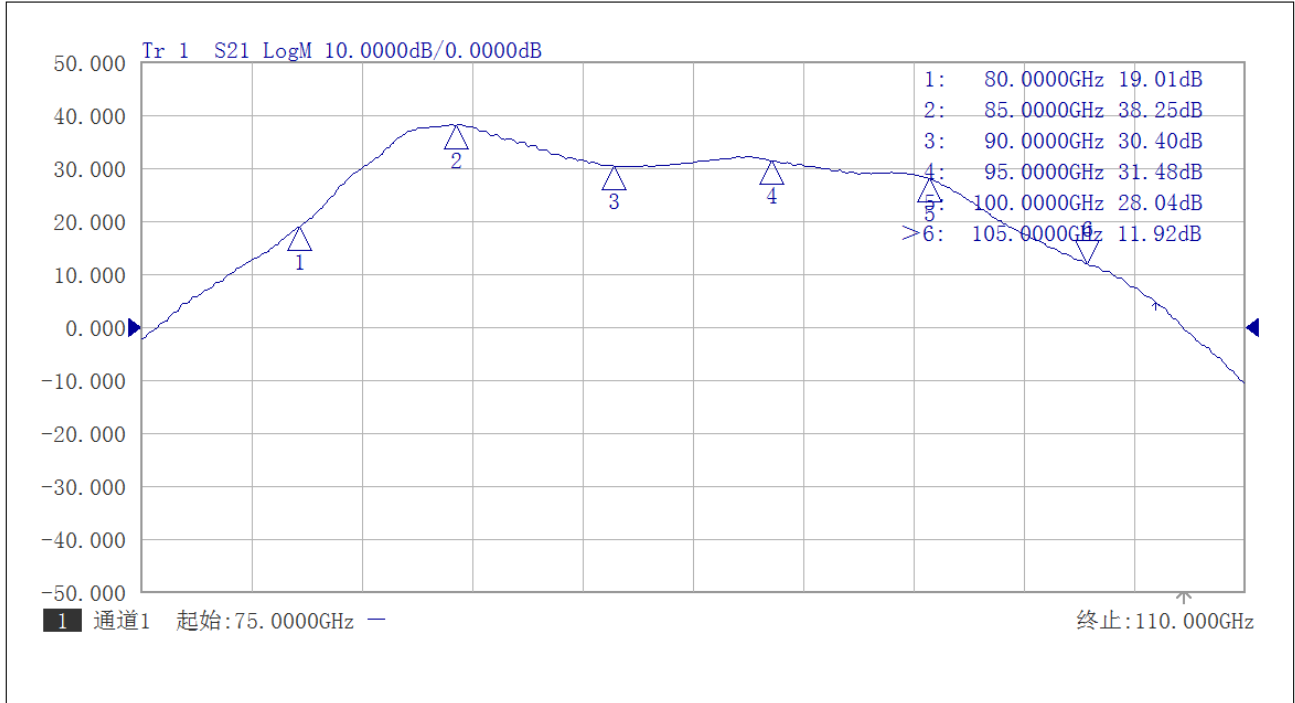
Please pay attention to the case temperature. If case temperature exceeds higher than +50C, heat sink and fan are required, or the amplifier may be damaged.

