

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

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.





AT-PA-9098-2726

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:

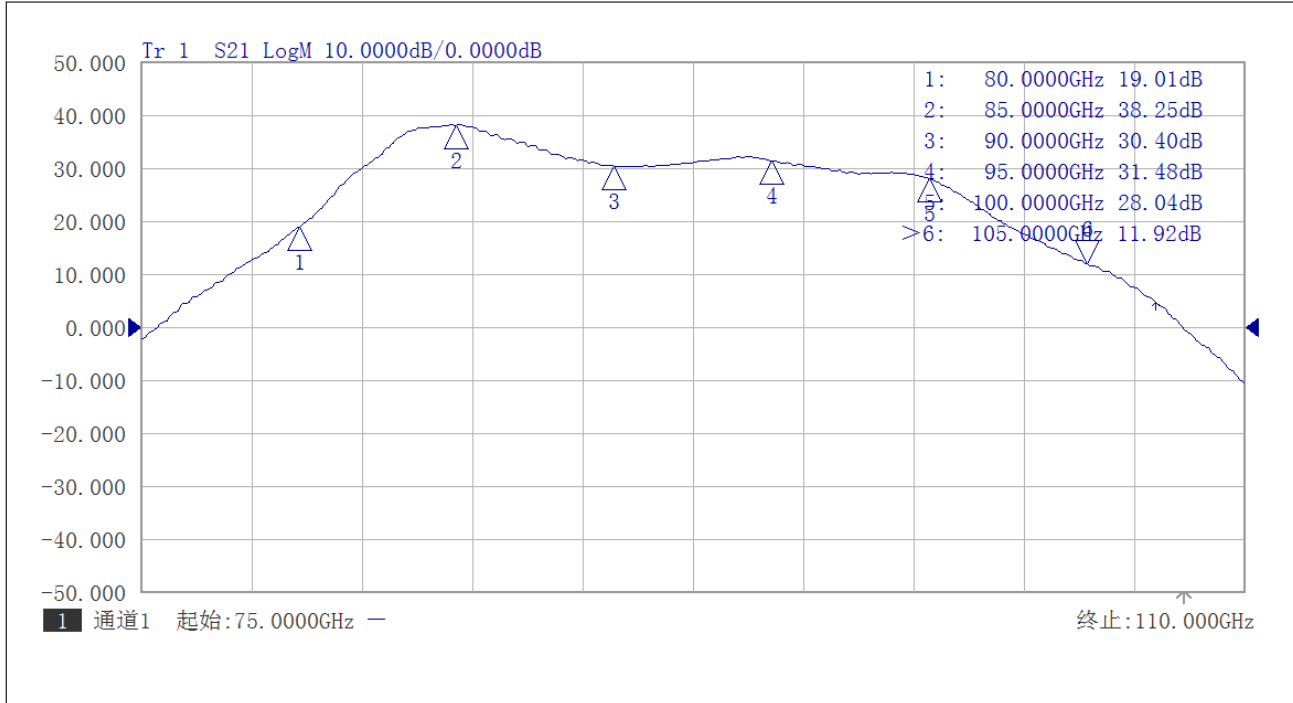
Please pay attention to the case temperature. If case temperature exceeds higher than +50C, heat sink and fan are required, or the amplifier may be damaged.

Notes:

