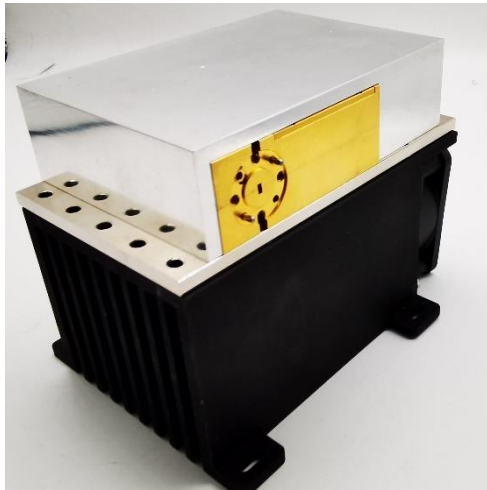


50-75GHz High Power Amplifier

2022-5-25

Gain=33dB, Psat=+32dBm, WR-15



Product Overview

AT-PA-5075-3332GN is GaN Based high power amplifier with +32dBm output power in the frequency of 50-75GHz. The DC power requirement is +16V/1.7A. The module is with standard WR-15 waveguide. Other Connector can be available according to request.

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: 50-75GHz
- ✓ Psat:+32dBm
- ✓ Small signal gain: 33dB
- ✓ Single Power Supply

Application

- ✓ V Band Communication
- ✓ Test Equipment
- ✓ ROF (RF Over Fiber)
- ✓ Radar System

Key Features

Parameter	Min	Typical	Max
Frequency		50-75GHz	
Small Signal Gain	30 28dB	50-70GHz: 33dB 70-75GHz: 31dB	
Psat	+32dBm +30dBm	50-63GHz: +33dBm 63-75GHz: +32dBm	
Vdd		+16V	+18V
Id(NO RF)		1.2A	
Id(Psat)		1.7A	
Input Return Loss		-7dB	
Output Return Loss		-5dB	
Spec Temp		25C	





AT-PA-5075-3332GN

50-75GHz High Power Amplifier

Mechanical Information

Item	Description
Input Port	WR-15
Output Port	WR-15
Case Material	Copper
Finish	Gold Plated
Weight (Without Heatsink)	435g
Size:	See outline

Absolute Maximum Ratings Table

Parameter	Value
Drain Supply	+20V
RF Input Power	+15dBm
Operating Temperature	0 to +50C
Storage Temperature	-65 to +150C

Notes:

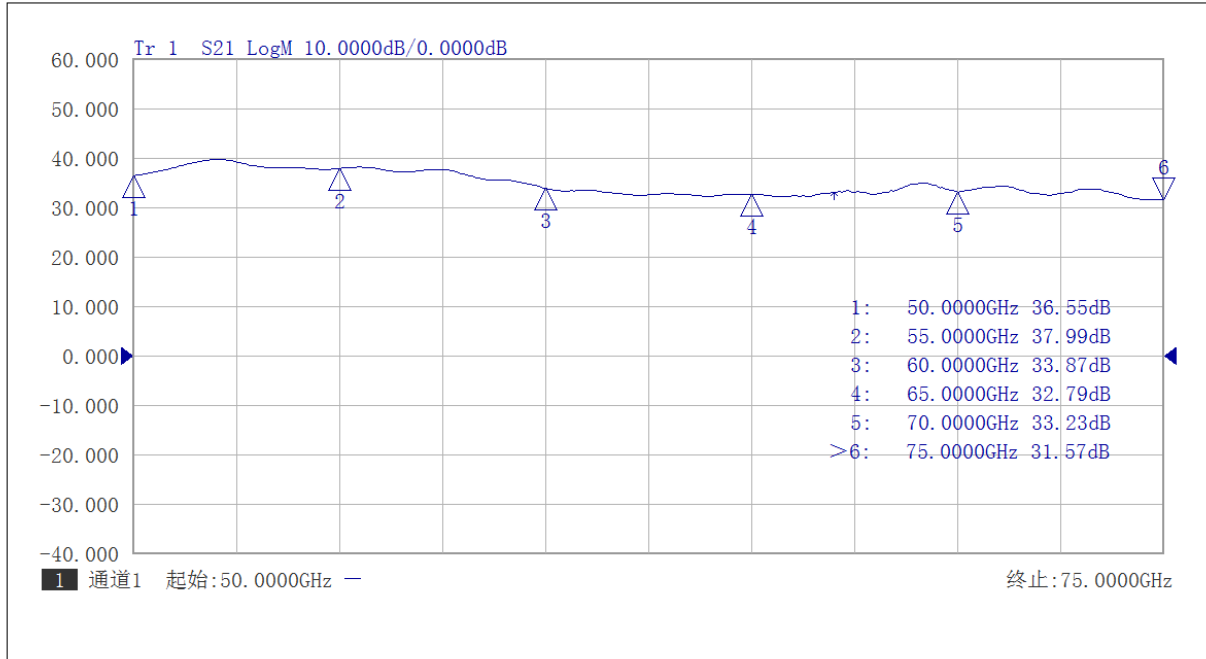
1. Datasheet may be changed according to update of MMIC, Raw materials , process, and so on.
2. This data is only for reference, not for guaranteed specifications.
3. Please contact AT Microwave team to make sure you have the most current data

