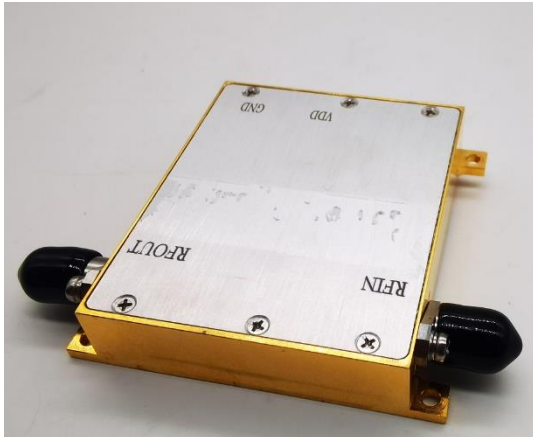


35-45GHz Power Amplifier

Gain=23dB, Pout=+25dBm, 2.4mm



Product Overview

AT-PA-3545-2325N is high gain power amplifier with +25dBm output power in the frequency of 35-45GHz. The DC power requirement is +8V/0.4A. The module is with 2.4mm connector.

The power amplifier has high gain, high linearity, low input/output return loss and flat gain response.

More information, please visit www.atmicrowave.com

Advantages

- ✓ Frequency: 35-45GHz
- ✓ Psat:+26dBm
- ✓ 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		35-45GHz	
Gain	22dB	23dB	
P1dB		+25dBm	
Psat	+24	+26dBm	
Drain Supply	+7V	+8V	+9V
Idq NO RF		0.35A	
IDD Psat		0.45A	
Input Return Loss		-8dB	
Output Return Loss		-5dB	
2.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	+13V
RF Input Power	+12 dBm
Operating Temperature	-40 to +85C
Storage Temperature	-50 to +125C

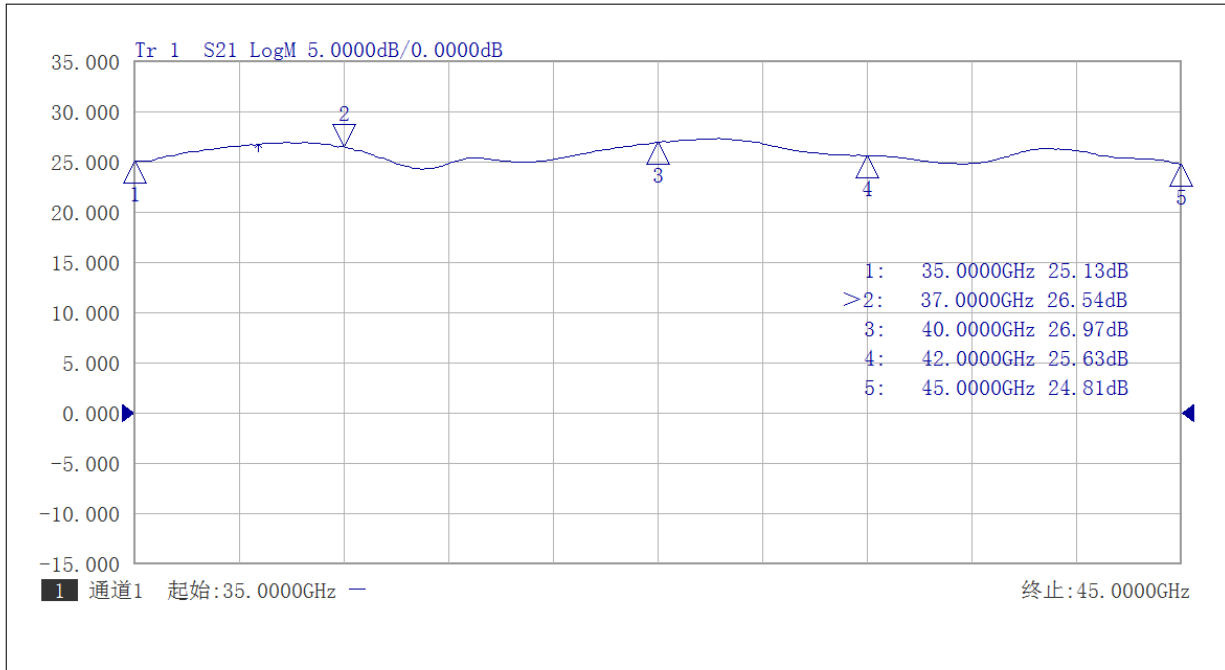
Very Important:

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.

