



# AT-PA-6090-2025GN

## 60-90GHz High Power Amplifier

Full E band High Power PA, Psat=+25dBm

2021-12-3

60-90GHz Gain=20dB, WR-12



### Product Overview

AT-PA-6090-2025GN is a medium power amplifier operating in the 60-90GHz frequency range. The HPA is packaged in a waveguide module using industry standard WR12.

GaN Based MMIC technology Chips are used, which ensures reliable and repeatable unit-to-unit result. Higher gain amplifier can be achieved.

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

### Advantages

- ✓ Frequency: 60-90GHz
- ✓ Gain: 20dB
- ✓ Pout: +25dBm
- ✓ Single Supply

### Application

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

### Key Features

Parameter	Min	Typical	Max
Frequency		60-90GHz	
Small Signal Gain	18dB	20dB	
Gain Flatness		+/-2.5dB	
Psat (see test plot)	+23dBm	+25dBm	
Drain Supply		+15V	+17V
Current/NO RF		0.75A	
IDD/Psat		0.9A	
Input Return Loss		-5dB	
Output Return Loss		-5dB	
Spec Temp		25C	





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### Mechanical Information

Item	Description
Input Port	WR-12
Output Port	WR-12
Case Material	Copper
Finish	Gold Plated
Weight (Without Heatsink)	270g
Size:	See outline

### Absolute Maximum Ratings Table

Parameter	Value
Drain Supply	+18V
RF Input Power	+20dBm
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.

