

26-40GHz High Power Amplifier

Gain=33dB, Pout=+34dBm

2023-11-14



-LCBT Option

Product Overview

AT-HPA-2640-3334N is GaAs Based high gain power amplifier with +34dBm output power in the frequency of 26-40GHz. Both AC and DC power supply can be used.

The power amplifier has high gain, high linearity, low input/output return loss and flat gain response. There are heatsink and fan in default for this amplifier.

More information, please visit www.atmicrowave.com

Advantages

- ✓ Frequency: 26-40GHz
- ✓ Psat:+34dBm
- ✓ Small signal gain: 33dB
- ✓ Single Power Supply

Application

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

Key Features

Parameter	Min	Typical	Max
Frequency		26-40GHz	
Gain	30dB	33dB	
P1dB	+31dBm	+32dBm	
Psat	+32.5dBm	+34dBm	
DC Power Supply		+12V	+15V
Idd/NO RF		1.0A	
IDD/ Psat		2.5A	3.2A
Input Return Loss		-10dB	
Output Return Loss		-5dB	
Spec Temp		25C	





AT-HPA-2640-3334N

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Mechanical Information

Item	Description
Input Port	2.92mm Female
Output Port	2.92mm Female
Case Material	Copper
Finish	Gold Plated
Weight	Module: 180g LCBT Option: 1.5KG
Size:	See outline

Absolute Maximum Ratings Table

Parameter	Value
DC Power Supply	+24V
RF Input Power	+20 dBm
Operating Temperature	-40 to +70C
Storage Temperature	-45 to +85C

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.

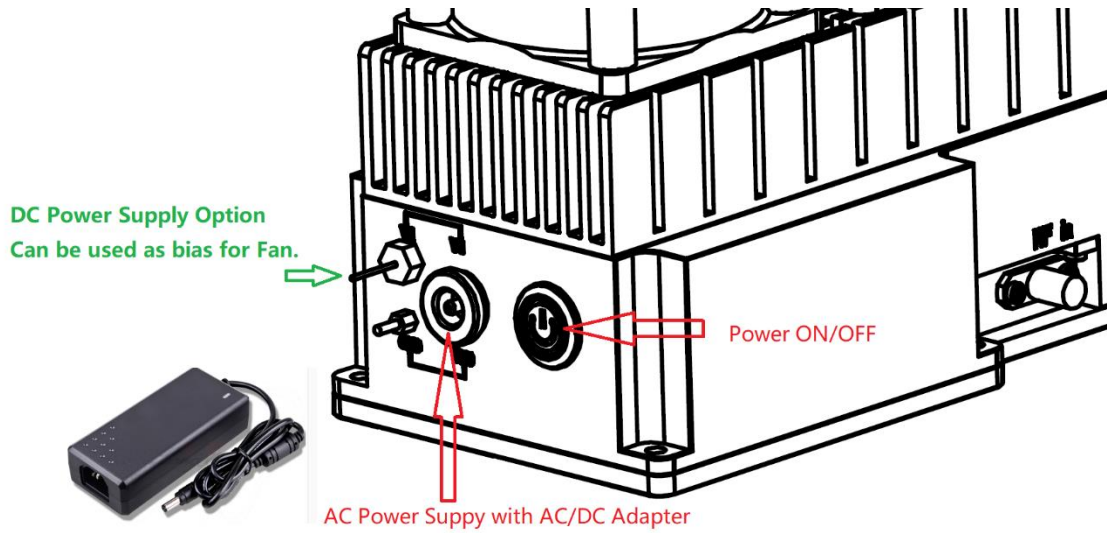
Part Number Selection

Item	Description
AT-HPA-2640-3334N	Standard products without heatsink and Fan. Customer must apply Heatsink and Fan by themselves.
AT-HPA-2640-3334N -LCBT	L ow Cost, C ompact B ench- T op, Heatsink included. +24V for DC Power Supply Option. +220V Supply with AC/DC Adapter
AT- BT HPA-2640-3334N	Bench-top Option 220V AC Power Supply Directly.



