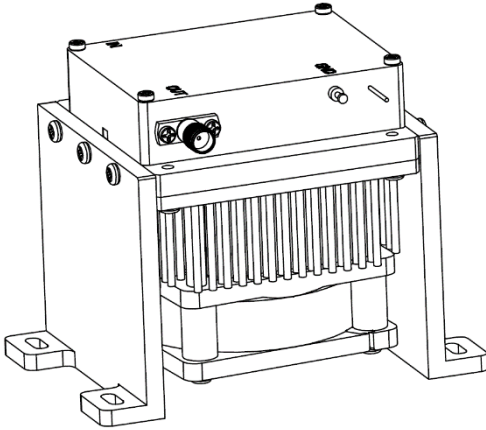


### 40-60GHz Broadband Amplifier, +32dBm

2022-3-6

#### Product Overview



AT-PA-4060-3932VGN is high gain power amplifier with +32dBm output power in the frequency of 40-60GHz. The DC power requirement is +18V/1.5A. Supply voltage can be from +18 to +20V. The module is with 1.85mm connector.

AT-PA-4067-3932VGN and AT-PA-4060-3932VGN are same design. PA-4067 is extended to 67GHz with selection and higher price, while PA-4060 is the standard product without guarantee for 60+GHz performance.

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

#### Advantages

- ✓ Frequency: 40-60GHz
- ✓ Pout: +32dBm
- ✓ Small signal gain: 39dB
- ✓ Single Power Supply

#### Application

- ✓ 5G Communication
- ✓ Test Equipment
- ✓ ROF (RF Over Fiber)
- ✓ Radar System

#### Key Features

Parameter	Min	Typical	Max
Frequency		40-60GHz	
Small Signal Gain	37dB	40-60GHz: 39dB	
Gain Flatness (40-60GHz)		+/-5dB	
P1dB		TBD	
Psat	+30.8dBm	+32dBm	
Drain Supply		+18V	+20V
Current/Quiscent		0.97A	
IDD Psat		1.55A	
Input Return Loss		-5dB	
Output Return Loss		-5dB	
Spec Temp		25C	





# AT-PA-4060-3932VGN

40-60GHz Power Amplifier

## Mechanical Information

Item	Description
Input Port	1.85mm Female
Output Port	1.85mm Female
Case Material	Copper
Finish	Gold Plated
Weight(without heatsink)	230g
Size:	See outline

## Absolute Maximum Ratings Table

Parameter	Value
Drain Supply	+24V
RF Input Power	+15 dBm
Operating Temperature	-20 to +70C
Storage Temperature	-67 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.