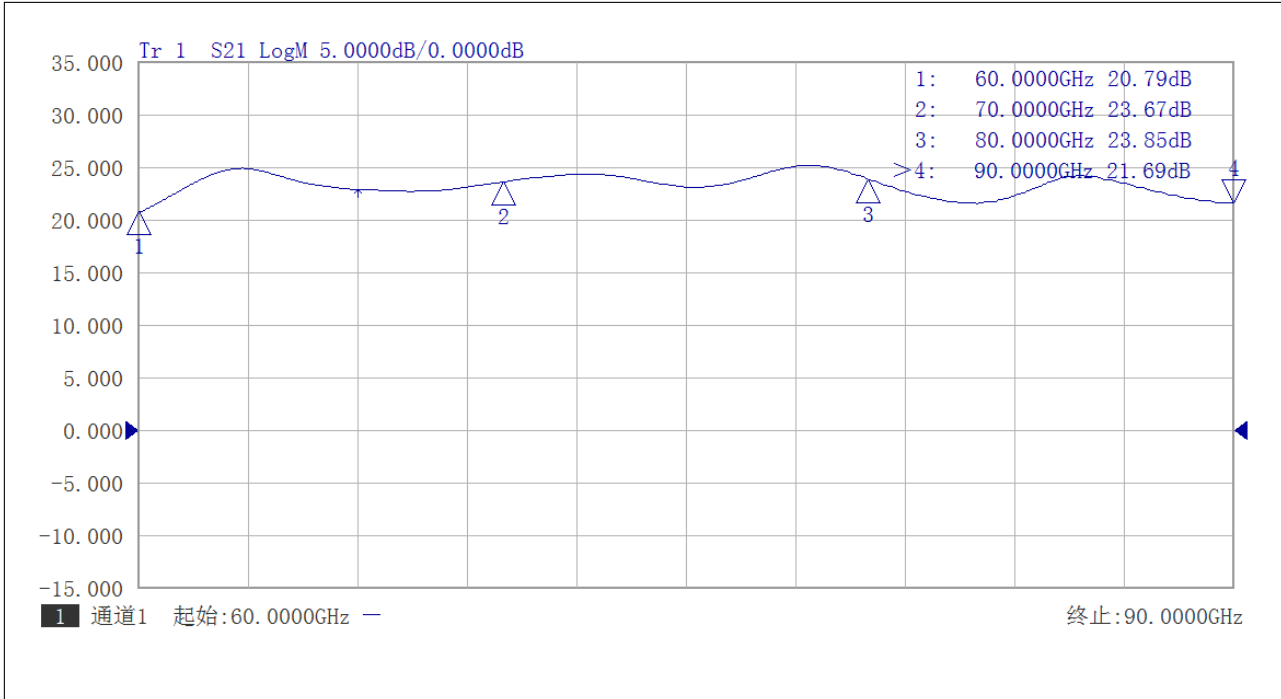




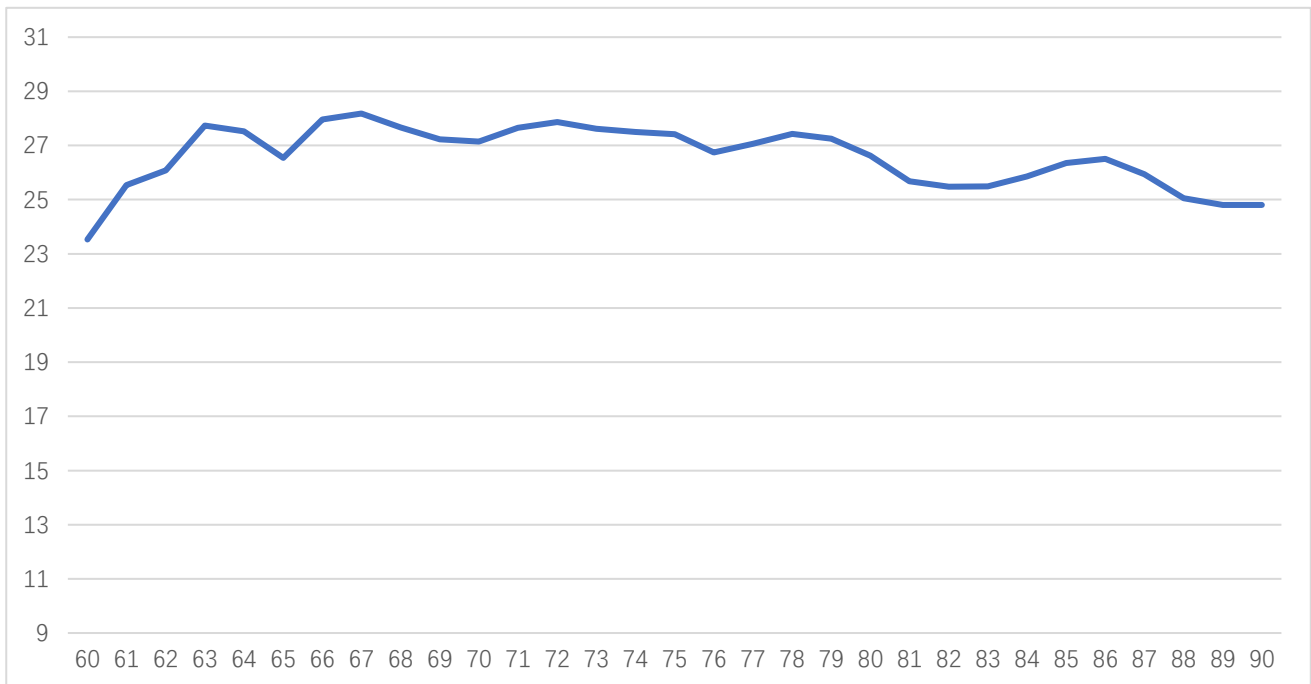
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### Test Data