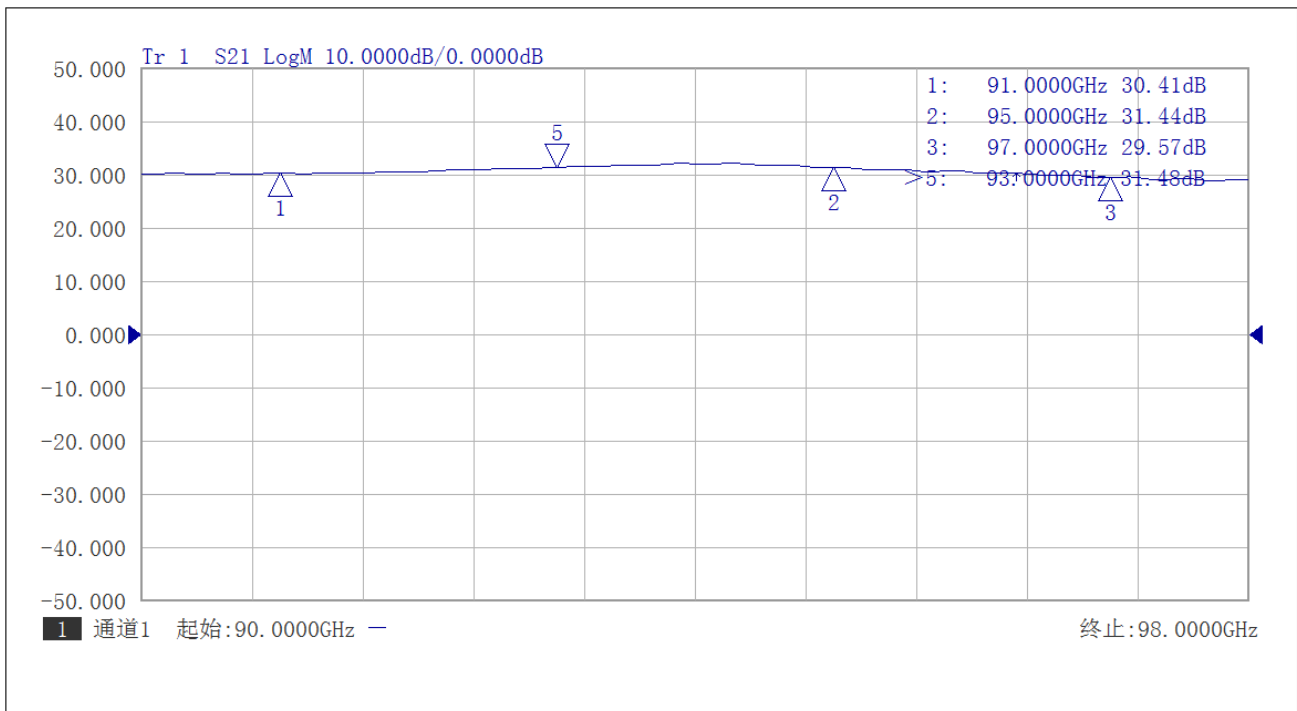
1. Datasheet may be changed according to update of MMIC, Raw materials , process, and so on.
2. This data is only for reference, not for guaranteed specifications.
3. Please contact AT Microwave team to make sure you have the most current data.



