

E2 Band Power Amplifier



Product Overview

AT-PA-7588-1527 is power amplifier with +27dBm output power in the frequency of 75-88GHz. The DC power requirement is +5/2100mA. The module is with a standard WR-12 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

Advantages

- ✓ Frequency: 75-88GHz
- ✓ Psat:+27dBm
- ✓ Small signal gain: 15dB
- ✓ Single Power Supply

Application

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

Key Features

Parameter	Min	Typical	Max
Frequency	75	77-86GHz	88
Gain	13	15dB	
Drain Supply		+5V	+6V
Quiescent Current		1.3A	
Psat Current		2.1A	
Psat	+25	+27dBm	
Input Return Loss		-7 dB	
Output Return Loss		-7 dB	
Spec Temp		25C	





AT-PA-7588-1527

75-88GHz Power Amplifier, $P_{sat}=+27\text{dBm}$

Mechanical Information

Item	Description
Input Port	WR-12
Output Port	WR-12
Case Material	Copper
Finish	Gold Plated
Weight (Without Heatsink)	221g
Size:	See outline

Absolute Maximum Ratings Table

Parameter	Value
Drain Supply	+7V
RF Input Power	+20dBm
Operating Temperature	0 to +50C
Storage Temperature	-65 to +150C

Caution:

Please pay attention to the case temperature. If case temperature exceed 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.