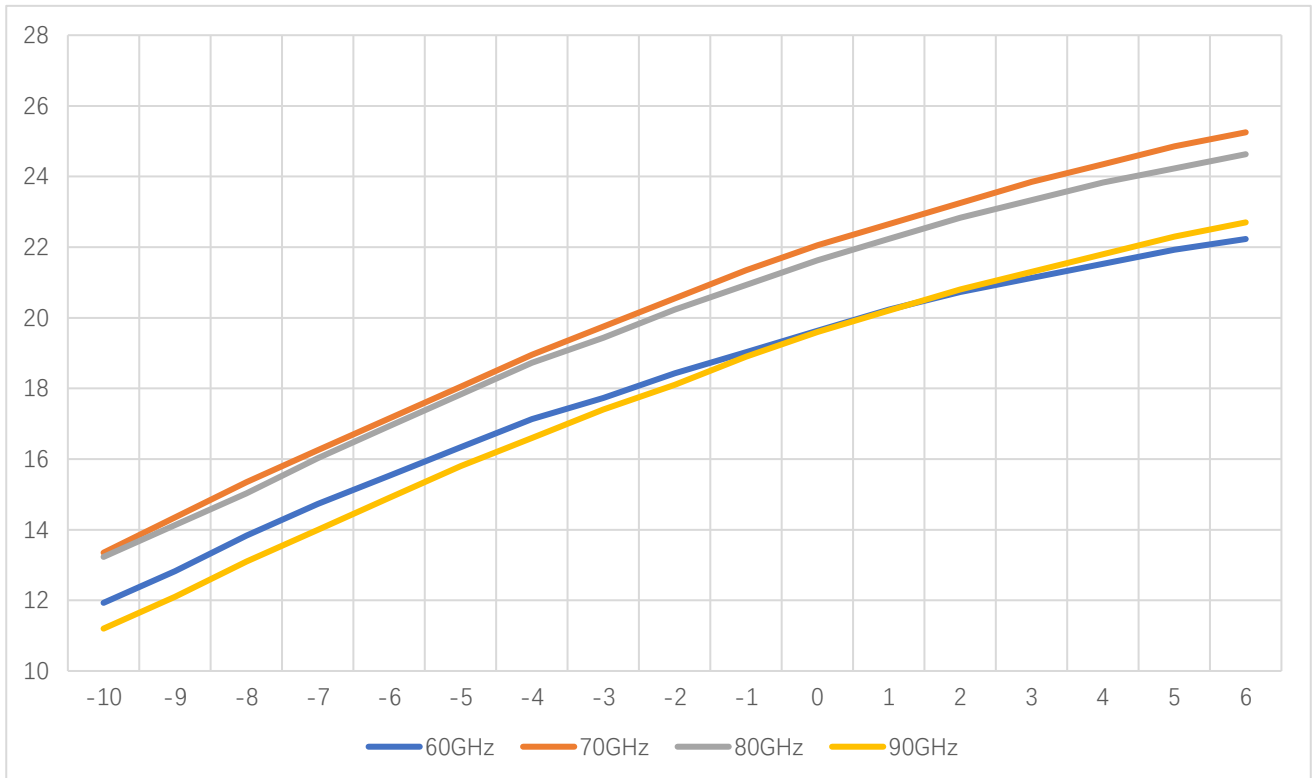


Small Signal Gain vs Frequency



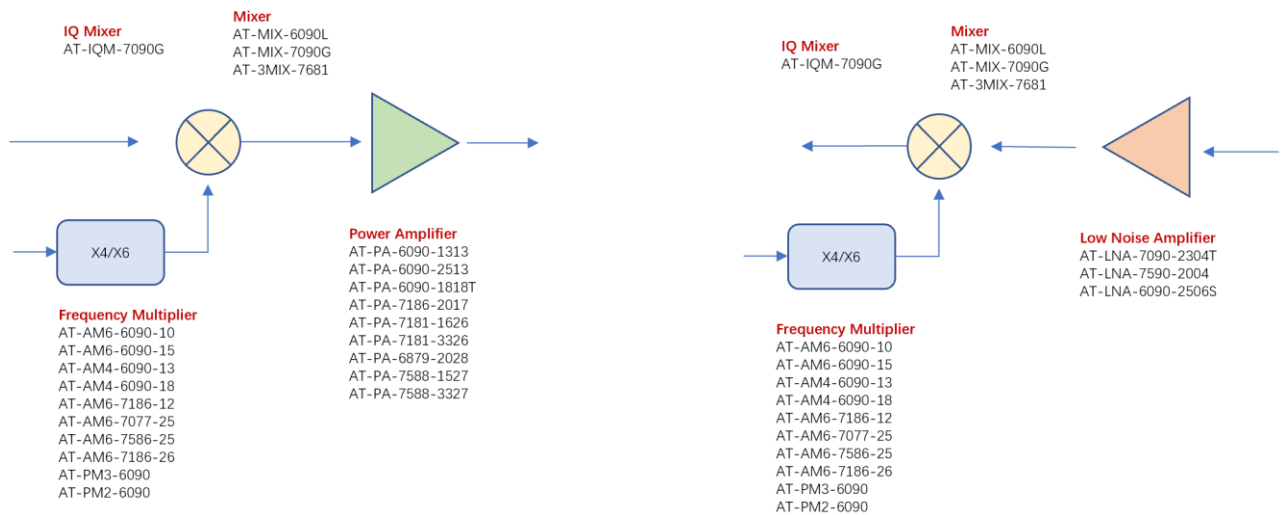
Psat vs Frequency, Pin=+8dBm



