



# AT-PA-5566-1520VG

## 55-66GHz Medium Power Amplifier

## 55-66GHz Broadband Power Amplifier



### Product Overview

AT-PA-5566-1520VG is high power amplifier with +20dBm output power in the frequency of 55-66GHz. The DC power requirement is +5V/300mA. The module is with 1.85mm Female

The power amplifier has high gain, high linearity, low input/output return loss and flat gain response.

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

### Advantages

- ✓ Frequency: 55-66GHz
- ✓ P1/Psat:+18/20dBm
- ✓ Small signal gain: 15dB
- ✓ Single Power Supply

### Application

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

## Key Features

Parameter	Min	Typical	Max
Frequency		55-66GHz	
Gain	13dB	15dB	
P1Db		+18dBm	
Psat		+20dBm	
Drain Supply		+5V	+8V
Current		300 mA	
Input Return Loss		-7dB	
Output Return Loss		-7dB	
Spec Temp		25C	





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## Mechanical Information

Item	Description
Input Port	1.85mm Female
Output Port	1.85mm Female
Case Material	Copper
Finish	Gold Plated
Package Sealing	Epoxy Sealed
Weight (Without Heatsink)	90g
Size:	30x30x14 mm

## Absolute Maximum Ratings Table

Parameter	Value
Drain Supply	+9V
RF Input Power	+15dBm
Operating Temperature	-20 to +66C
Storage Temperature	-66 to +150C

### Caution:

Please pay attention to the case temperature.

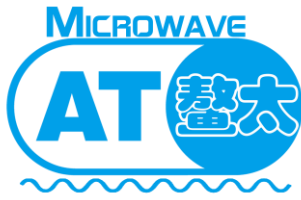
If case temperature exceeds +50C, heat sink and fan are required.

### Bias Procedure:

Make sure GND is connected before Vdd Power ON.

Module may be damaged when Vdd Power ON without GND.





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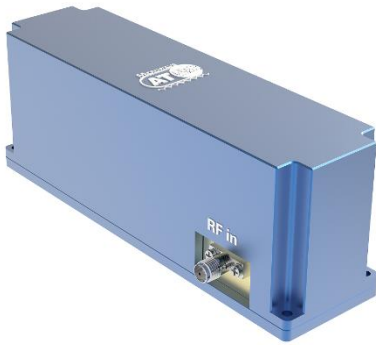
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### Notes:

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.