Caution:

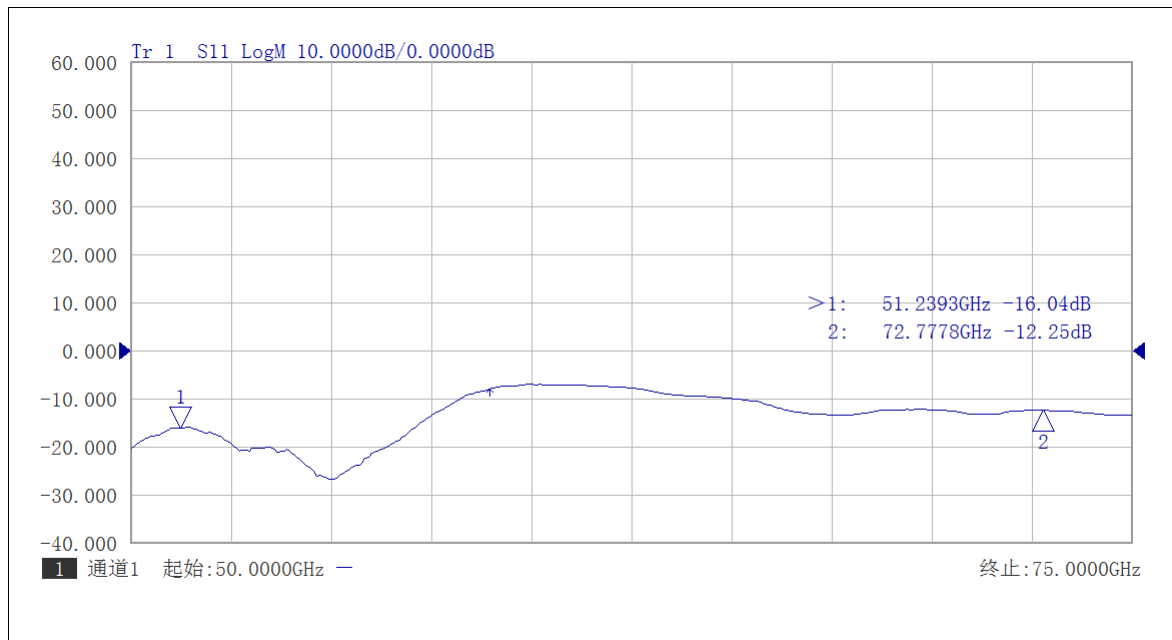
Please pay attention to the case temperature. If case temperature exceed higher than +50C, heat sink and fan are required, or the amplifier may be damaged.