# AT-PA-4060-3932VGN

40-60GHz Power Amplifier

## Notes:

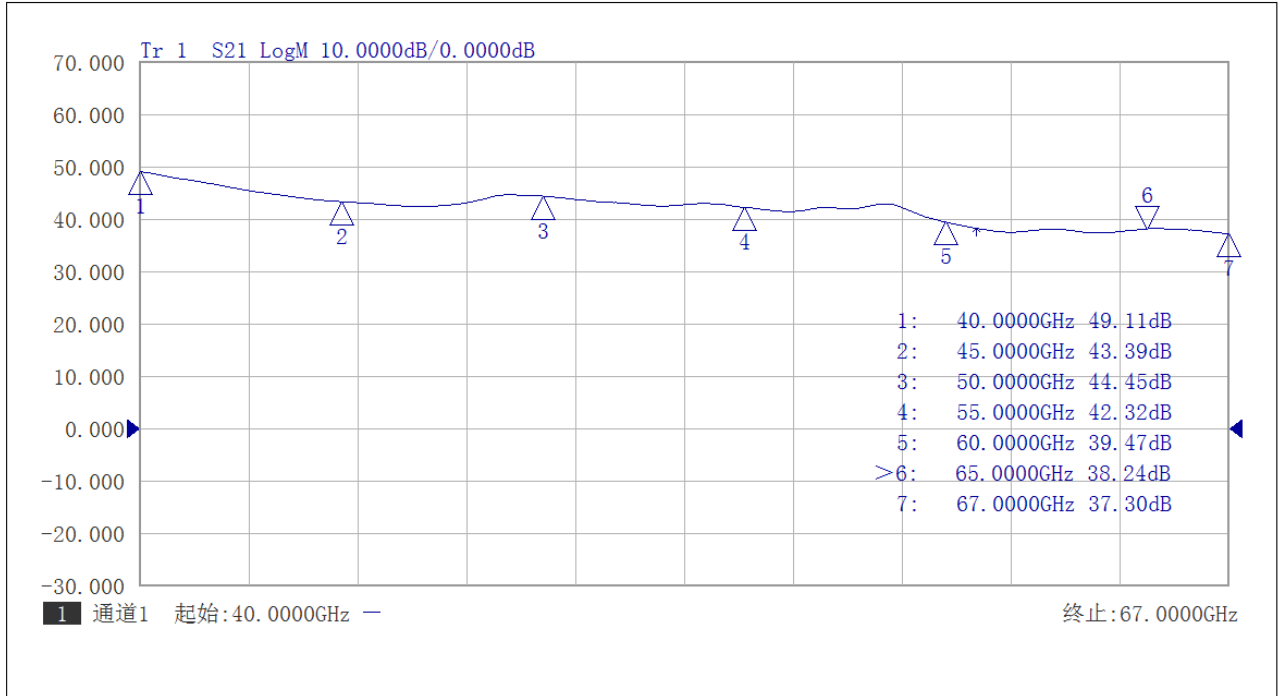
1. Datasheet may be changed according to update of MMIC, Raw materials , process, and so on.
2. This data is only for reference, not for guaranteed specifications.
3. Please contact AT Microwave team to make sure you have the most current data.

## Part Number Selection

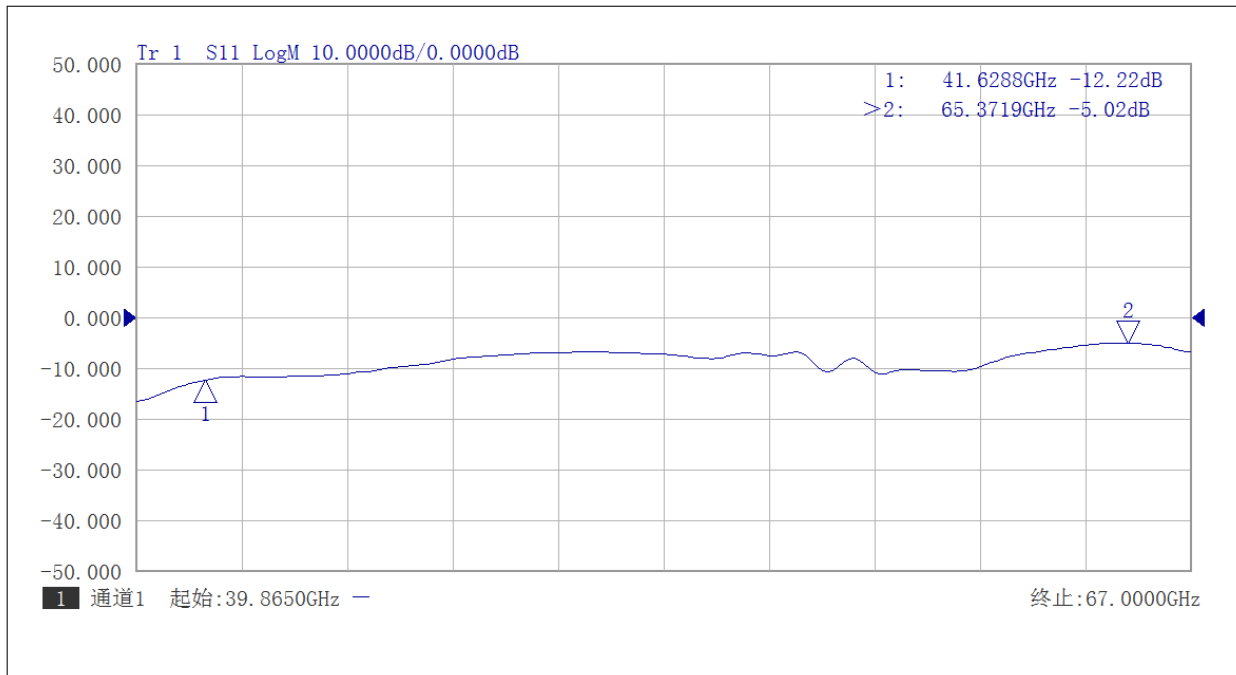
Item	Description
AT-PA-4060-3932VGN	In defaulted without heatsink and Fan. Heatsink and Fan required during operation.
AT-PA-4060-3932VGN -HF	Including Heatsink and Fan. Fan bias is connected with PA Module's Vdd supply