Test Data

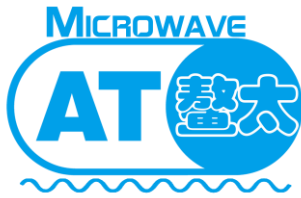


Small Signal Gain from 75-110GHz



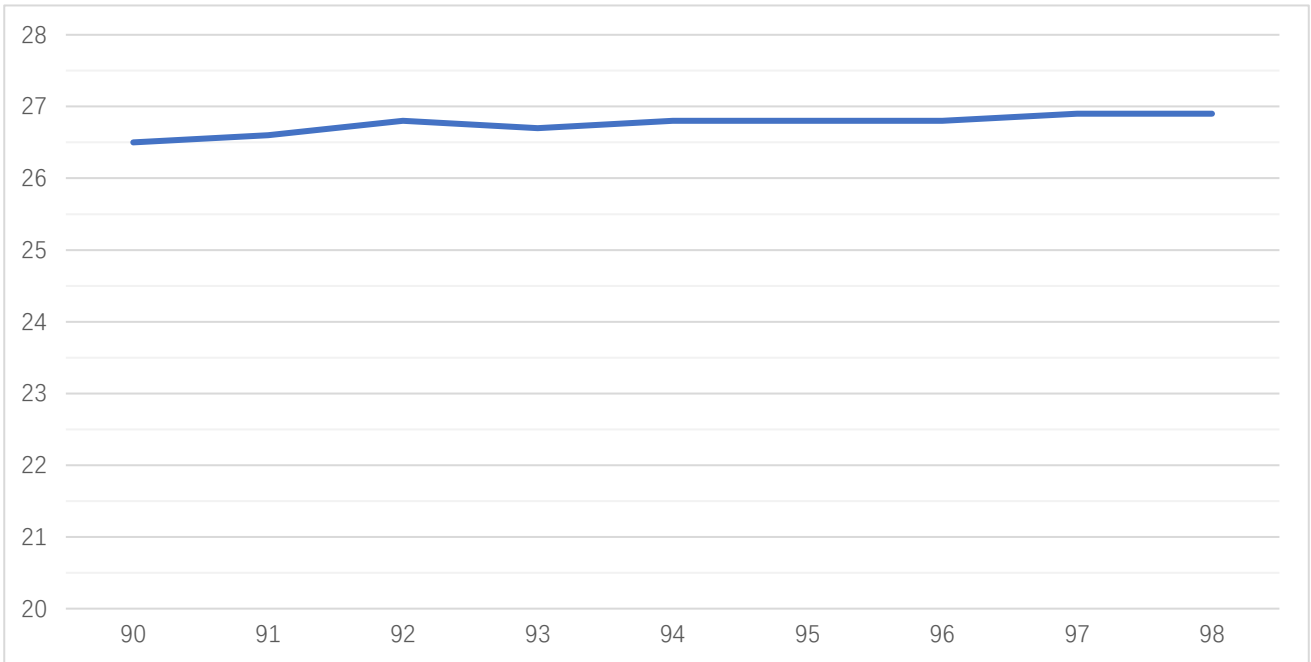
Small Signal Gain from 90-98GHz



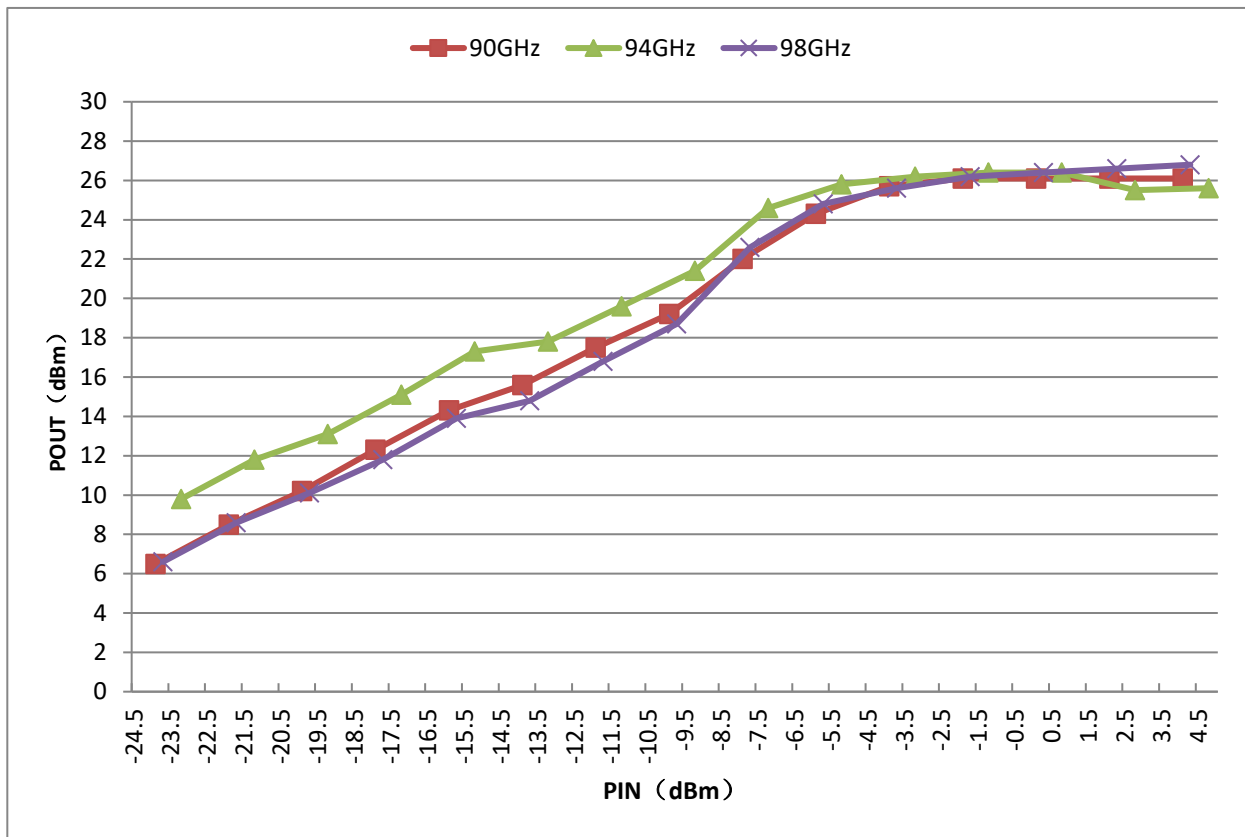


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90-98GHz Power Amplifier, Psat=+26dBm