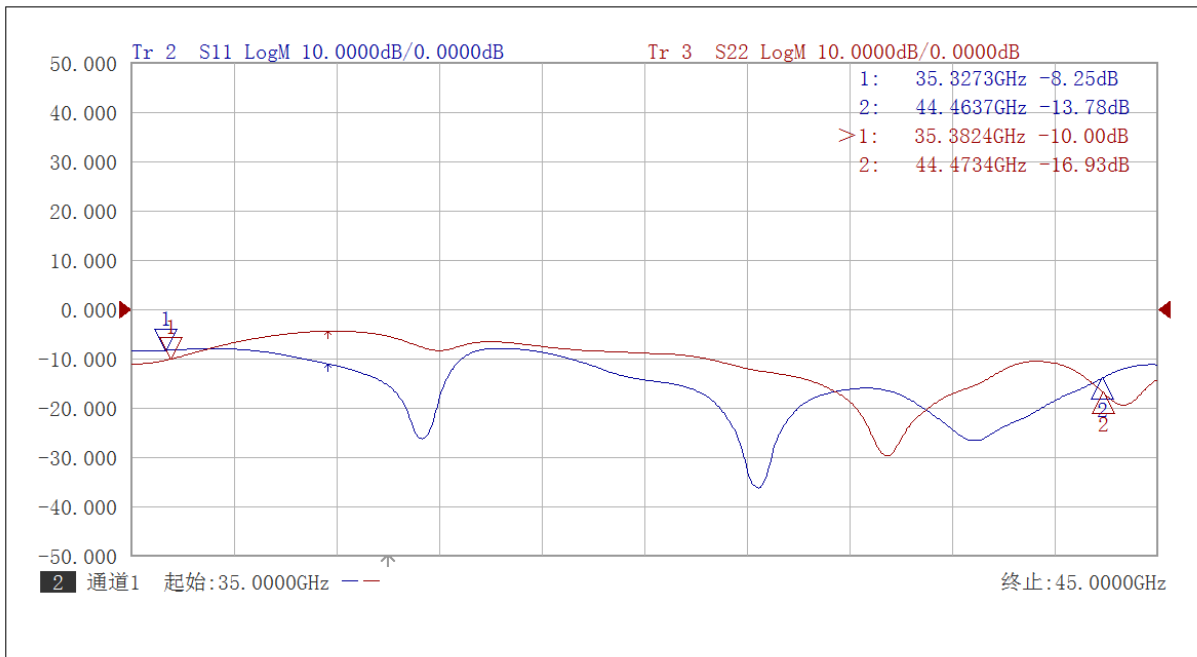


Test Data (25C)

