

AT-HPA-3340-4035N

33-40GHz High Power Amplifier

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Gain=40dB, Pout=+35dBm



Product Overview

AT-HPA-3340-4035N is GaAs Based high gain power amplifier with +34.5dBm output power in the frequency of 33-40GHz. The DC power requirement is +8V/3.6A at Psat. The module is with 2.92mm connector.

The power amplifier has high gain, high linearity, low input/output return loss and flat gain response. There is no heatsink and fan in default. Option with suffix "-HF" is part number with heatsink and Fan.

More information, please visit www.atmicrowave.com

Advantages

- ✓ Frequency: 33-40GHz
- ✓ Psat:+34.5dBm
- ✓ Small signal gain: 40dB
- ✓ Single Power Supply

Application

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

Key Features

Parameter	Min	Typical	Max
Frequency		33-40GHz	
Gain		40dB	
P1dB		+33dBm	
Psat	+33.5dBm	+34.5dBm	
Drain Supply		+8V	+9V
Idd NO RF		2.86A	
IDD Psat		3.62A	
Input Return Loss		-10dB	
Output Return Loss		-5dB	
Spec Temp		25C	



Mechanical Information

Item	Description
Input Port	2.92mm Female
Output Port	2.92mm Female
Case Material	Copper
Finish	Gold Plated
Weight (With Heatsink and Fan)	400g
Size(Without heatsink and Fan)	See outline

Absolute Maximum Ratings Table

Parameter	Value
Drain Supply	+13V
RF Input Power	+20 dBm
Operating Temperature	-20 to +55C
Storage Temperature	-65 to +150C

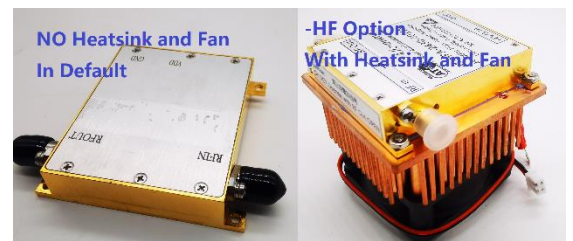
Very Important:

1. MUST Apply to heatsink and Fan during operation, or the amplifier will be damaged due to the high power consumption;
2. Do NOT leave Output OPEN with Bias and input power. Connect to 50 Ohms system during operation.
3. Take care that Vdd never touch Case/GND when Power ON, or the amplifier will be damaged.



Part Number Selection

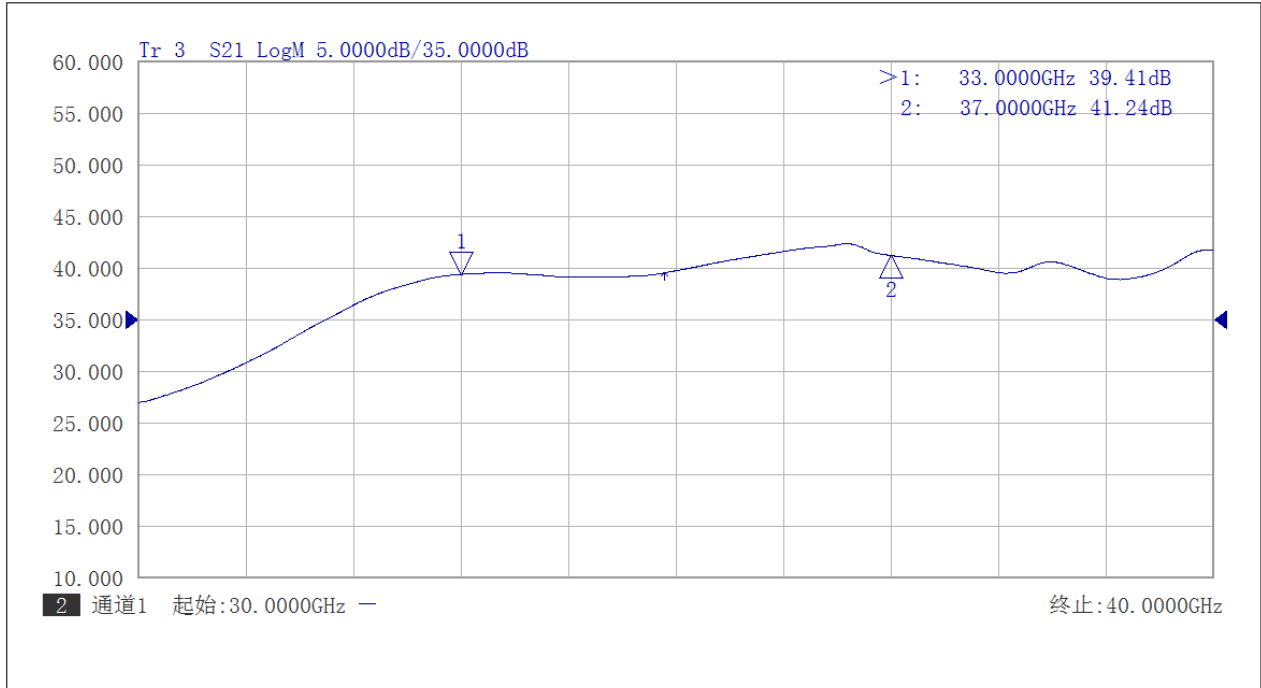
Item	Description
AT-HPA-3340-4035N	In defaulted without heatsink and Fan. Heatsink and Fan required during operation.
AT-HPA-3340-4035N -HF	Including Heatsink and Fan. Fan bias is connected with PA Module's Vdd supply



