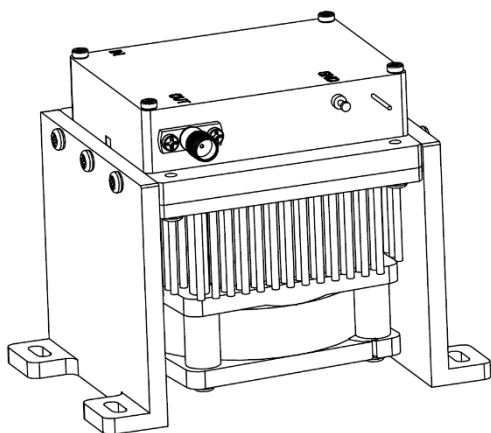


40-60GHz Broadband Amplifier, High Gain 39dB, High Power +34dBm

2022-10-1



Module with-HF Option

Product Overview

AT-PA-4060-3934VGNT is high gain power amplifier with +34dBm output power in the frequency of 40-60GHz. The DC power requirement is +20V/2.5A. Supply voltage can be from +20 to 22V. The module is with 1.85mm connector.

AT-PA-4060-3934VGNT and AT-PA-4060-3934VGNT are same design. PA-4060 is extended to 60GHz 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

Advantages

- ✓ Frequency: 40-60GHz
- ✓ Pout:+34dBm
- ✓ 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	35dB	39dB	
Small Signal Gain Flatness		+/-5dB	
Psat	+32dBm	+34dBm	
Drain Supply		+20V	+22V
Current/Quiescent		2.05A	
IDD Psat		2.5A	3.0A
Input Return Loss		-3dB	
Output Return Loss		-8dB	
Spec Temp		25C	





AT-PA-4060-3934VGNT

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	-60 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-4060-3934VGNT

40-60GHz Power Amplifier

Notes:

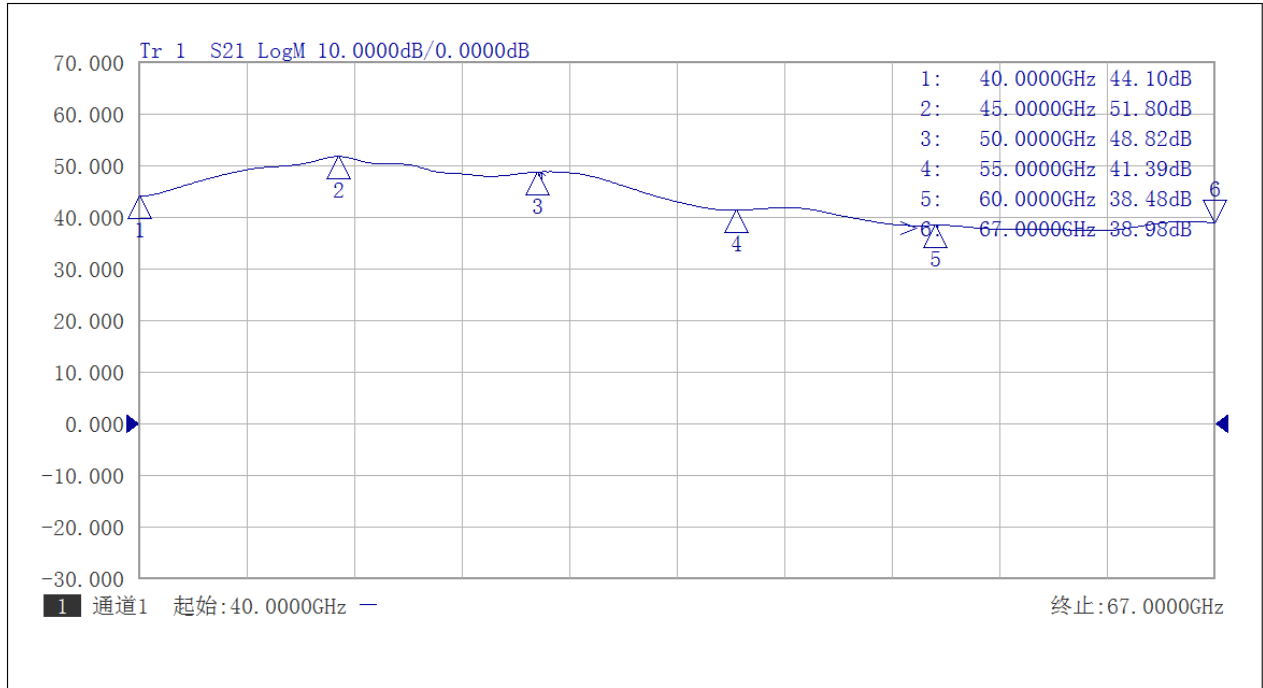
1. Datasheet may be changed according to update of MMIC, Raw materials , process, and so on.
2. This data is only for reference, not for guaranteed specifications.
3. Please contact AT Microwave team to make sure you have the most current data.

