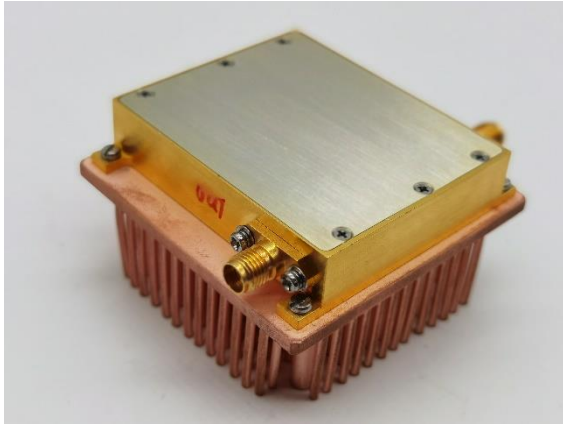


37-43GHz GaN High Power Amplifier



Product Overview

AT-HPA-3743-2337GN is GaN Based high gain power amplifier with +37dBm output power in the frequency of 37-43GHz. The DC power requirement is +22V/2.6A at Psat. The module is with 2.4mm 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: 37-43GHz
- ✓ Psat:+37dBm
- ✓ Small signal gain: 23dB
- ✓ Single Power Supply

Application

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

Key Features

Parameter	Min	Typical	Max
Frequency		37-43GHz	
Gain	20dB	23dB	
P1dB		+34dBm	
Psat	+36	+37dBm	
Drain Supply		+22V	+24V
Idq NO RF		2.0A	
IDD Psat		2.6A	3.0A
Input Return Loss		-8dB	
Output Return Loss		-5dB	
Spec Temp		25C	



Mechanical Information

Item	Description
Input Port	2.4mm Female
Output Port	2.4mm Female
Case Material	Copper
Finish	Gold Plated
Weight (With Heatsink and Fan)	400g
Size:	See outline

Absolute Maximum Ratings Table

Parameter	Value
Drain Supply	+30V
RF Input Power	+30 dBm
Operating Temperature	-20 to +55C
Storage Temperature	-65 to +150C

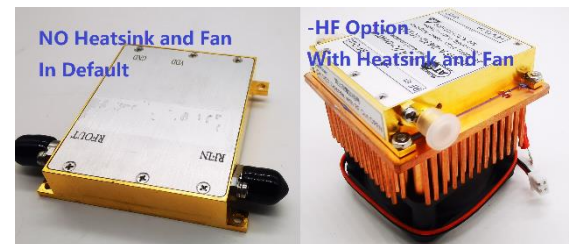
Very Important:

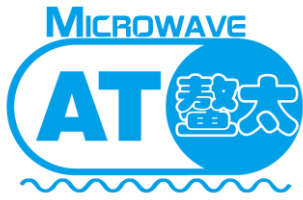
1. MUST Apply to heatsink and Fan during operation, or the amplifier will be damaged due to the high power consumption;
2. Do NOT leave Output OPEN with Bias and input power. Connect to 50 Ohms system during operation.
3. Take care that Vdd never touch Case/GND when Power ON, or the amplifier will be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



Part Number Selection

Item	Description
AT-HPA-3743-2337GN	In defaulted without heatsink and Fan. Heatsink and Fan required during operation.
AT-HPA-3743-2337GN HF	Including Heatsink and Fan. Fan bias is connected with PA Module's Vdd supply