### Notes:

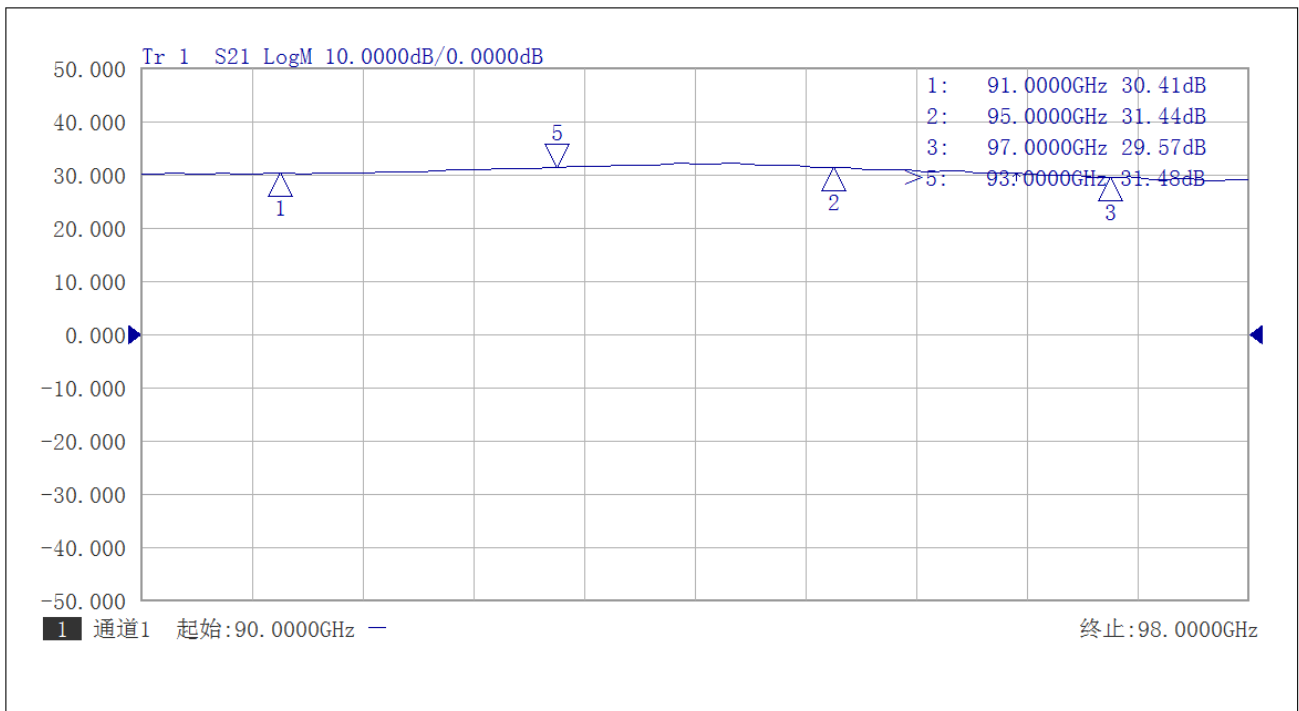
1. Datasheet may be changed according to update of MMIC, Raw materials , process, and so on.
2. This data is only for reference, not for guaranteed specifications.
3. Please contact AT Microwave team to make sure you have the most current data.