Part Number Selection

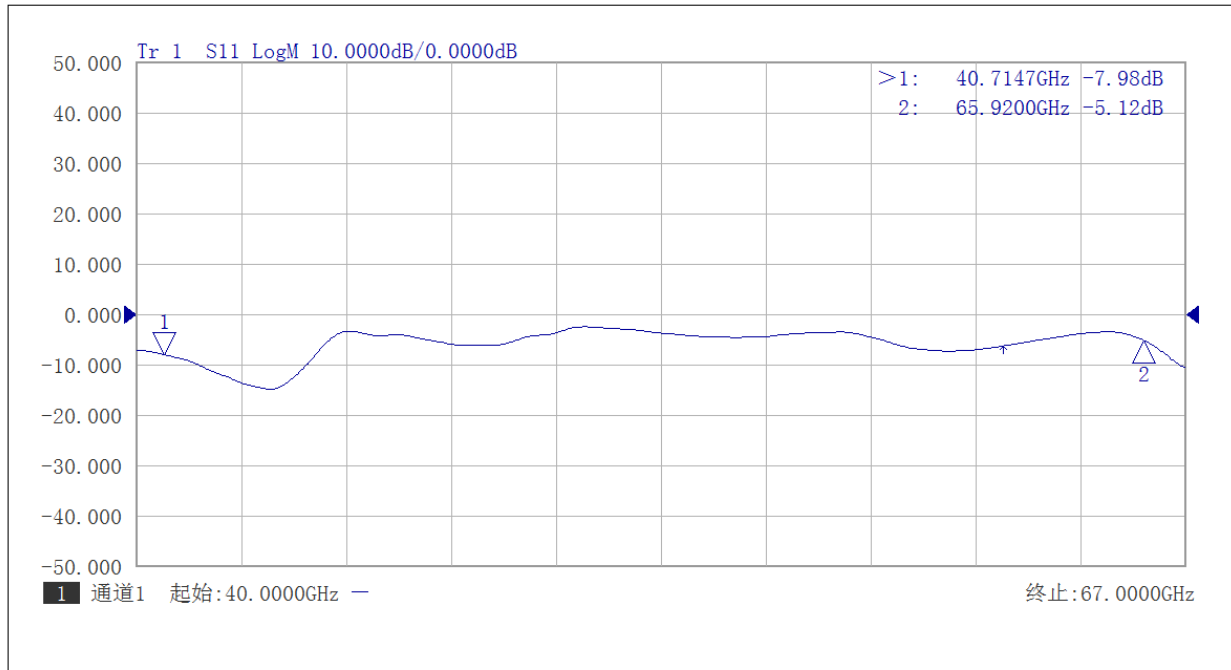
Item	Description
AT-PA-4060-3934VGNT	In defaulted without heatsink and Fan. Heatsink and Fan required during operation.
AT-PA-4060-3934VGNT -HF	Including Heatsink and Fan. Fan bias is connected with PA Module's Vdd supply