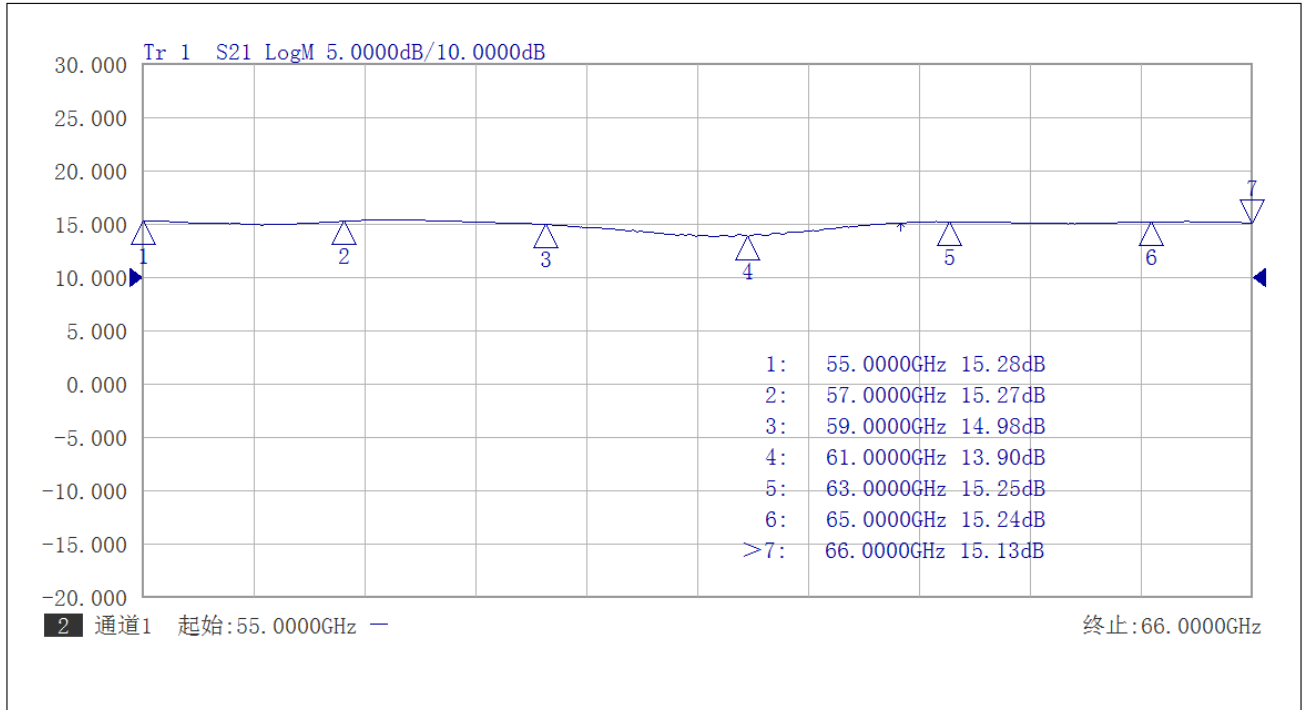
### Part Number Selection Guide

Item	Description
PN	Stand Module with DC Power Supply
<b>PN-LCBT</b>	<b>L</b> ow Cost, <b>C</b> ompact <b>B</b> ench- <b>T</b> op, +220V Supply with AC/DC Adapter

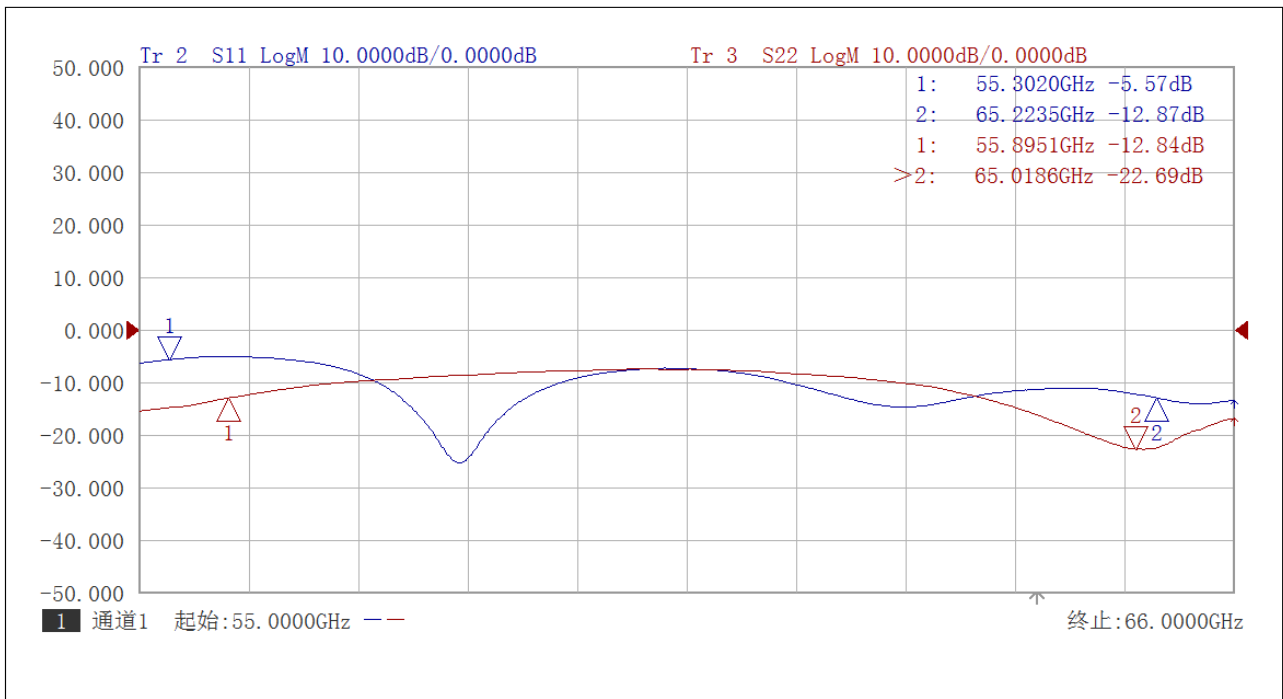


### Test Data

Please note that test curves will vary slightly from unit to unit.