Test data:

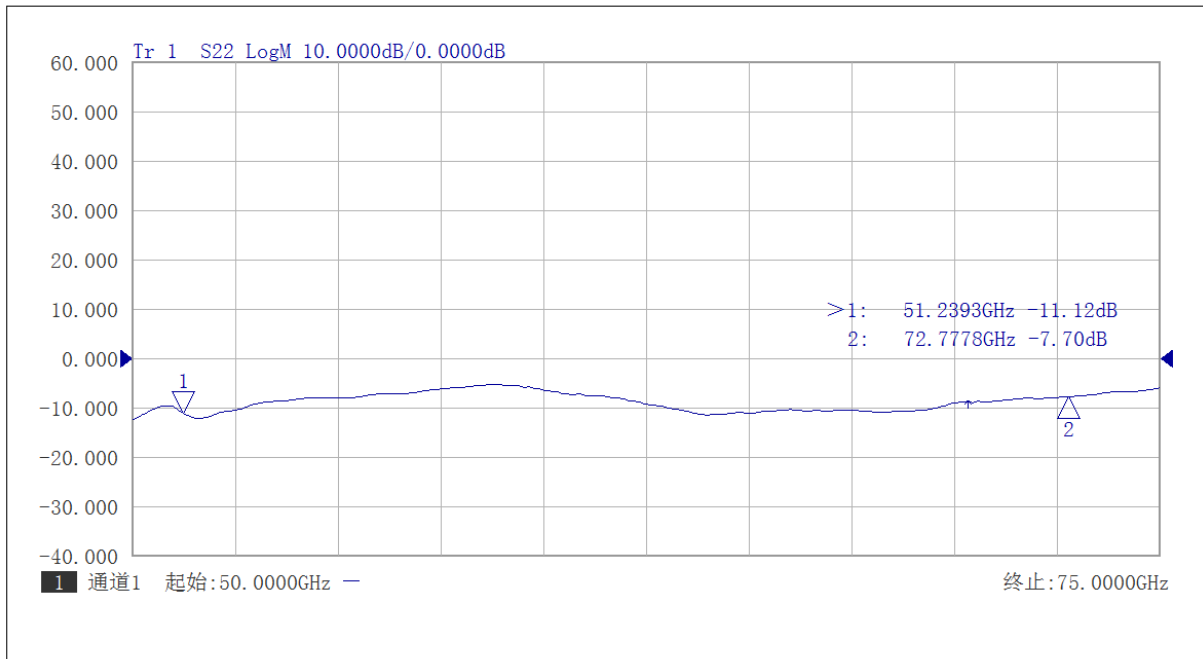


Gain vs Frequency

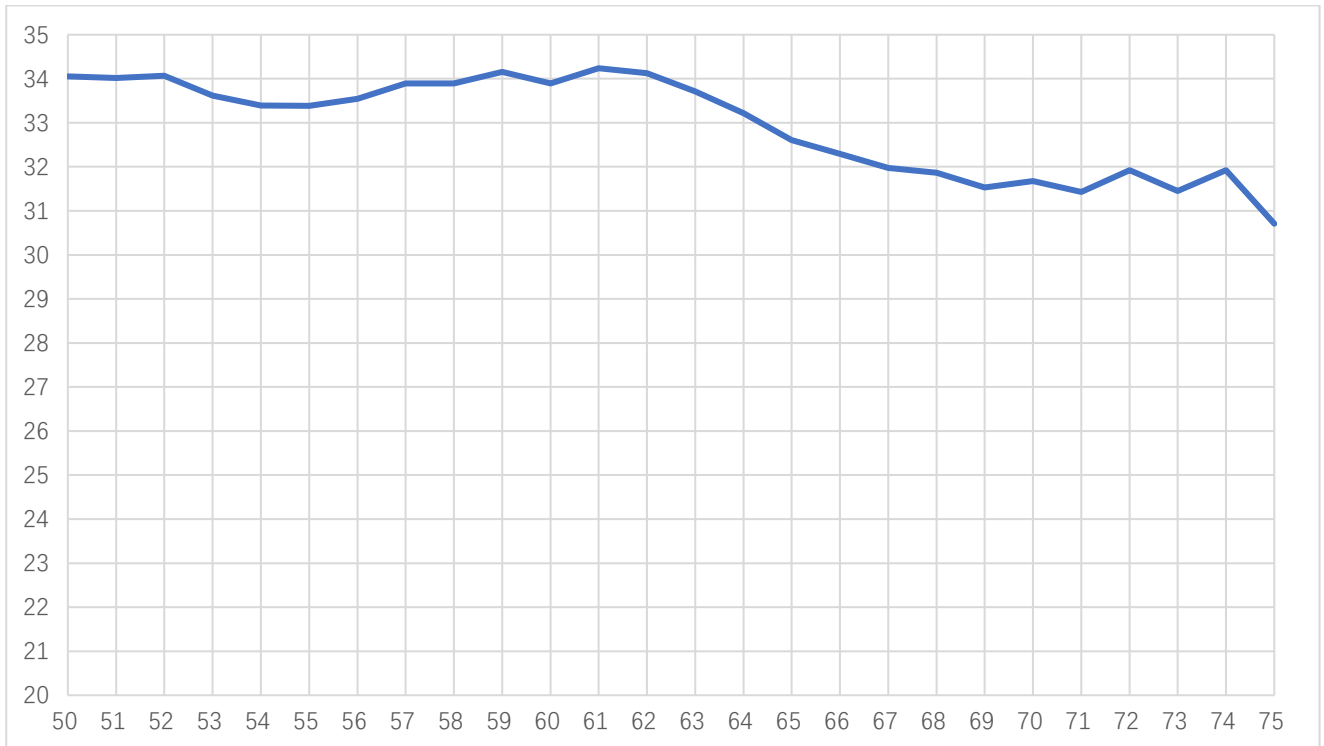


Input Return Loss vs Frequency