### Test Data (25C)

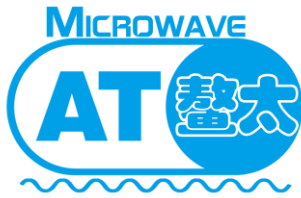


Gain vs Frequency



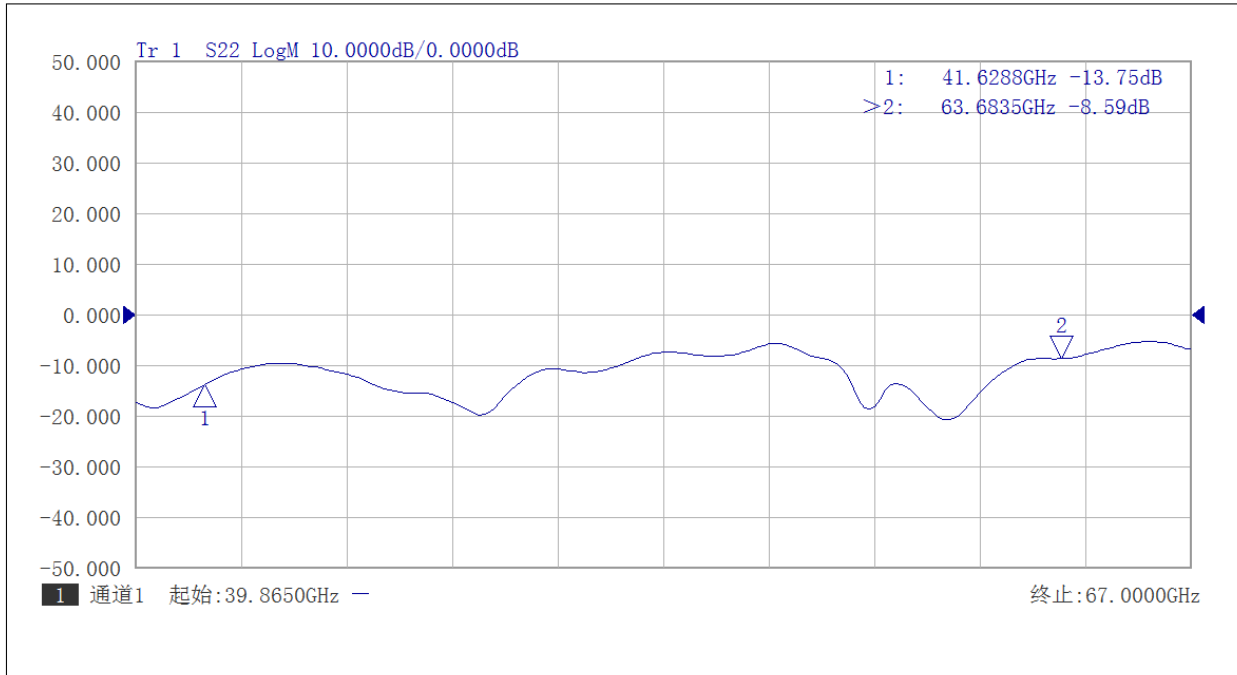
Input Return Loss vs Frequency



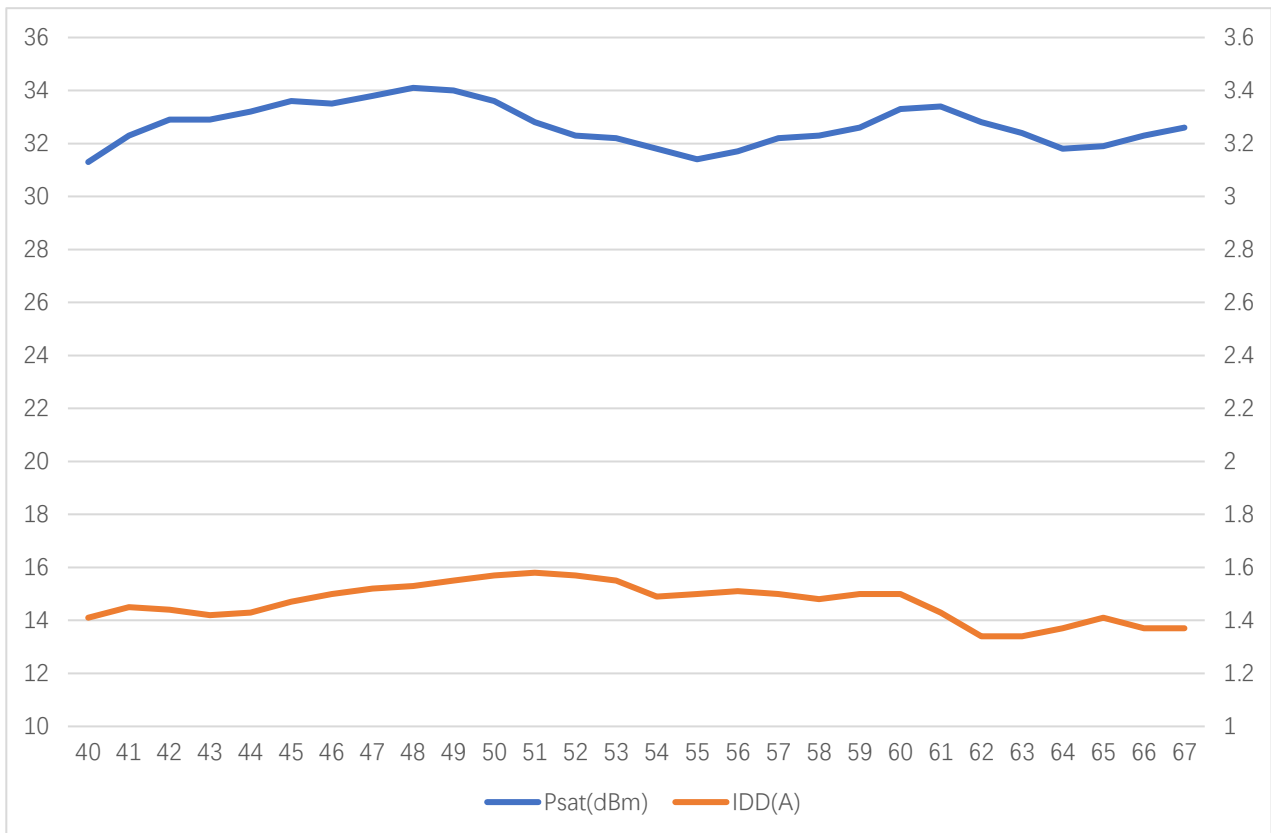


# AT-PA-4060-3932VGN

40-60GHz Power Amplifier