Gain vs Frequency



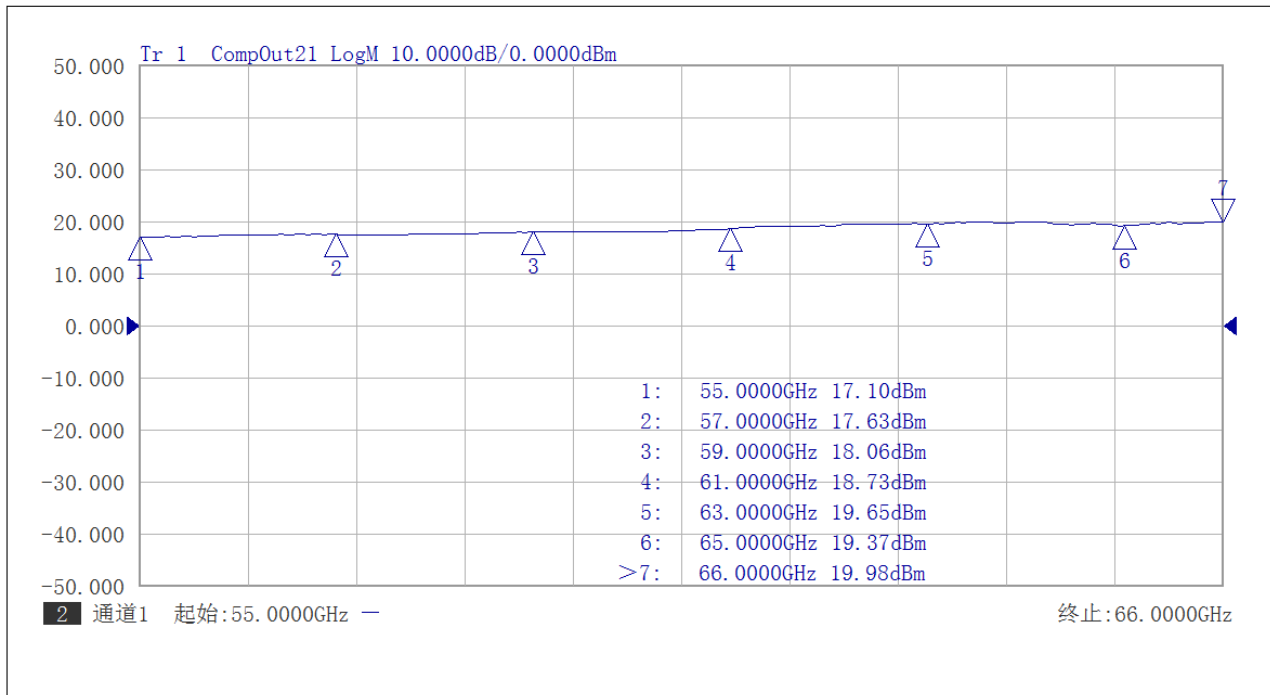
Return Loss vs Frequency



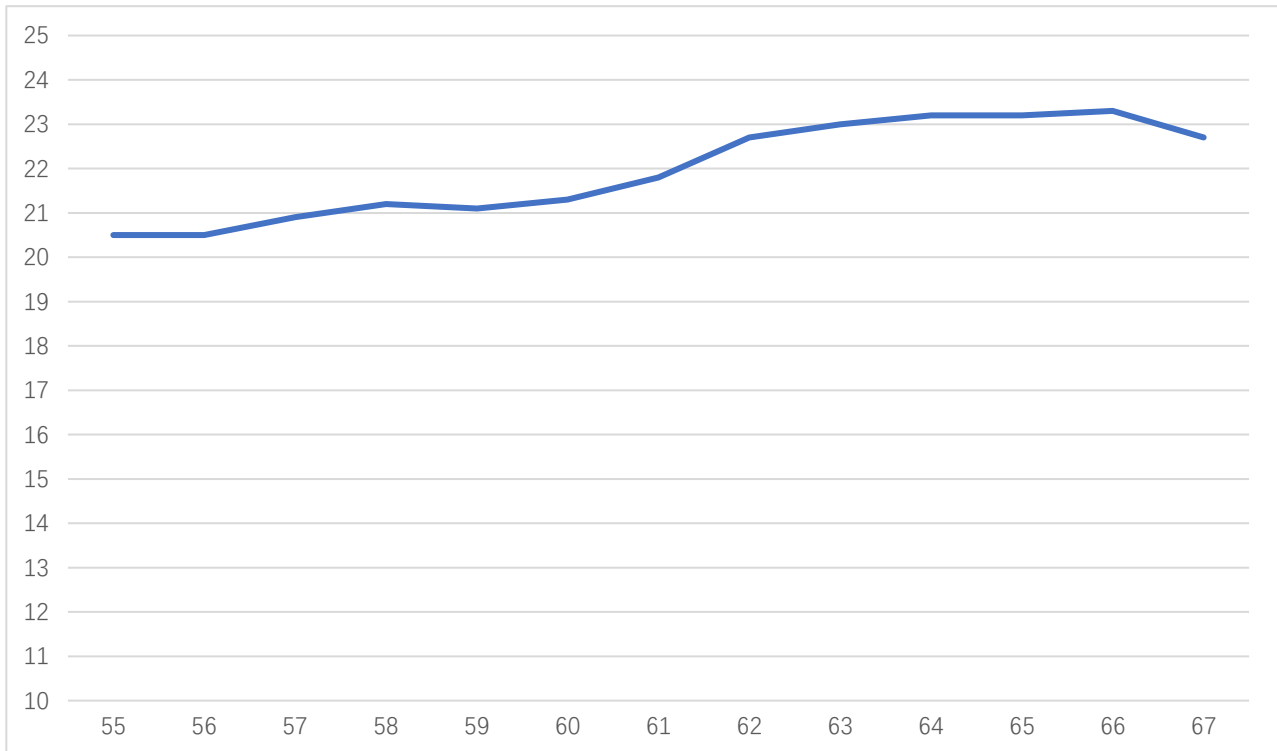


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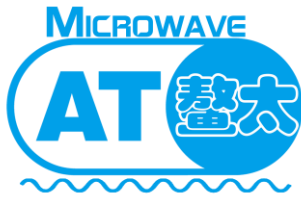