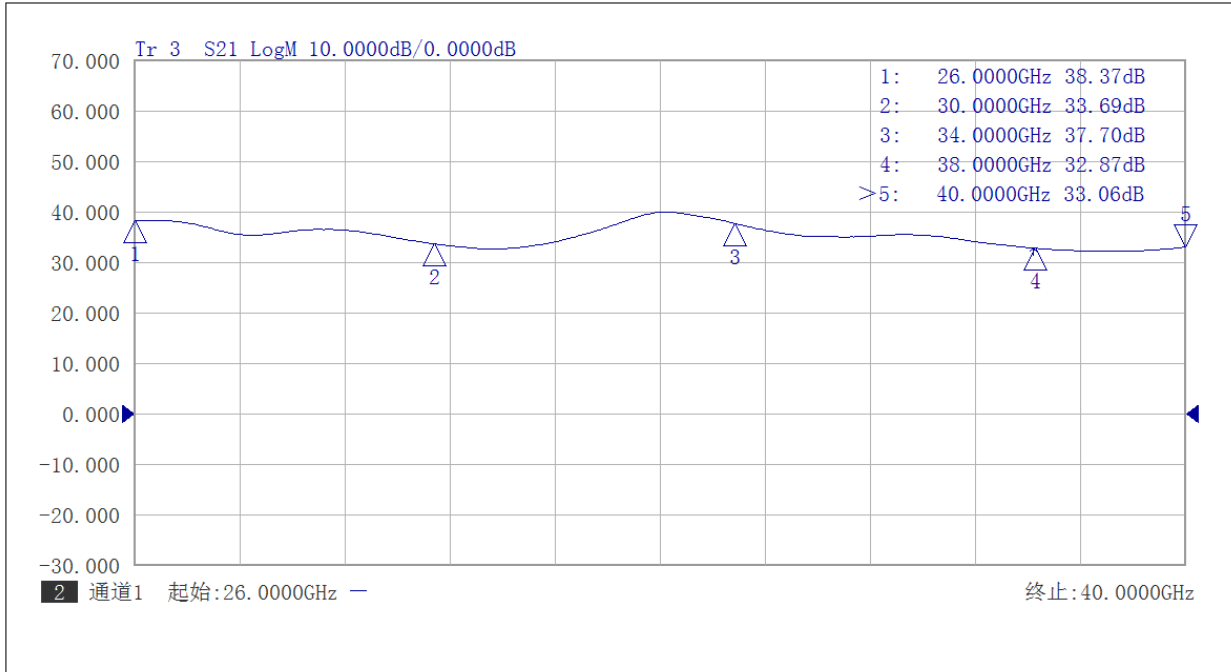
-LCBT Option Power Supply Guide.

1. AC Power supply with AC/DC Adapter; PIN VDD Output=+24V, can be used for Fan bias.
2. DC Power Supply from PIN VDD.
3. AT Microwave provide AC/DC adapter, heatsink and Fan in default for -LCBT Option.
4. **Never apply AC Bias and DC Bias at same time.**