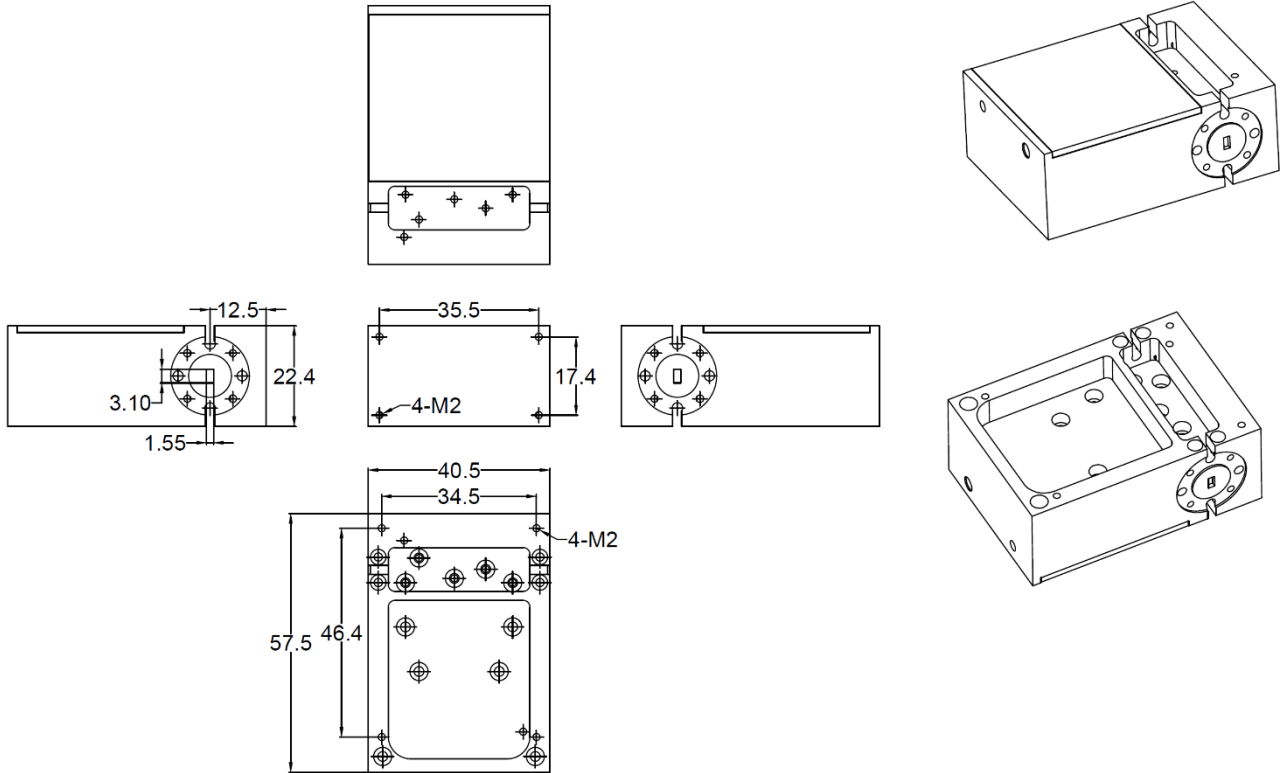


Pout vs Pin at 60/70/80/90GHz

### E Band 60-90GHz



Dimension: (mm)



Heatsink Required during operation.