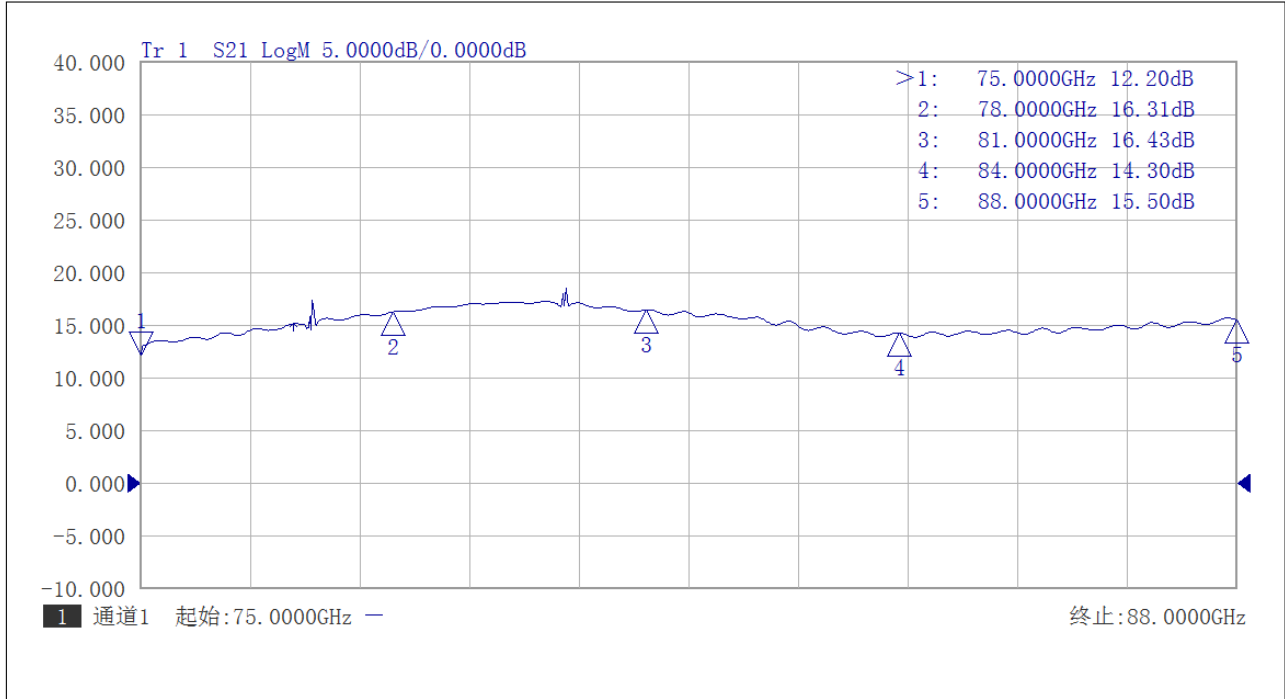




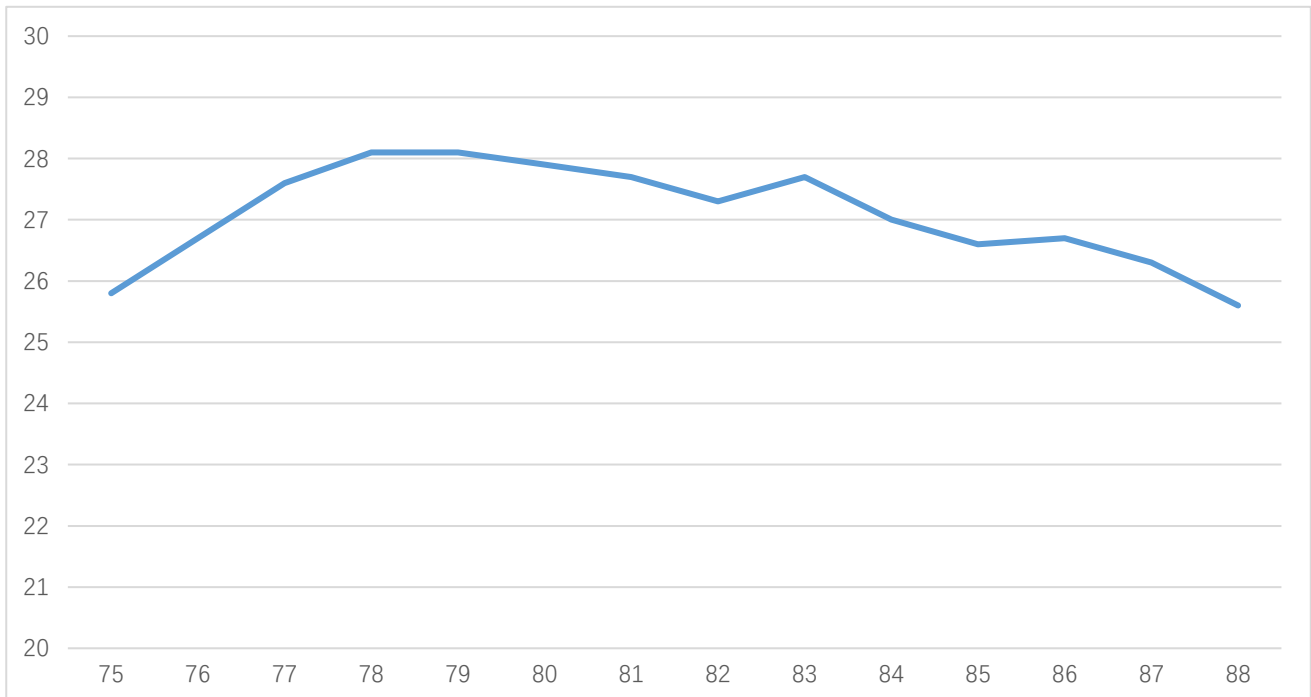
AT-PA-7588-1527

75-88GHz Power Amplifier, Psat=+27dBm

Test Data:(23C)