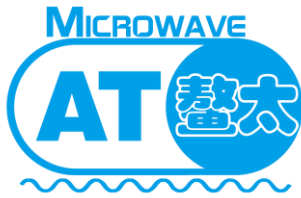


Output Return Loss vs Frequency



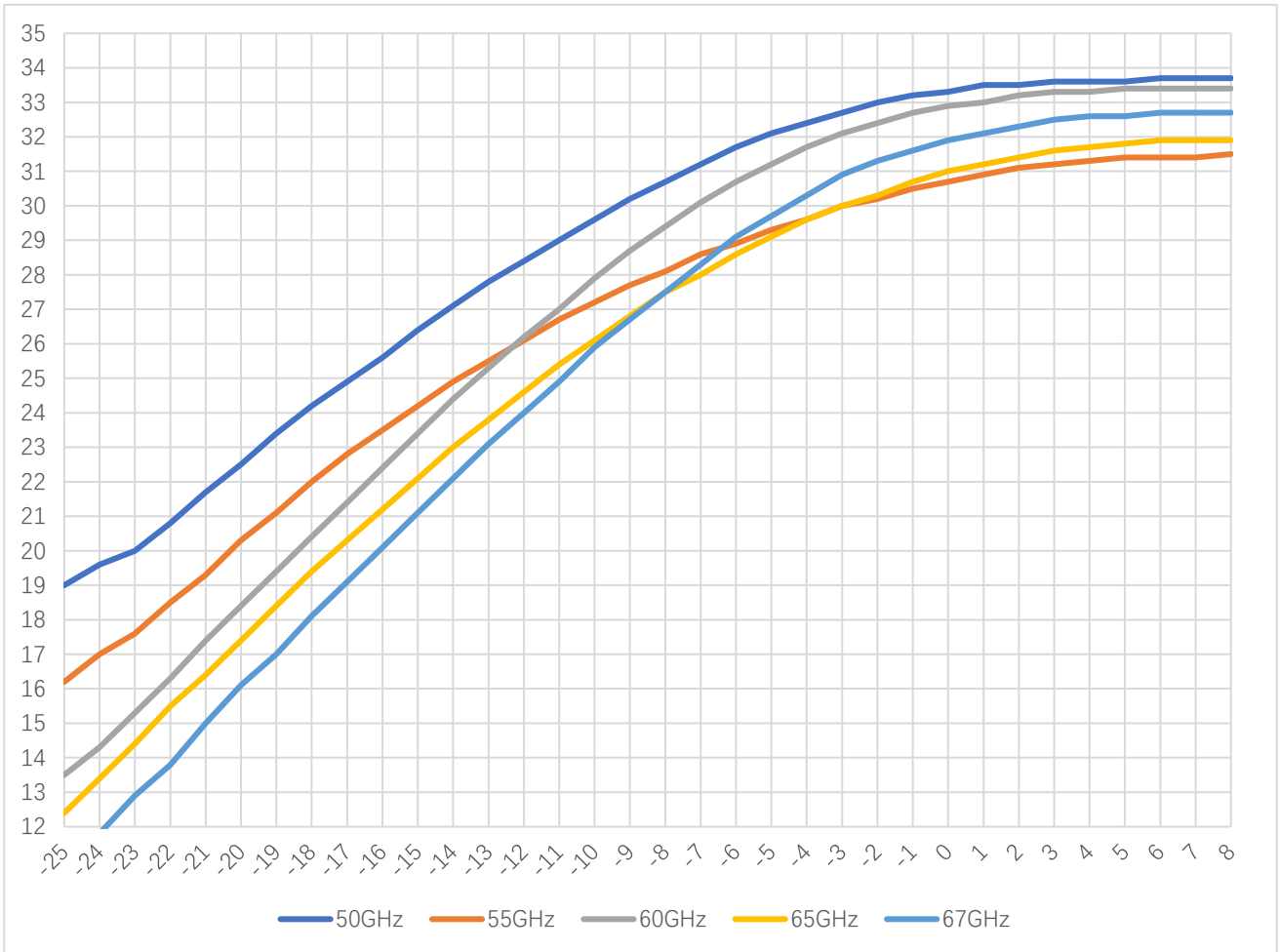
Psat and IDD vs Frequency, Pin=+5dBm





# AT-PA-4060-3932VGN

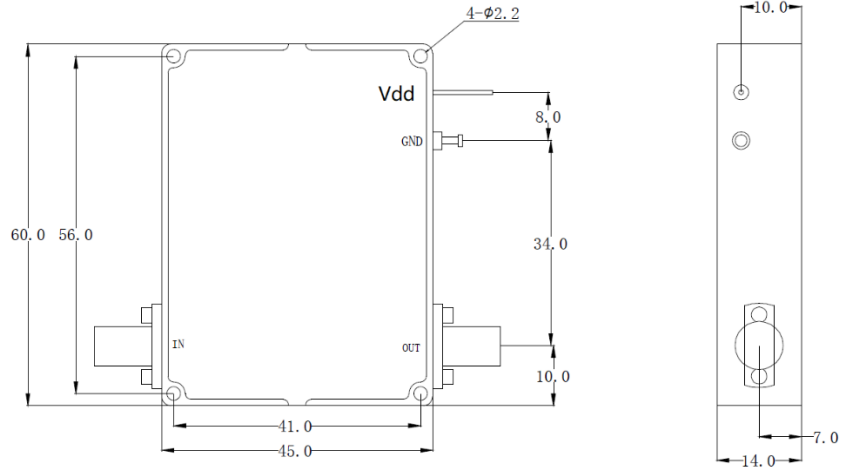