AT-HPA-3743-2337GN

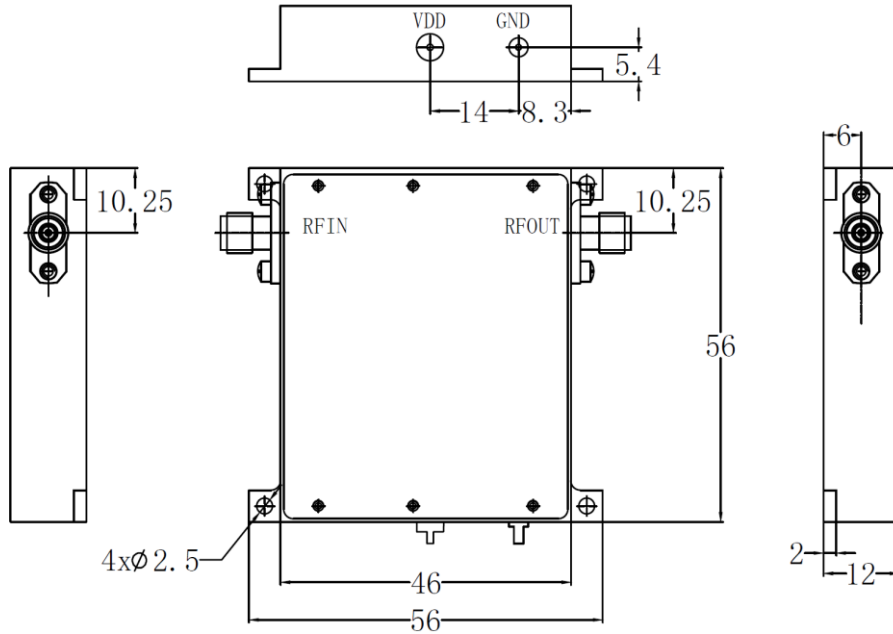
37-43GHz High Power Amplifier

Test Data (25C)

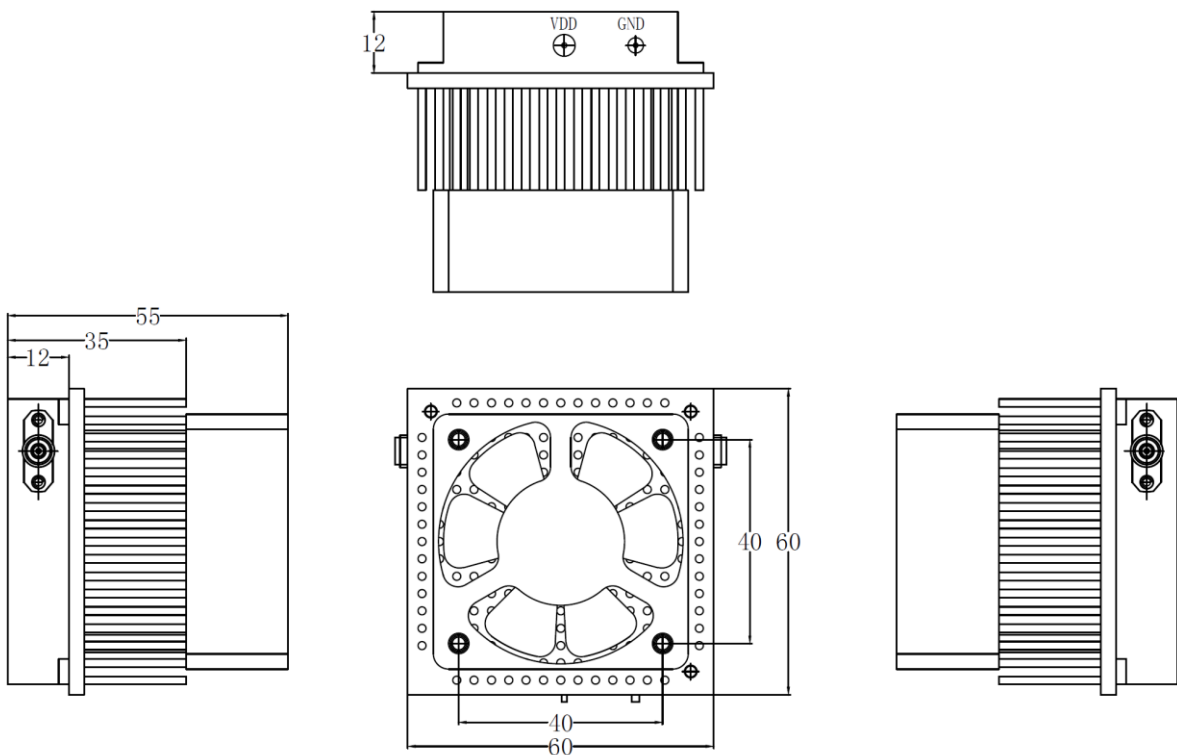
Please note that test curves will vary slightly from unit to unit.



Dimension: (mm)



Outline without Heatsink and Fan,
Heatsink Required during Operation



"-HF" option with Heatsink and Fan