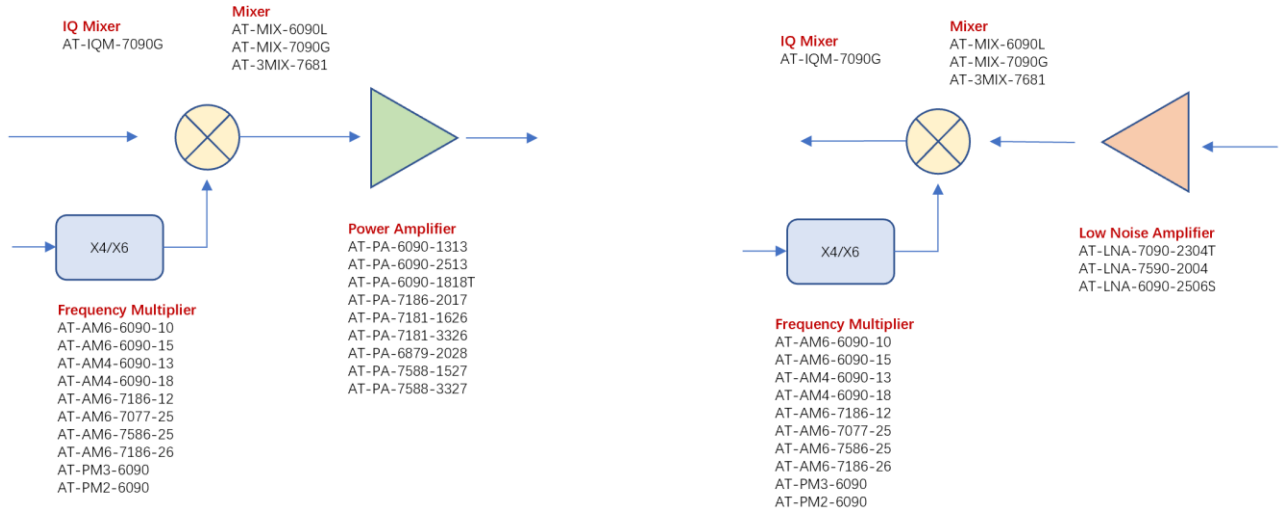
Gain Vs Frequency



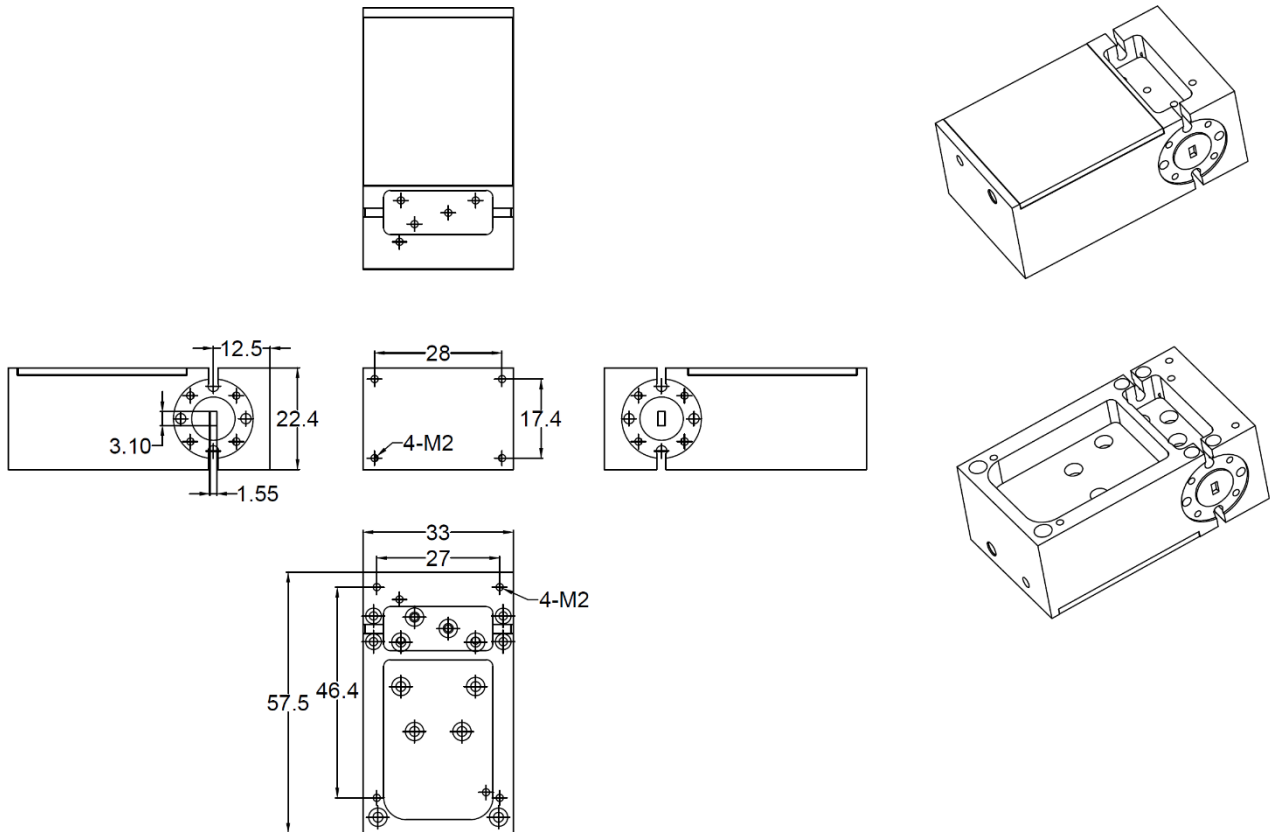
Pout Vs Frequency