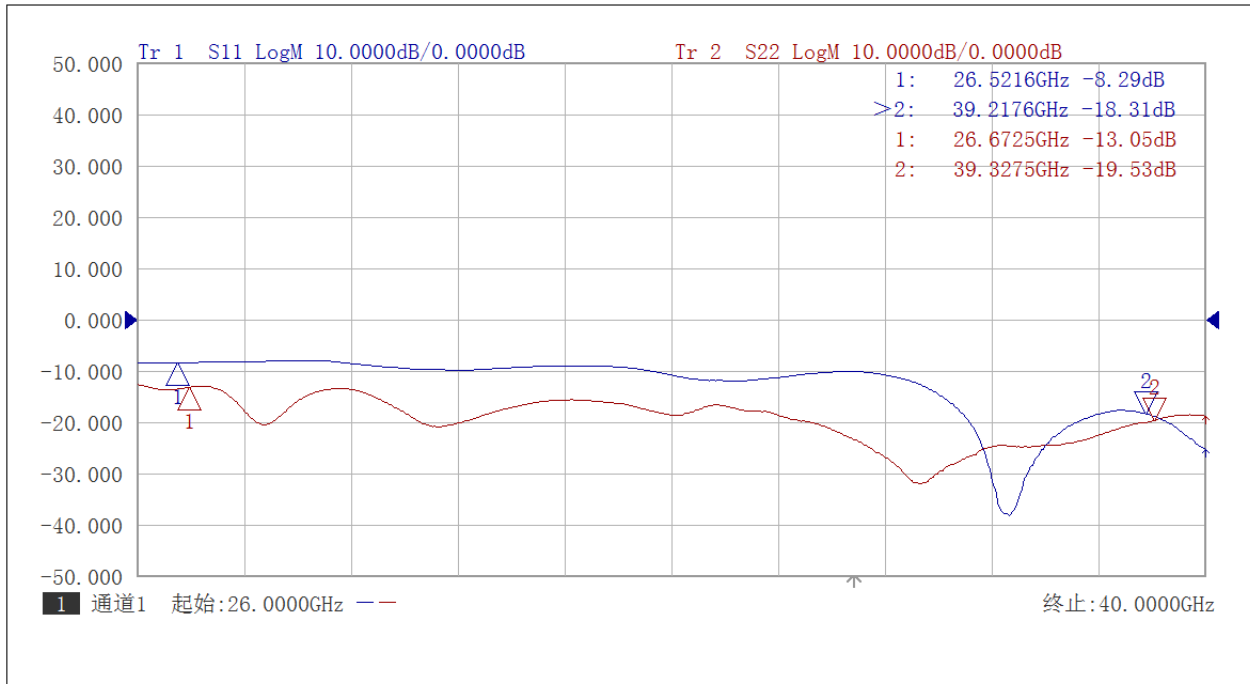


Test Data (25C)