### Test Data



Small Signal Gain from 75-110GHz



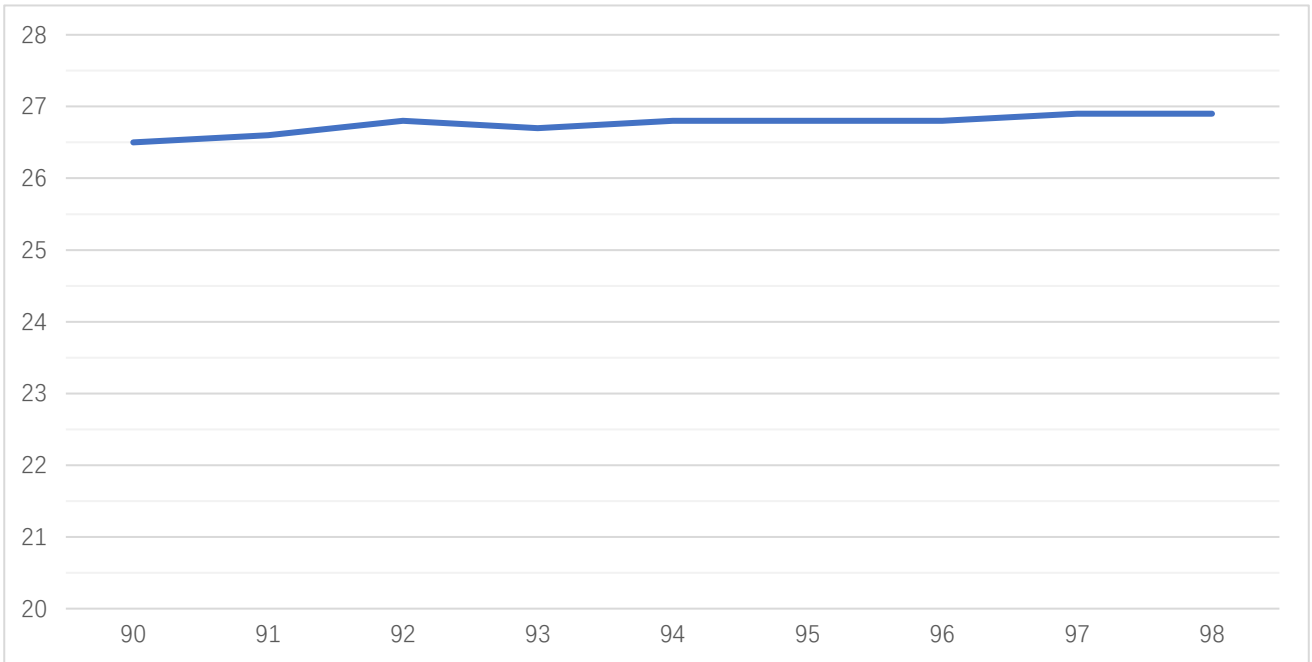
Small Signal Gain from 90-98GHz