Test Data

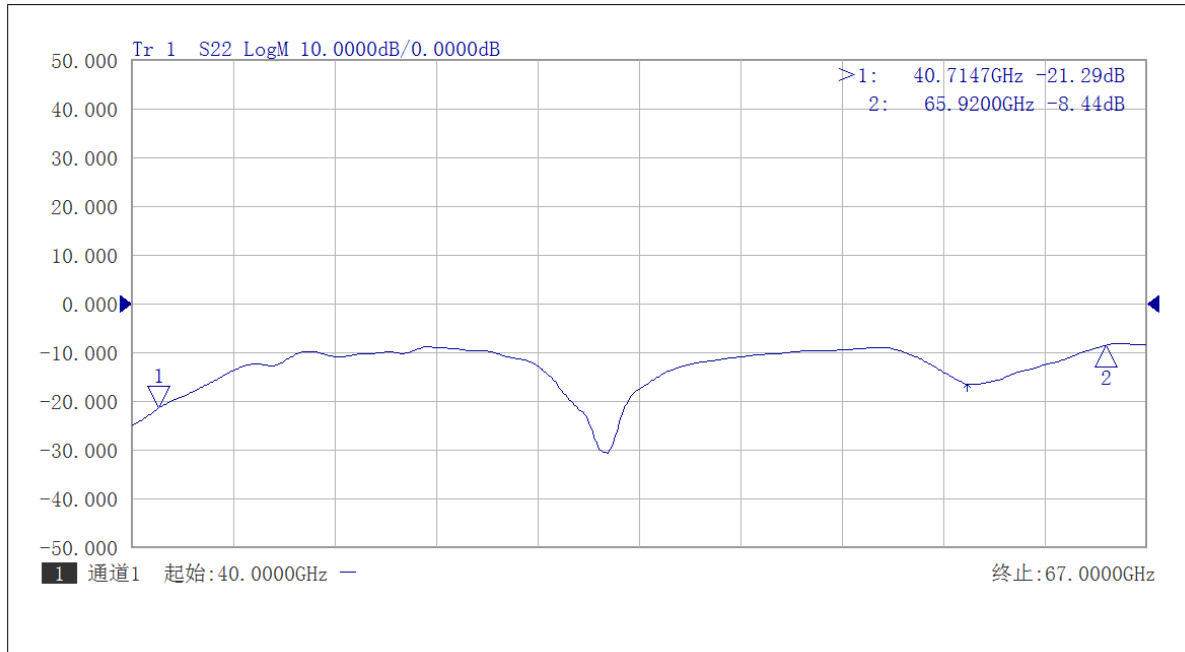


Gain vs Frequency

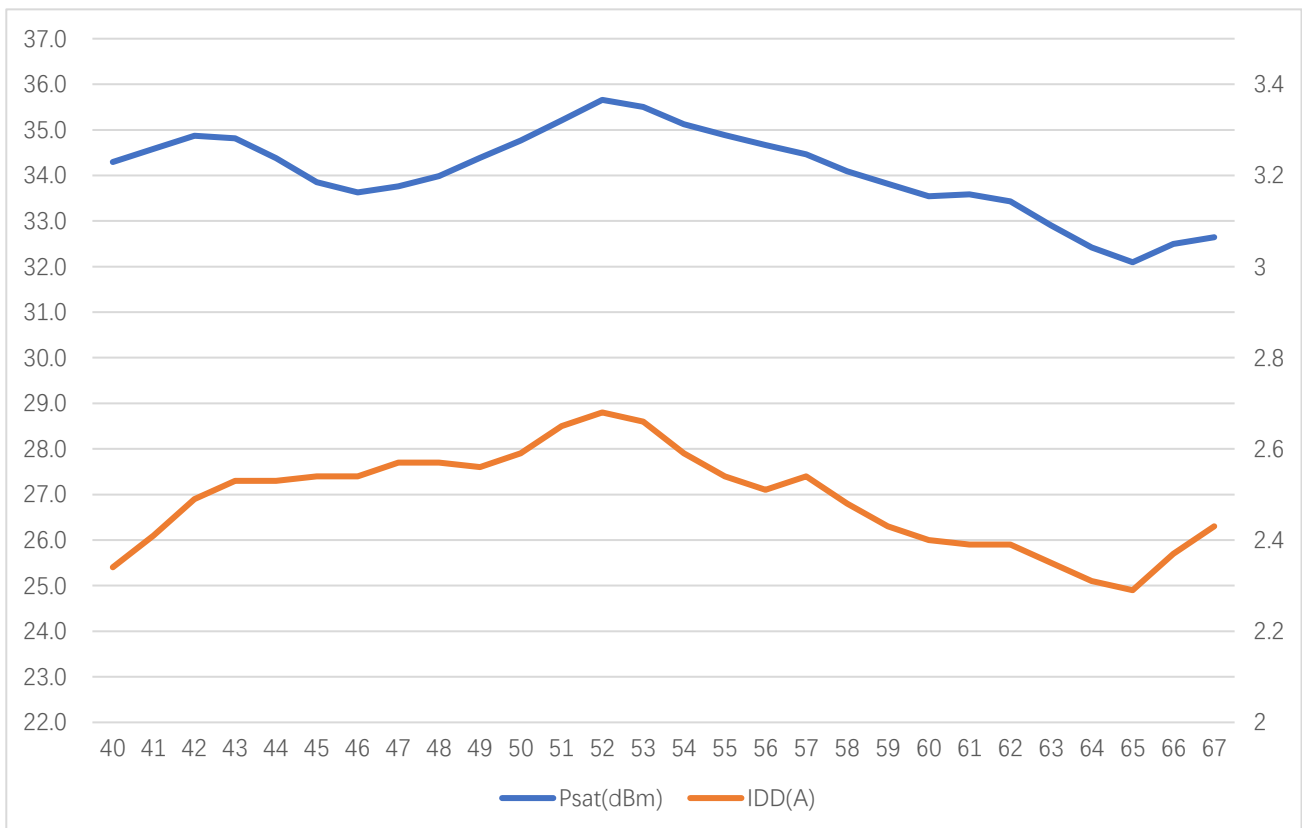


Input Return Loss vs Frequency





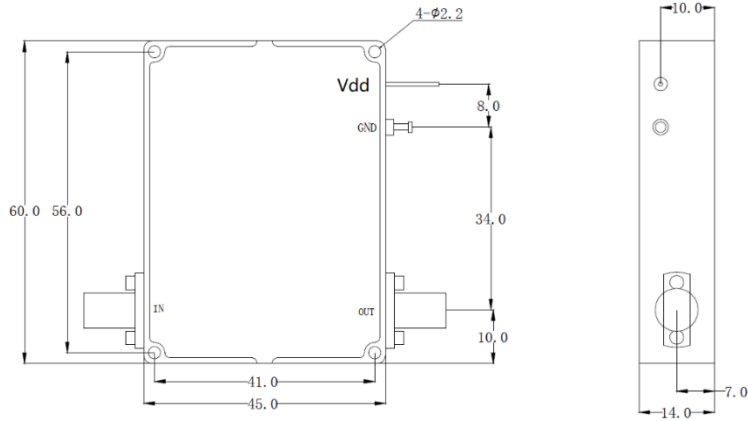
Output Return Loss vs Frequency