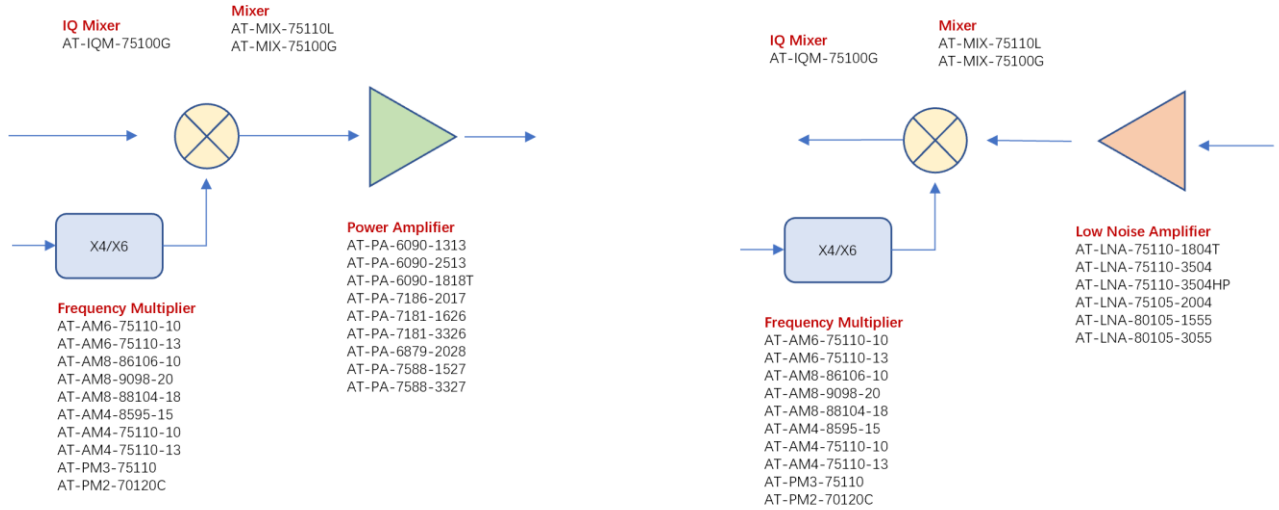
Pout vs Frequency



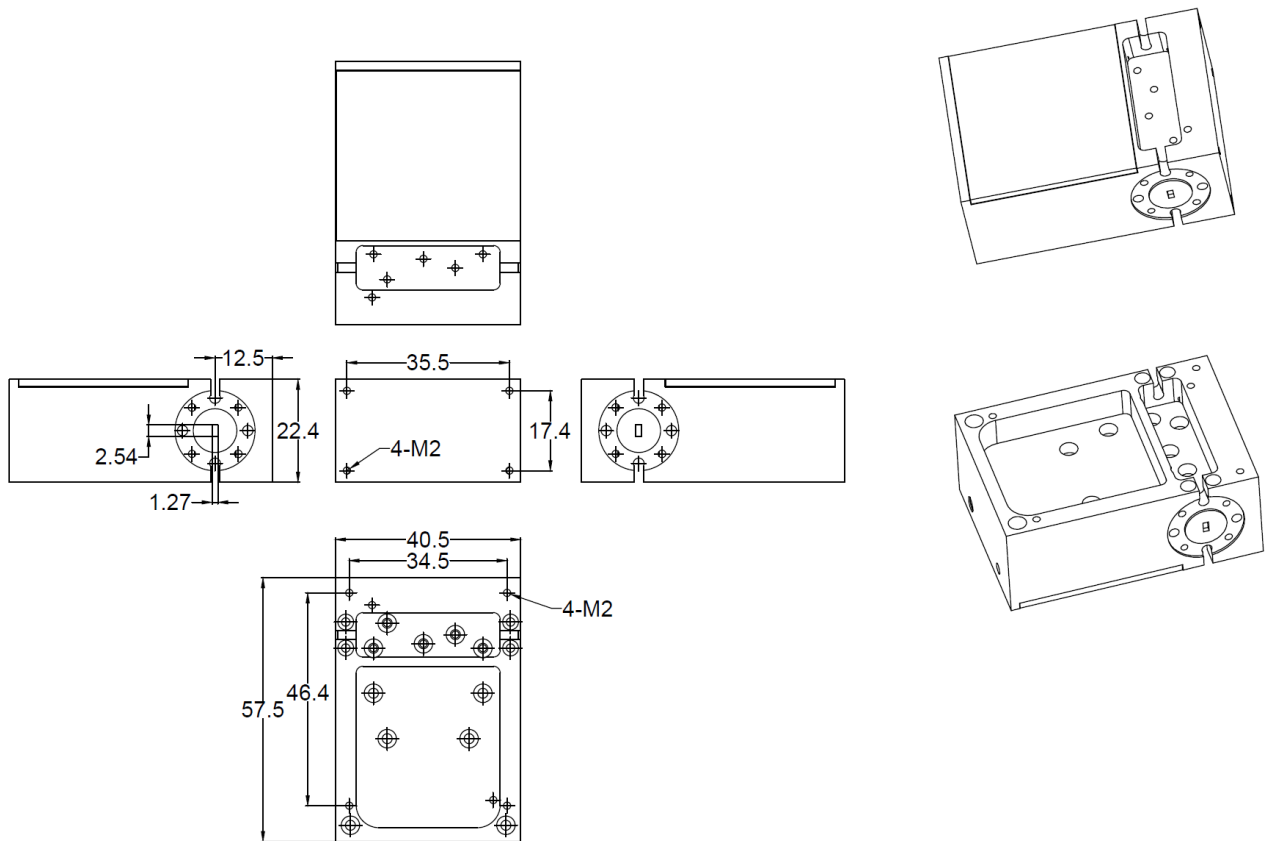
Pout vs Pin



W BAND 75-110GHZ



Dimension: (unit in mm)



Heat Sink Required During Operation