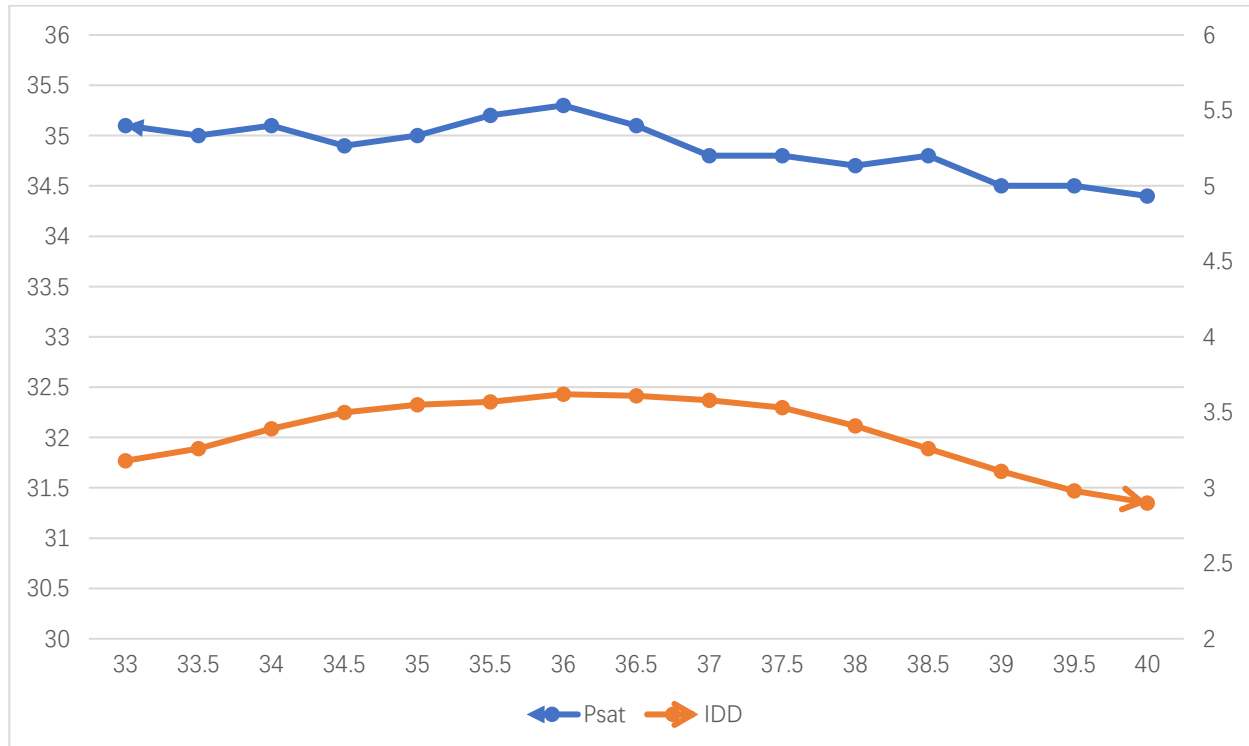
Test Data (25C)

