



AT-PA-6086-2027GT

60-86GHz Power Amplifier, $P_{sat}=+27\text{dBm}$

E Band GaN Based Power Amplifier High Power +27dBm, Gain=20dB



Product Overview

AT-PA-6086-2027GT is power amplifier with +27dBm output power in the frequency of 60-86GHz. The DC power requirement is +17V/550mA. 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: 60-86GHz
- ✓ P_{sat} : +27 dBm
- ✓ Small signal gain: 20dB
- ✓ Single Power Supply

Application

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

Key Features

Parameter	Min	Typical	Max
Frequency		60-86GHz	
Gain	17dB	20dB	
Drain Supply		+17V	+22V
Quiescent Current/A (NO RF)		0.35A	
PSAT Current/		0.55A	
P1Db		+25dBm	
Psat	+26dBm	+27dBm	
Input Return Loss		-8dB	
Output Return Loss		-8dB	
Temp Spec		25C	

Note: Heatsink and fan are required.





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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)	271g
Size:	See outline

Absolute Maximum Ratings Table

Parameter	Value
Drain Supply	+24V
RF Input Power	+16dBm
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.

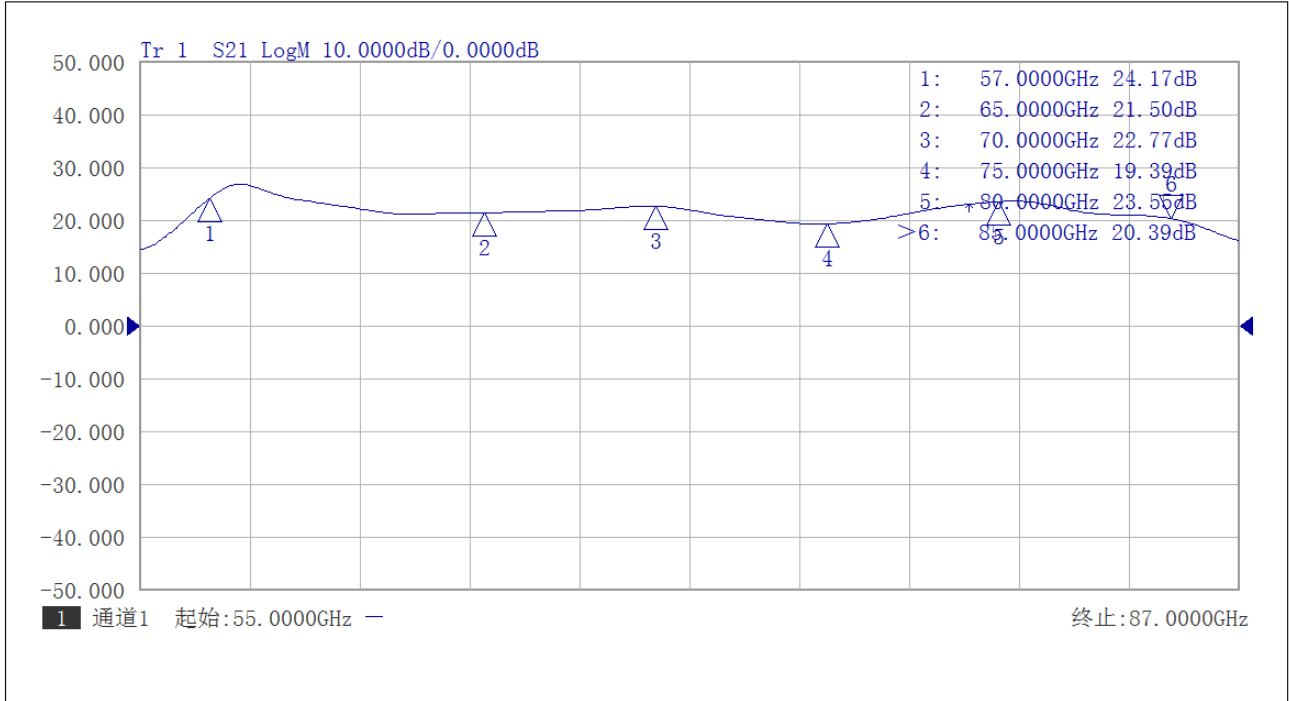




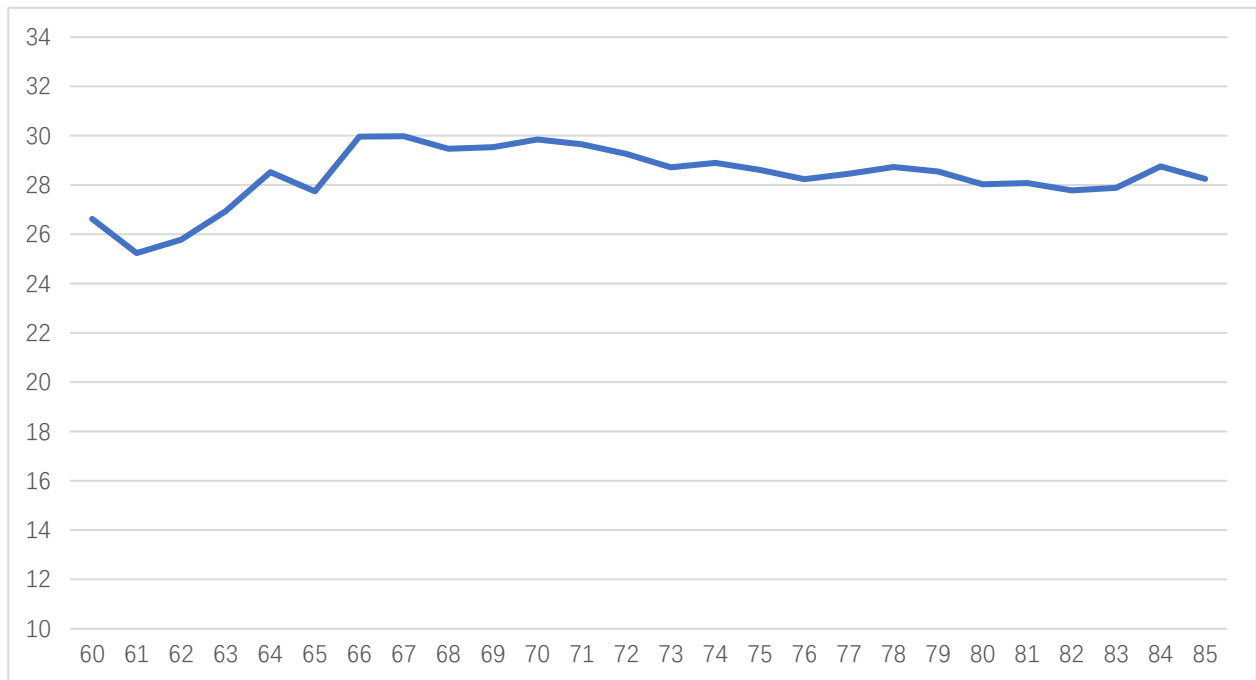
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Test Data:



Gain vs Frequency



Psat vs Frequency

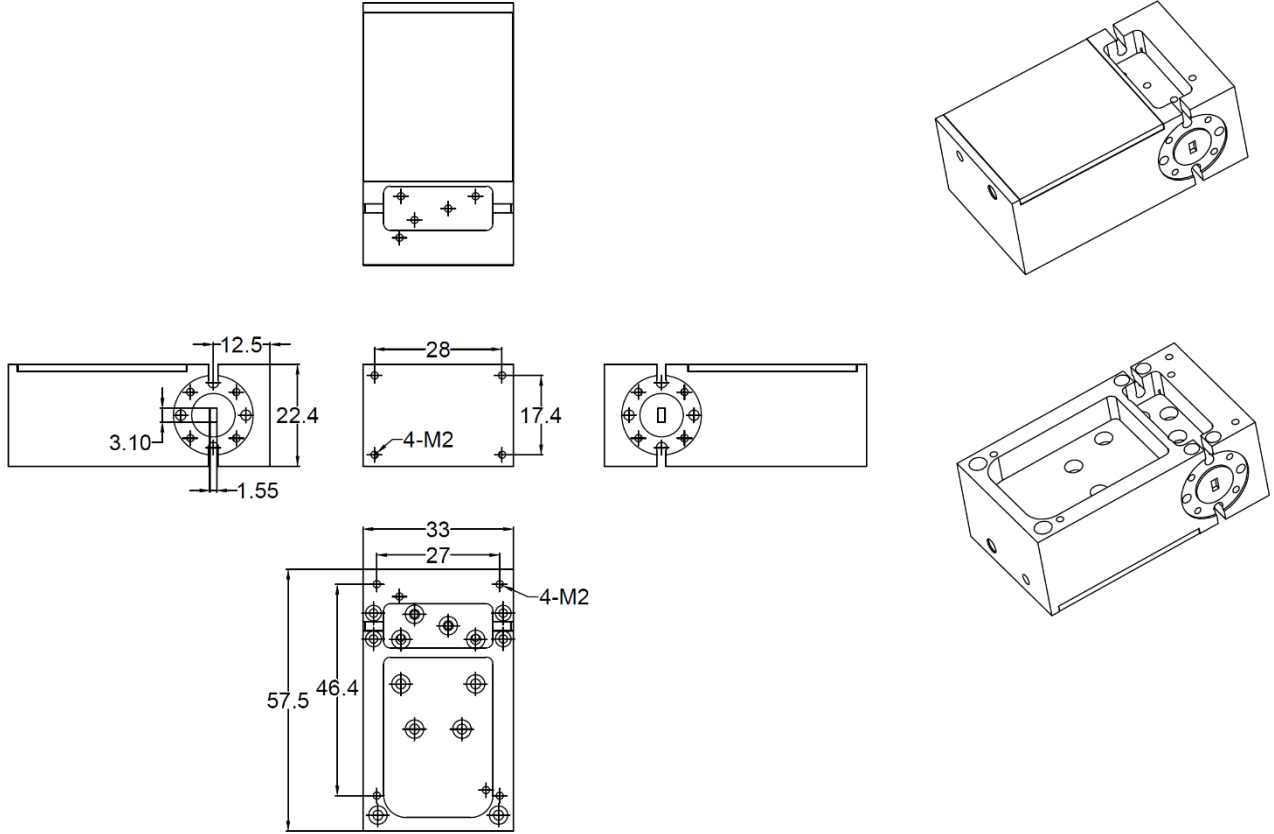




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