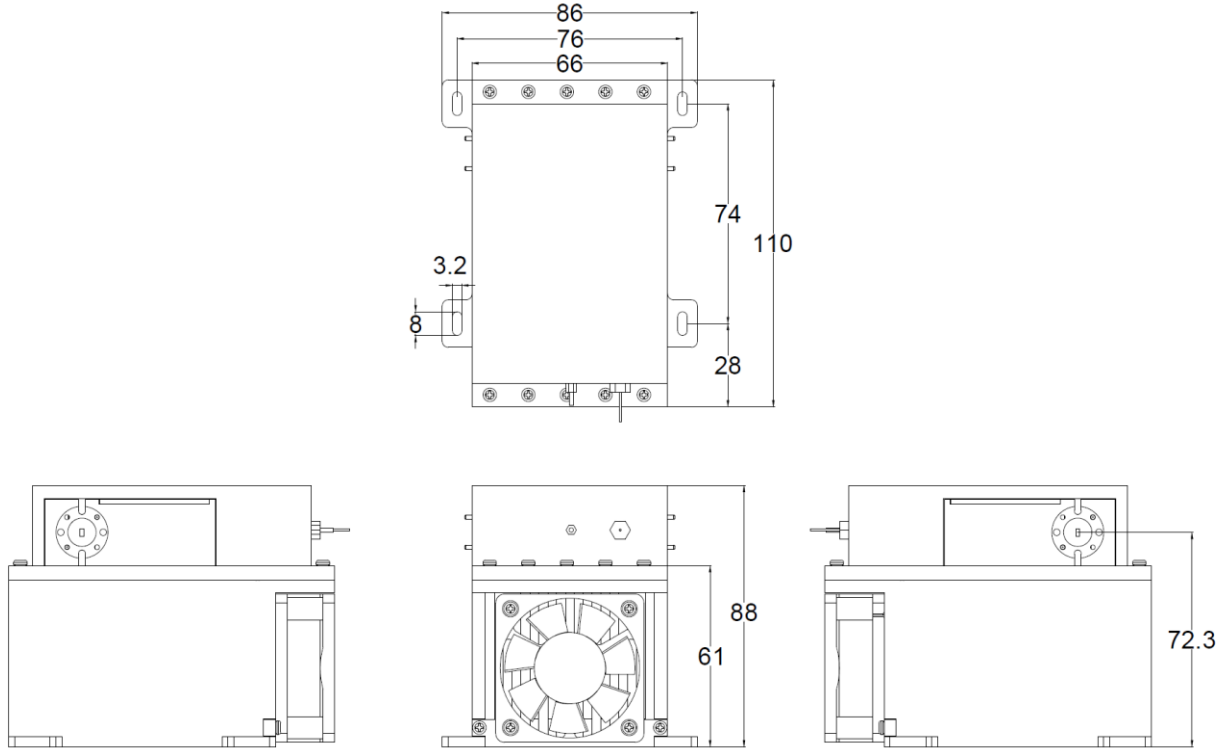
Output Return Loss vs Frequency



Psat vs Frequency



Dimension: (unit: mm)



Outline wit heatsink and Fan in default