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

Vdd=+8V, Idd=2.86A NO RF, IDD=3.62A at Psat, 25C

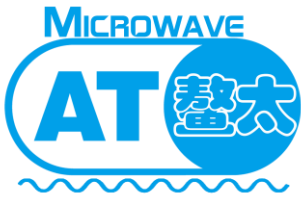


Gain vs Frequency



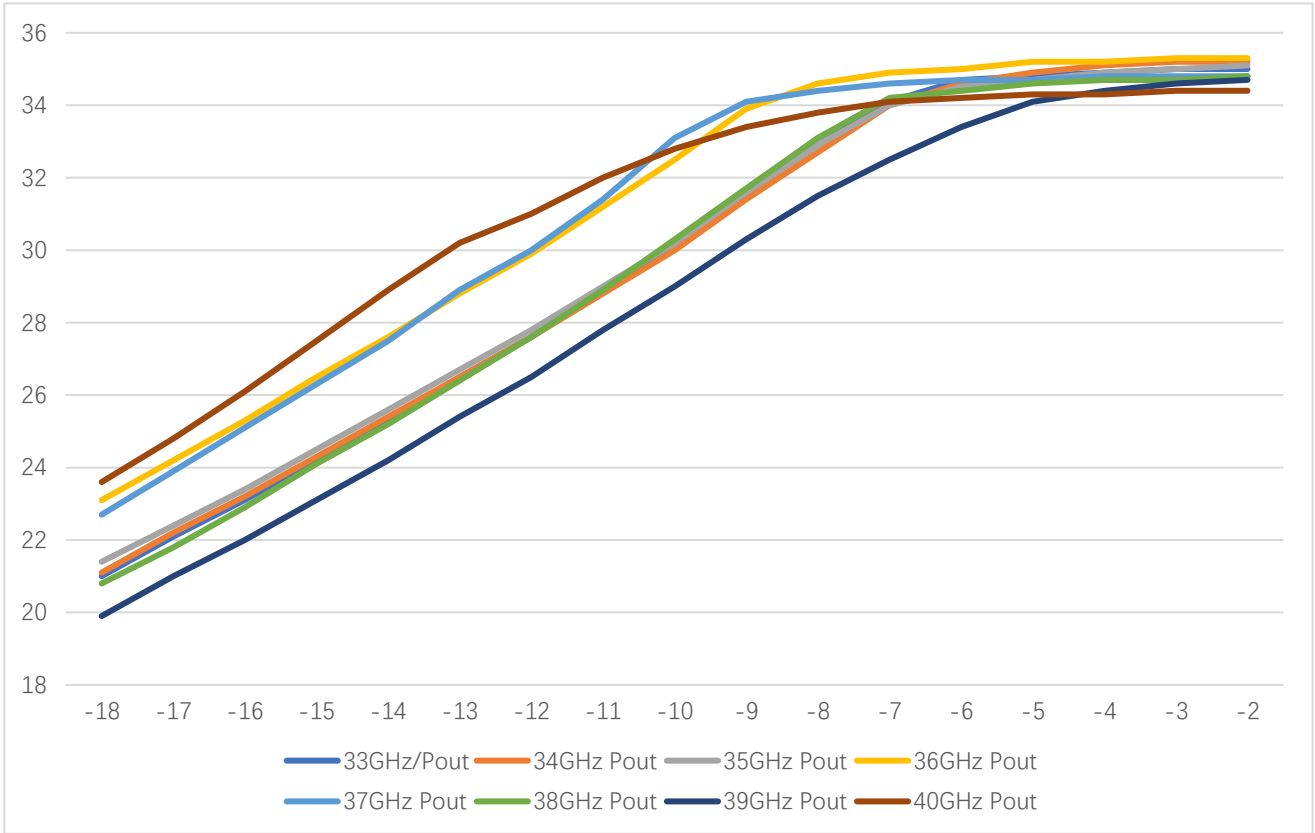