P1db vs Frequency



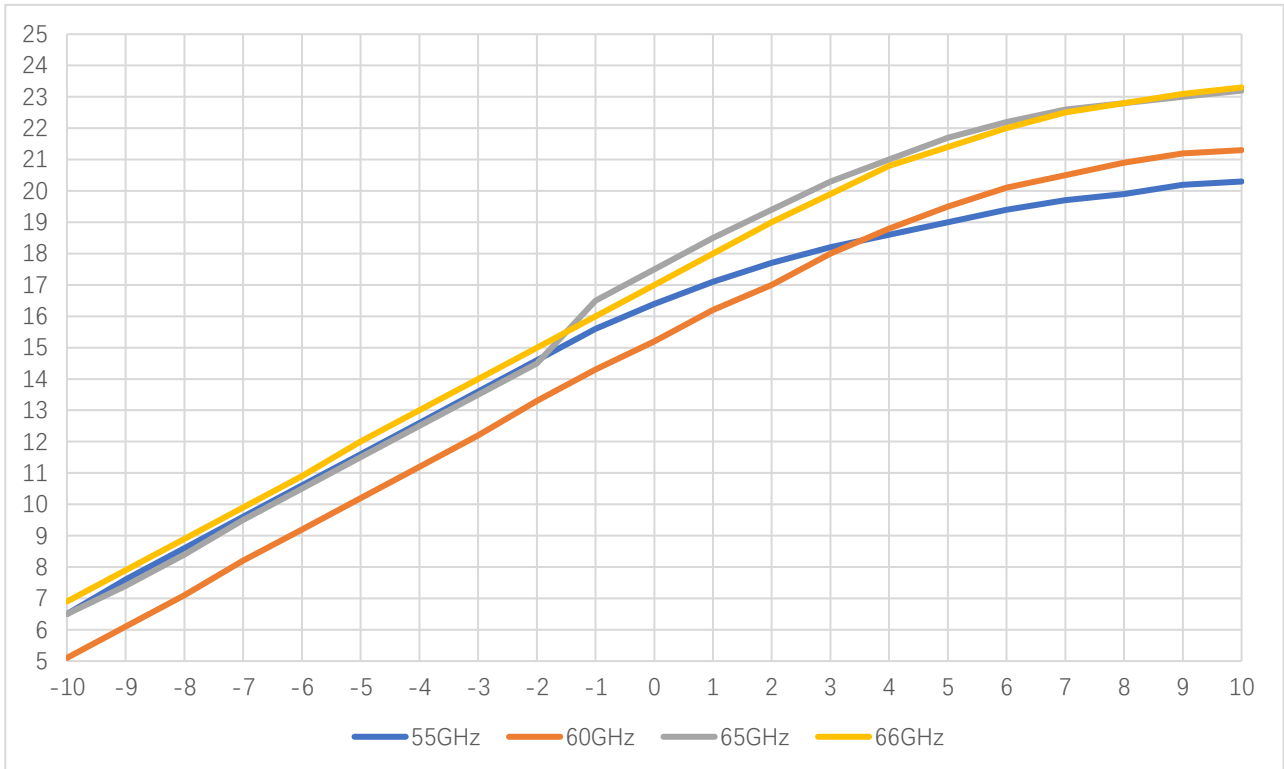
Psat vs Frequency





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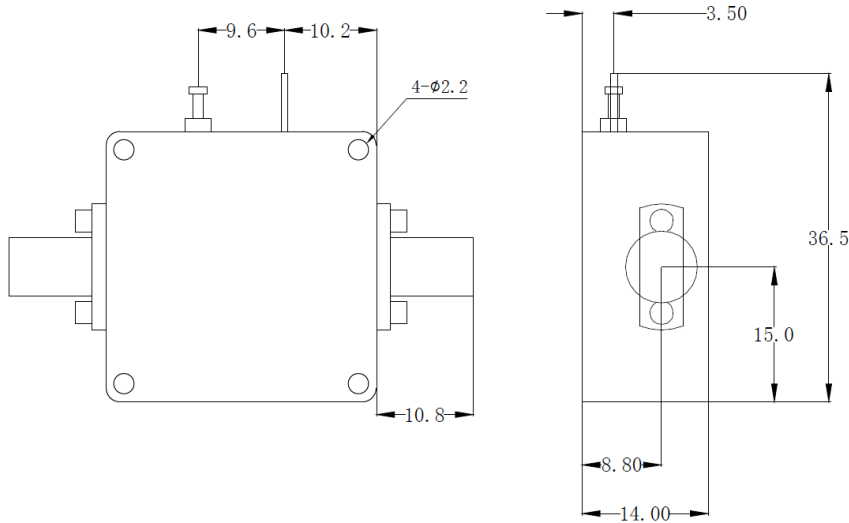
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Pout vs Pin

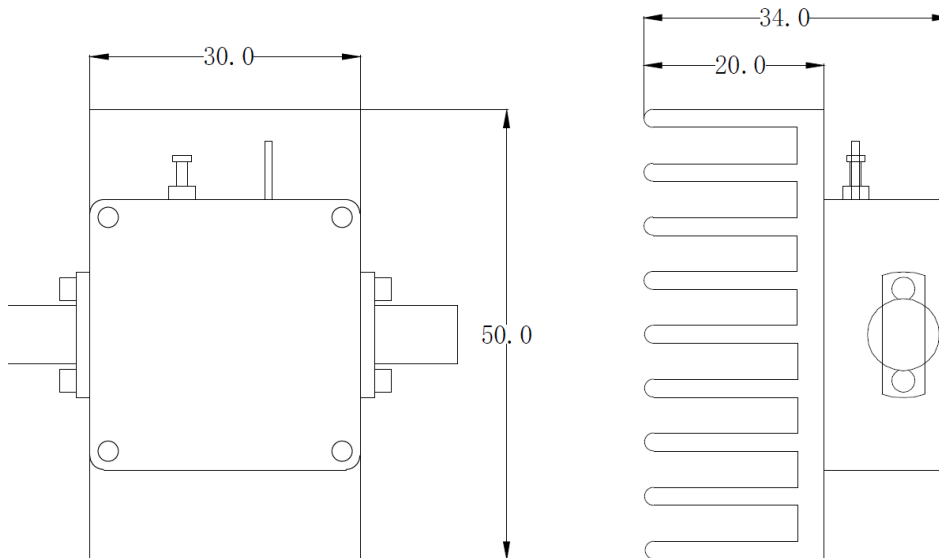


### Dimension: (unit in mm)



	<26.5GHz	<40GHz	<50GHz	<67GHz
Connector	SMA	2.92mm	2.4mm	1.85mm
Lenth of a	9.4mm	9.5mm	10.8mm	11.3mm

Note: Female Default. Contact with us for other types.



Including a small heatsink without Fan if output Power higher than +20dBm.  
Customers can removed it or use their own heatsink according to actual situation.

**Heat Sink Required During Operation**