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



Small Signal Gain vs Frequency



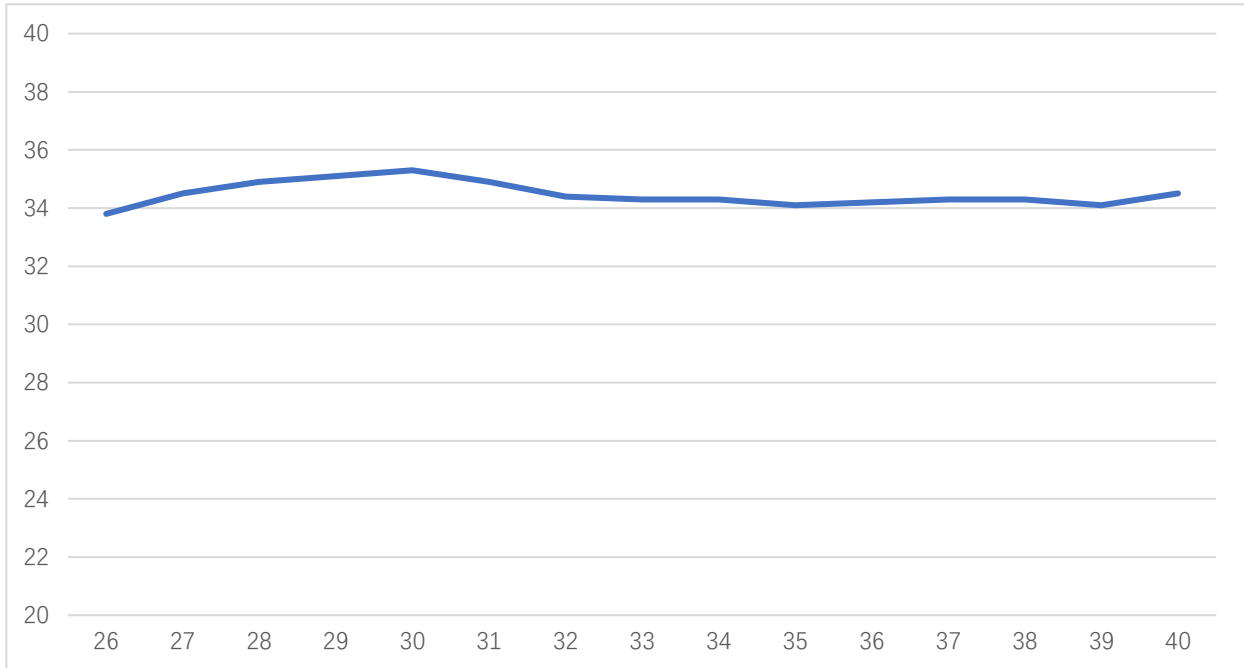
Return Loss vs Frequency





AT-HPA-2640-3334N

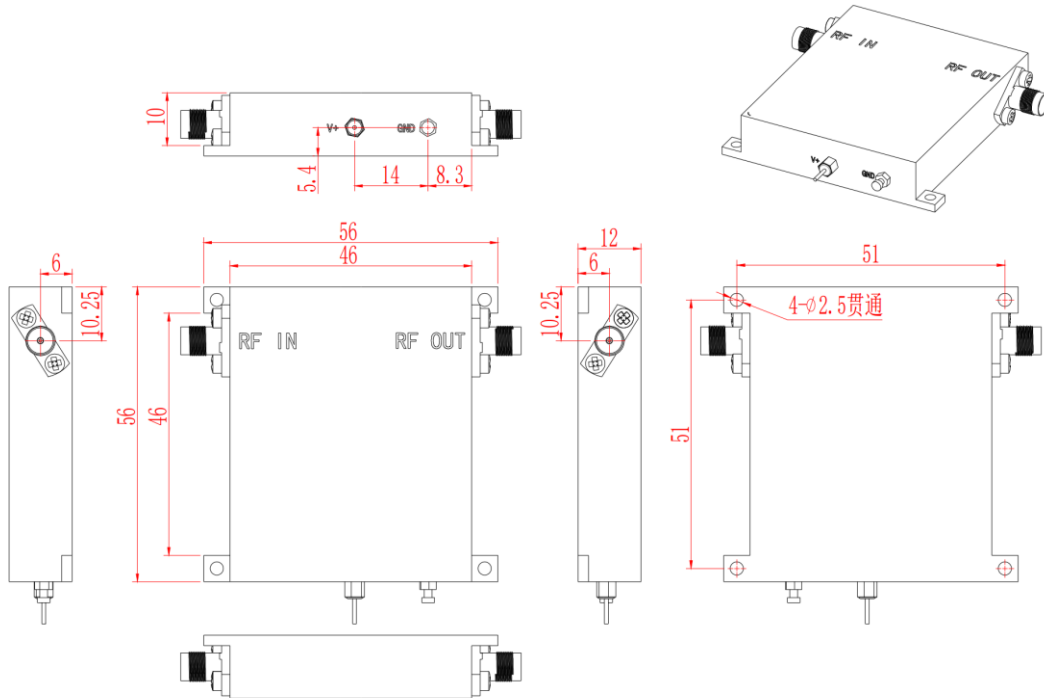
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Psat vs Frequency



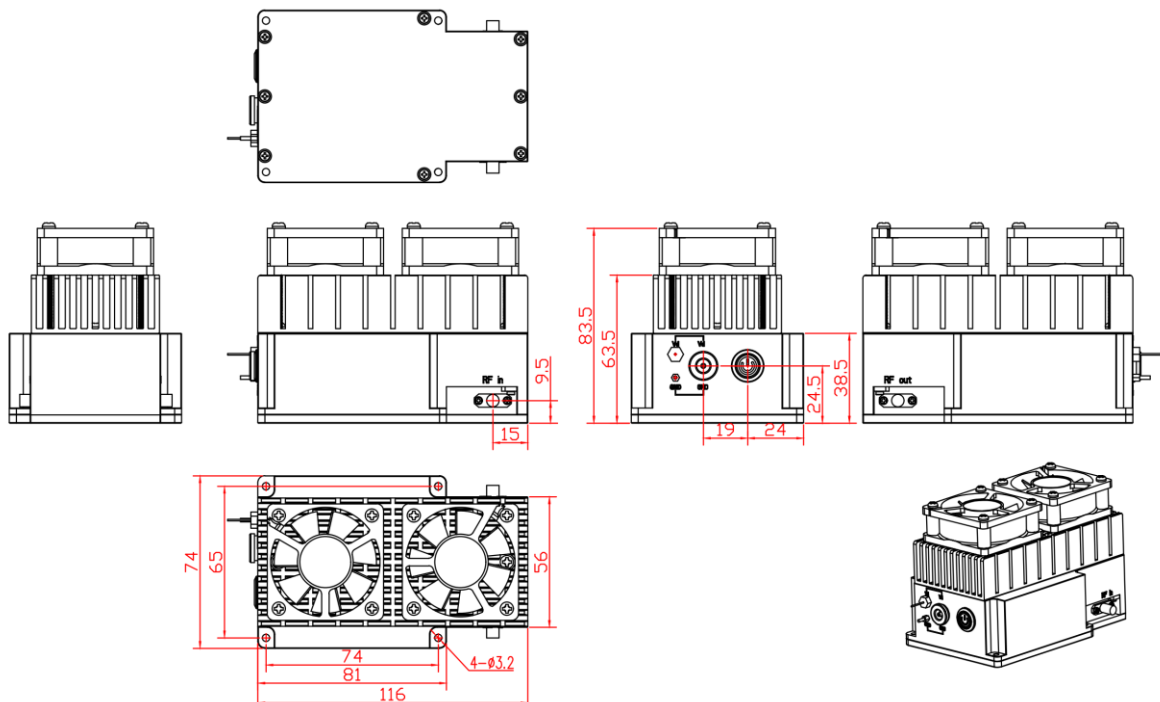
Dimension: (mm)



Please note that the standar option is not included heatsink and Fan.

Heatsink and Fan required during operation.

-LCBT Dimension: (mm)



-BT Bench-top Dimension (unit mm)