Psat and IDD vs Frequency at Pin=-3dBm



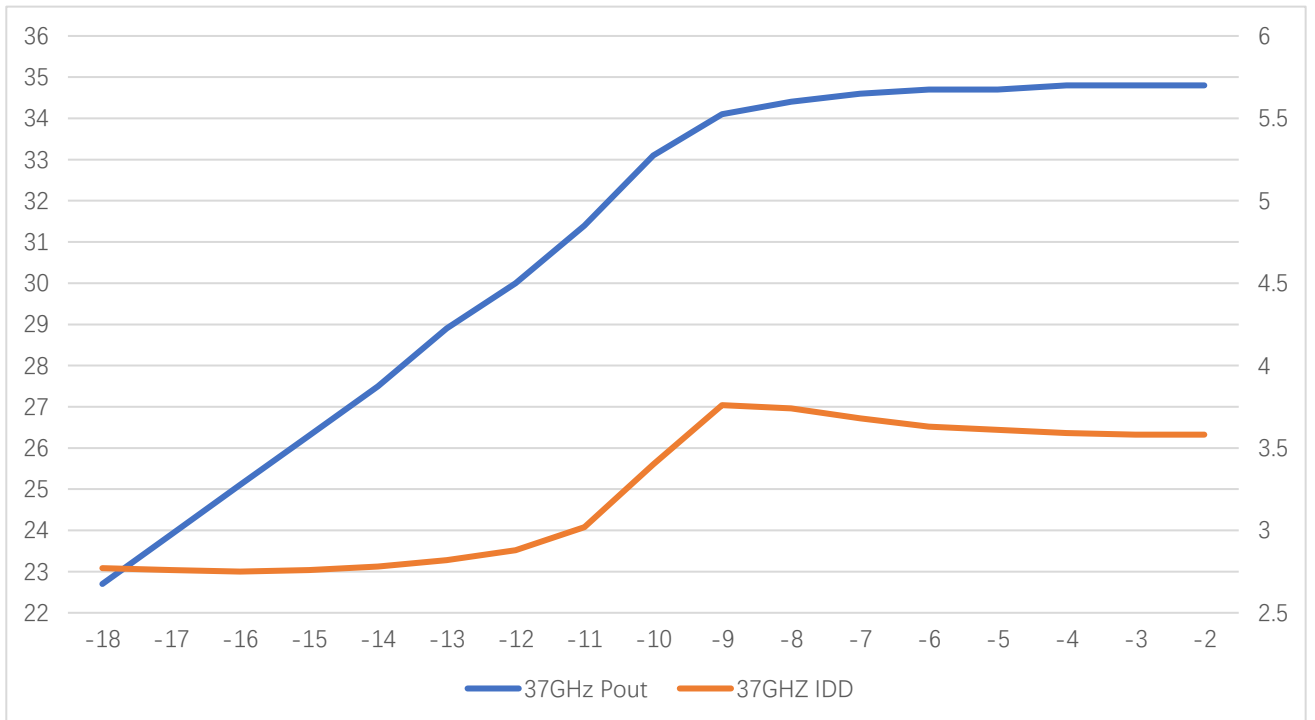


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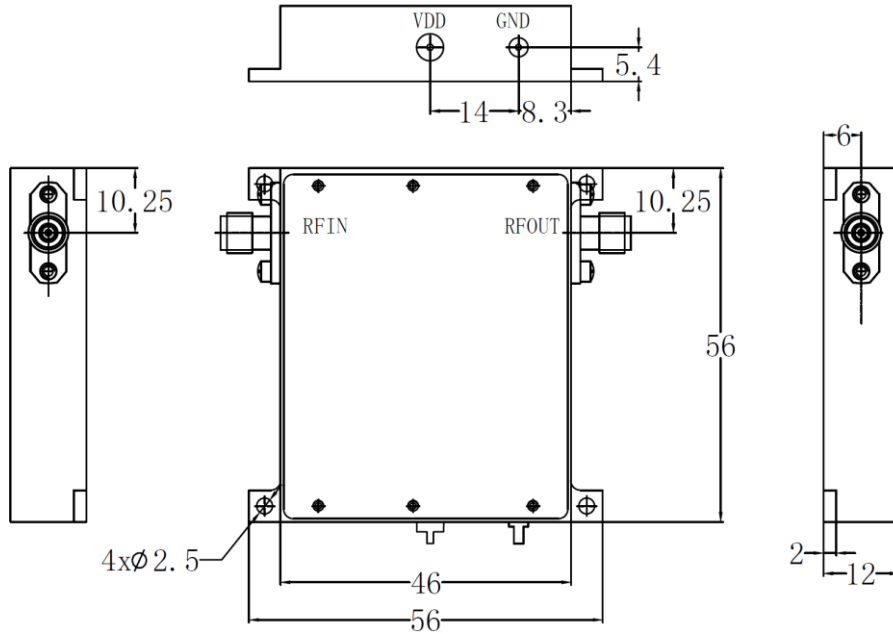
Pout vs Pin