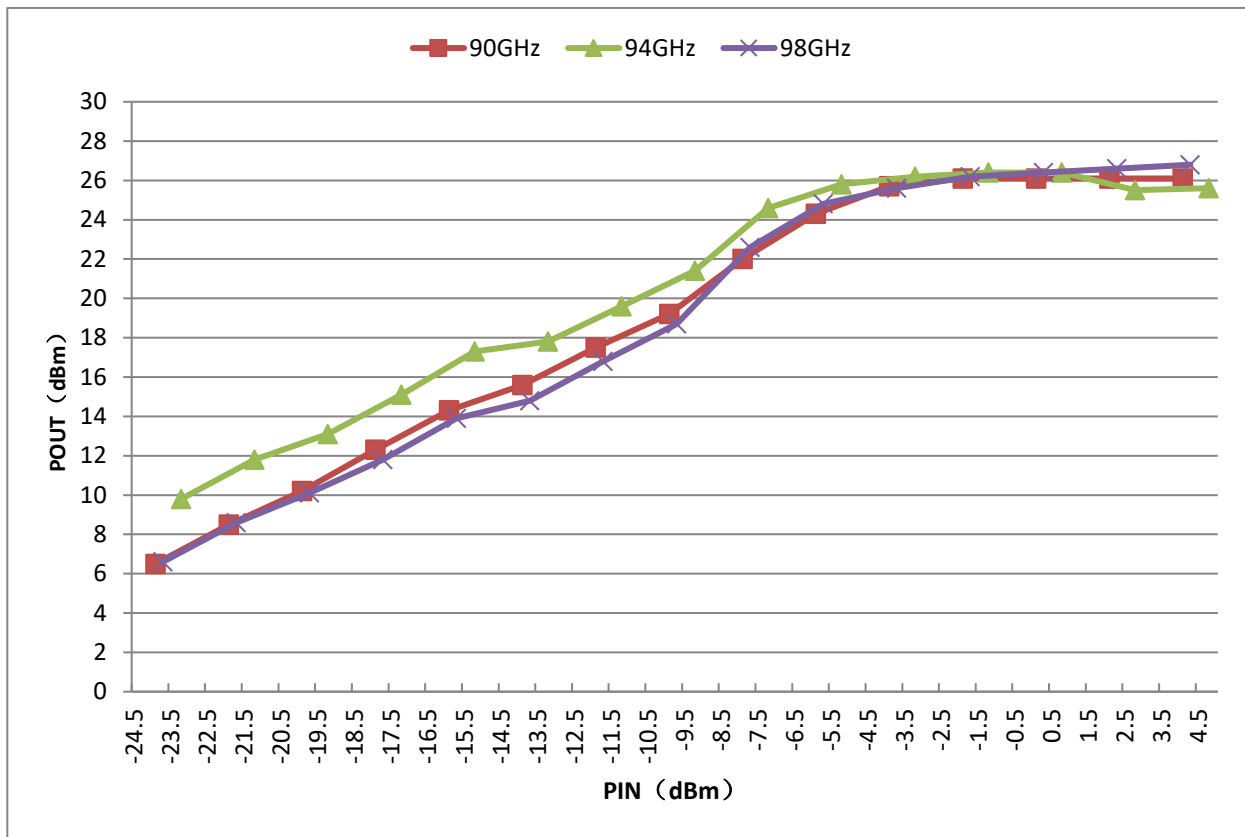


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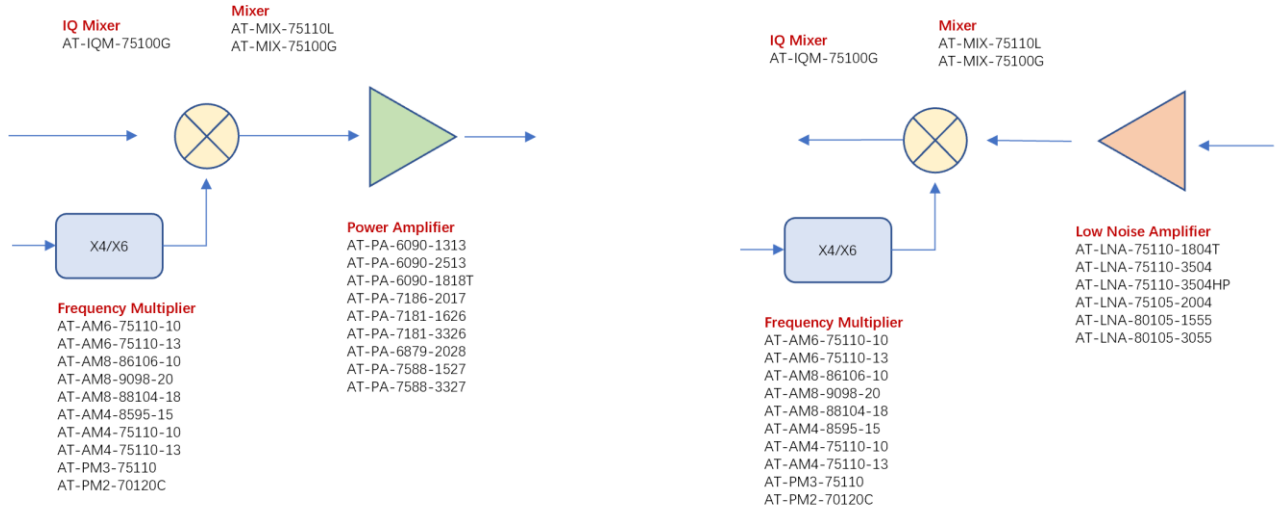
Pout vs Frequency