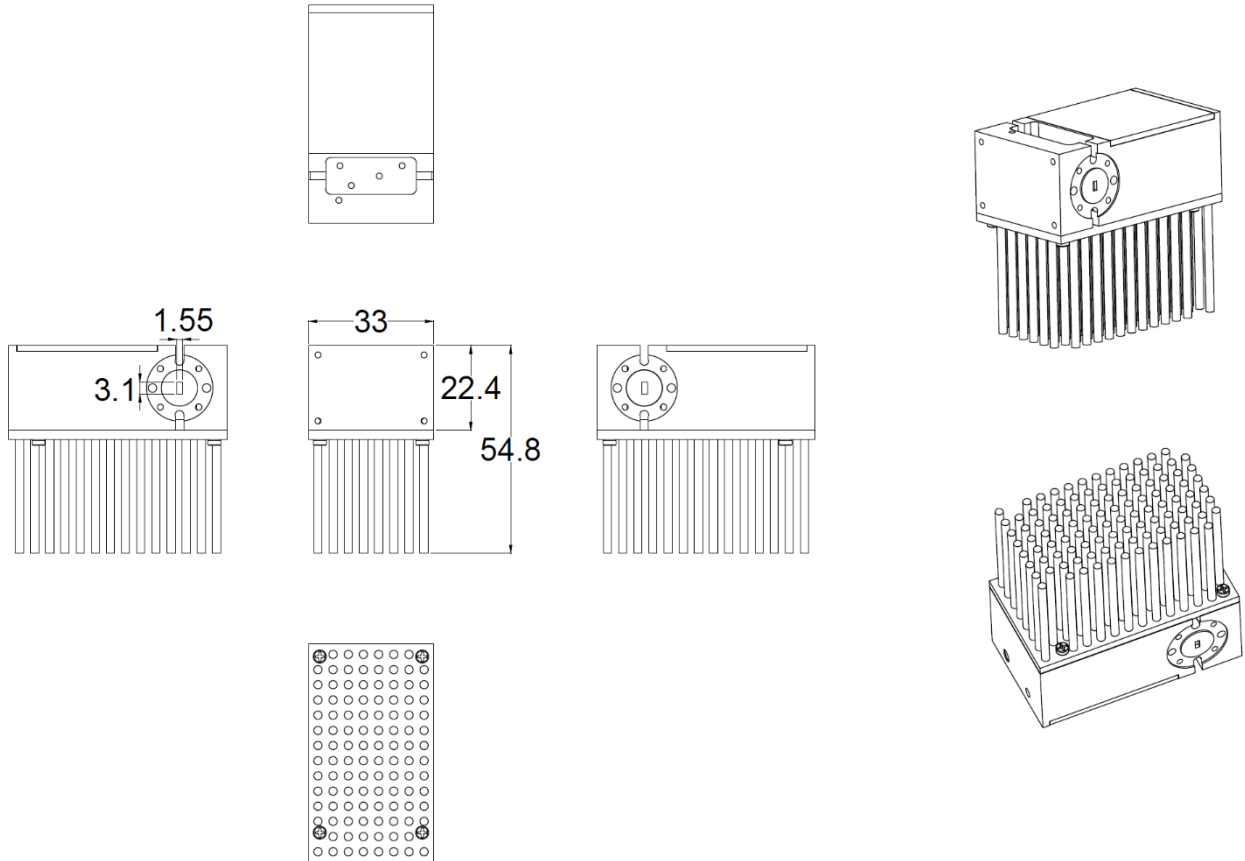
E Band 60-90GHz



Dimension:(unit in mm)



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.