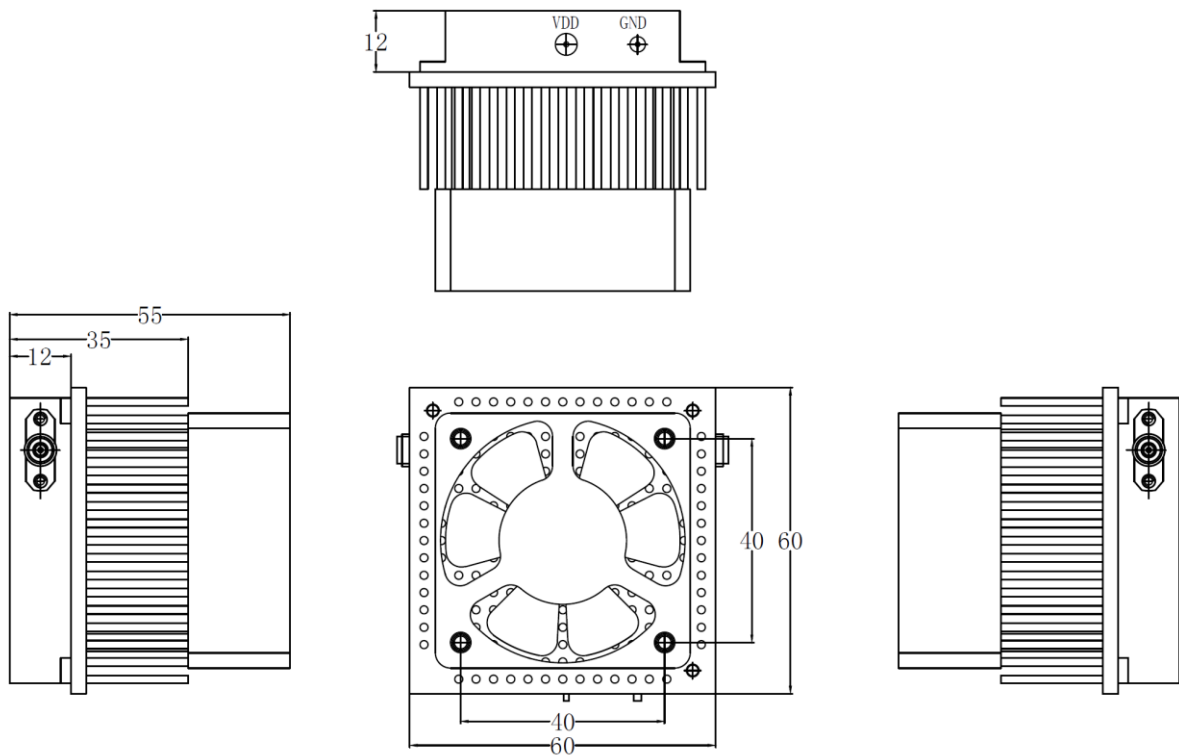
Pout and Idd vs Pin at 37GHz



Dimension: (mm)



Outline without Heatsink and Fan, Heatsink Required during Operation



"-HF" option with Heatsink and Fan