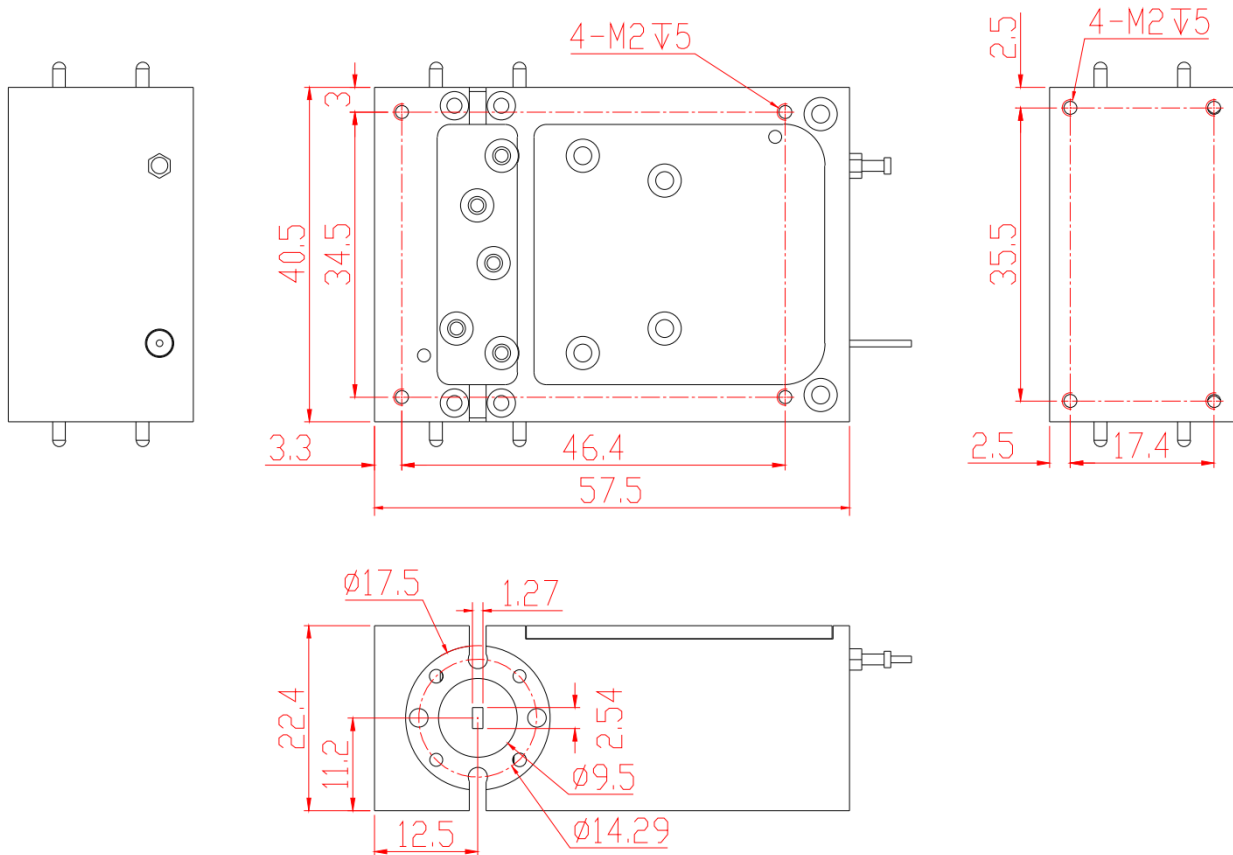
Pout vs Pin



### W BAND 75-110GHZ



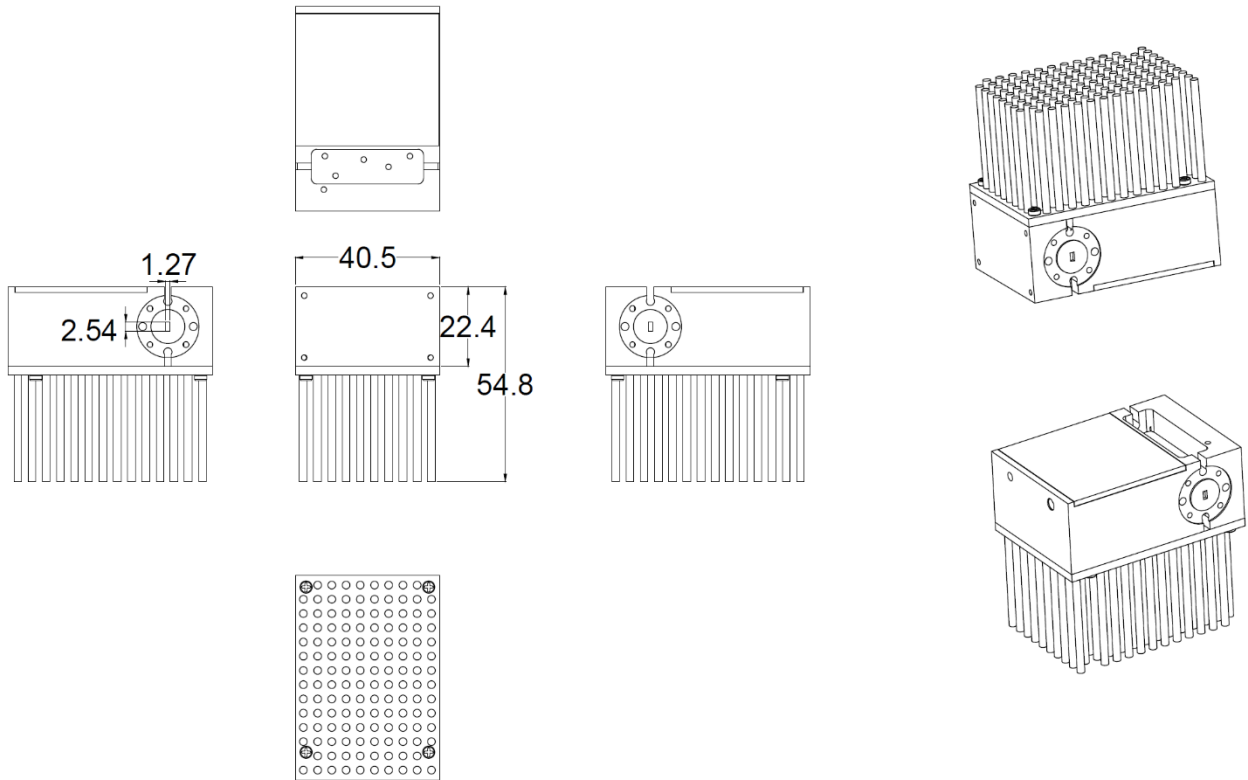
### Dimension: (unit in mm)



Heat Sink Required During Operation



## Dimension with heatsink:(unit in mm)



### Dimension with Heatsink

AT Microwave provides a heatsink in default if  $P_{out}$  is higher than  $+20dBm$   
 Customer can remove the heatsink easily and use their own heatsink if need.