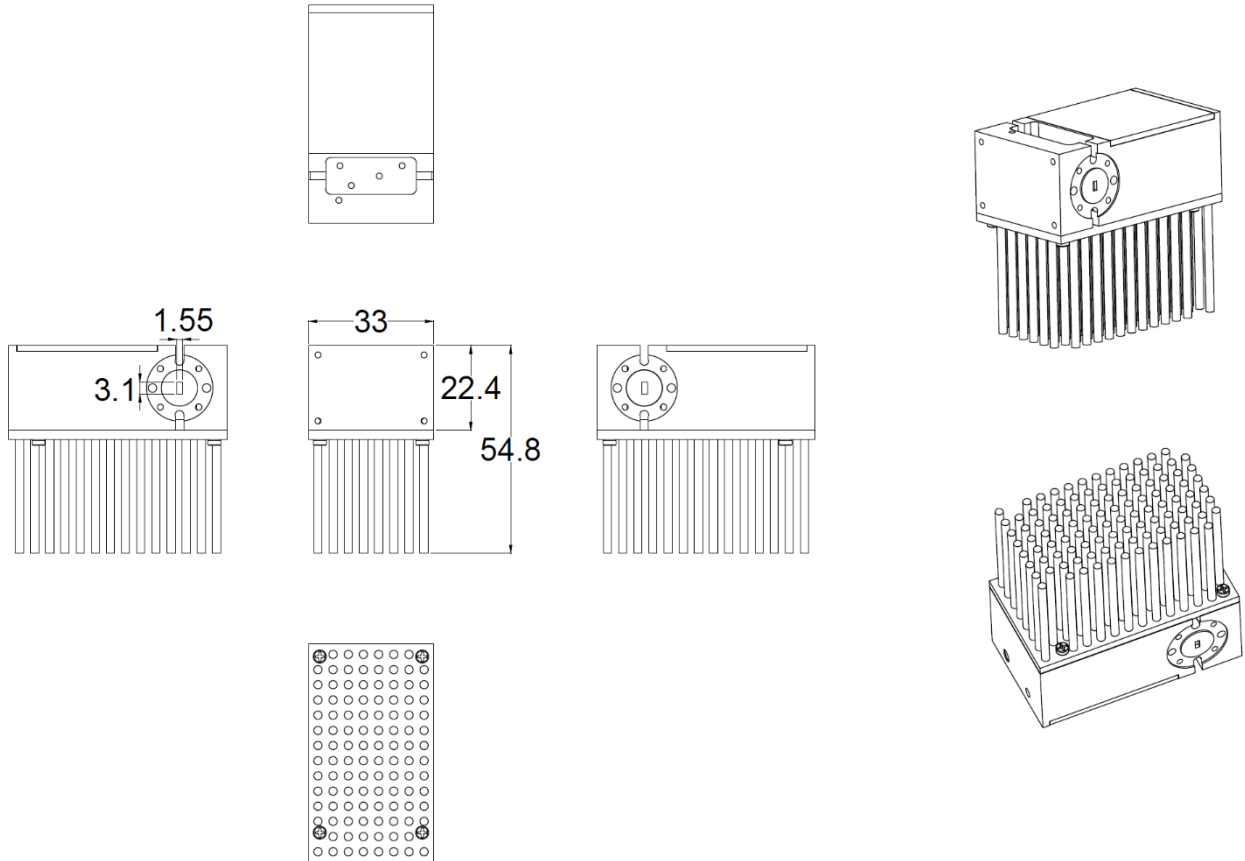
Dimension:(unit in mm)



Heatsink 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.