Pout vs Frequency, Pin=+5dBm



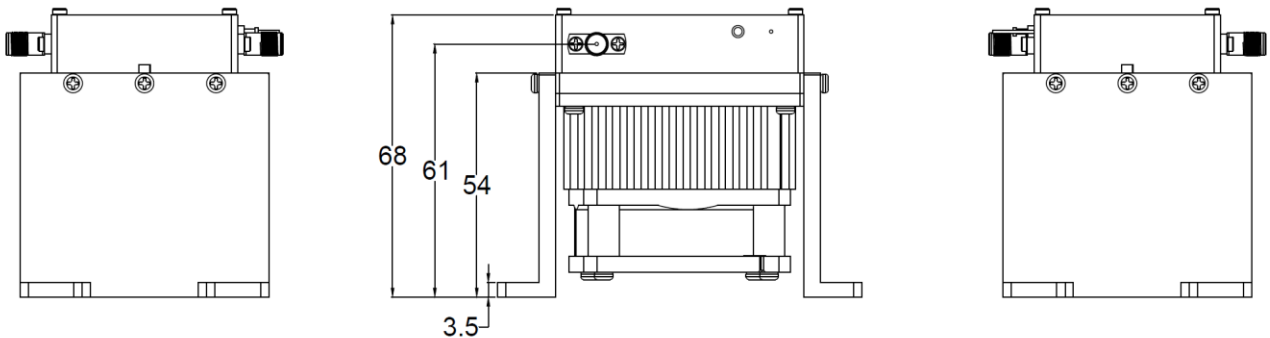
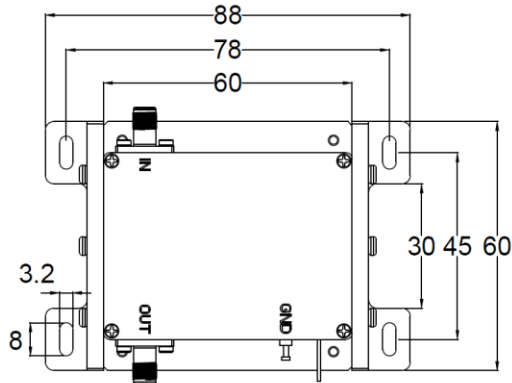
Dimension: (unit mm)



	<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