40-60GHz Power Amplifier



Pout vs Pin at 50/55/60/65/67GHz



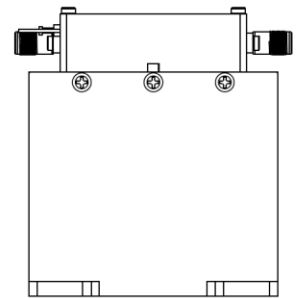
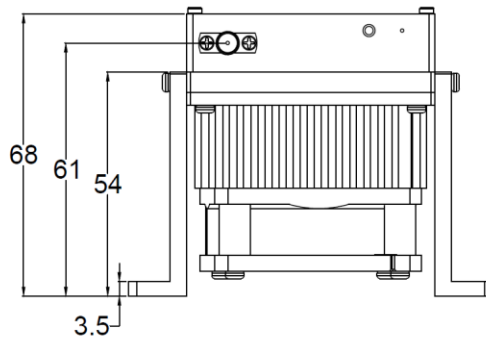
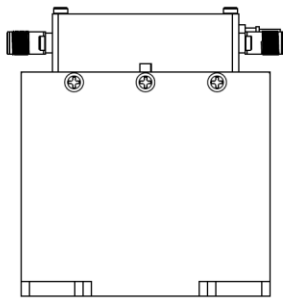
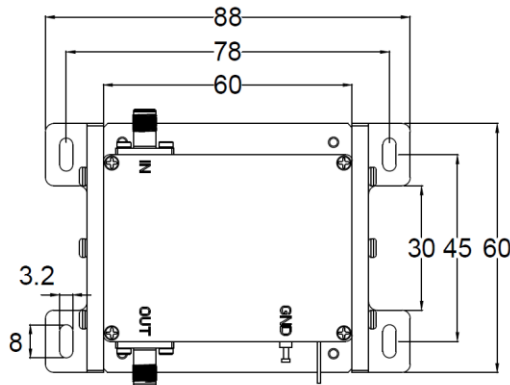
### Dimension: (unit mm)



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

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

Outline without heatsink. Heat Sink Required During Operation



Outline-HF option with heatsink