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

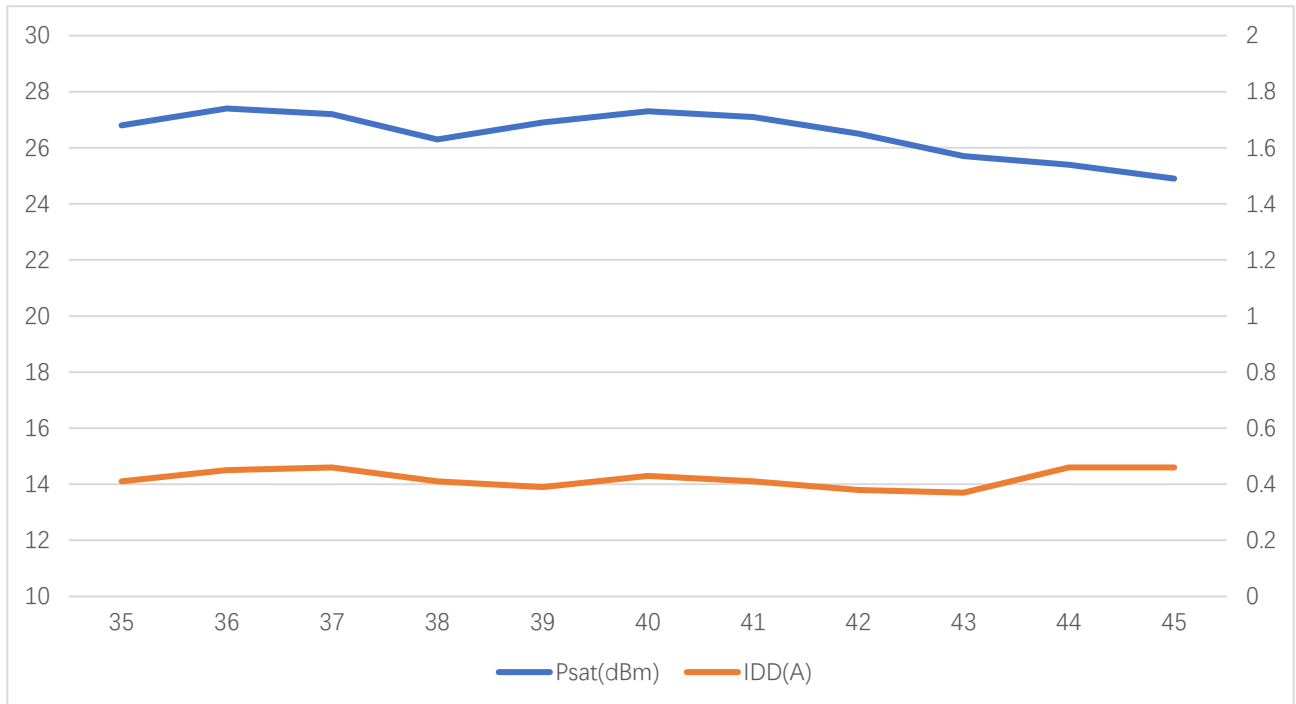


Gain vs Frequency

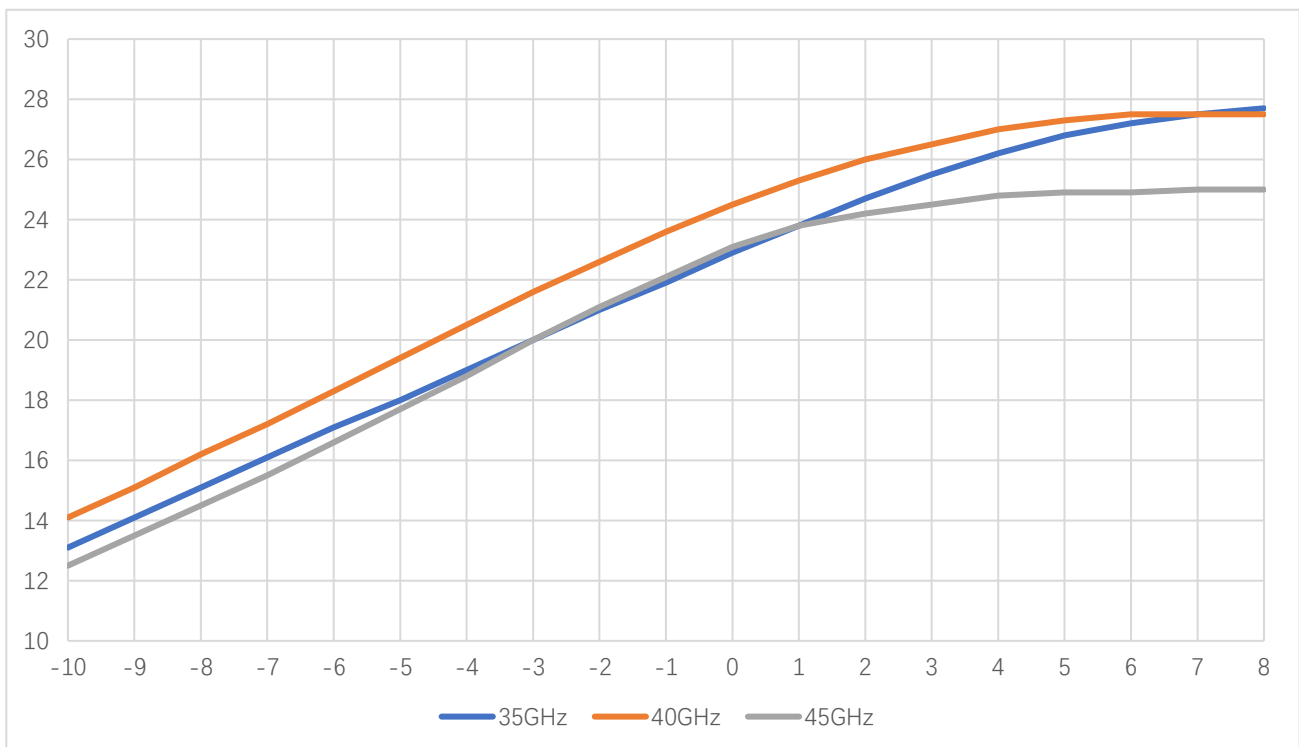


Return Loss vs Frequency



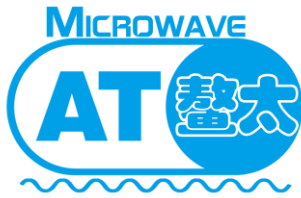


Psat and IDD vs Frequency



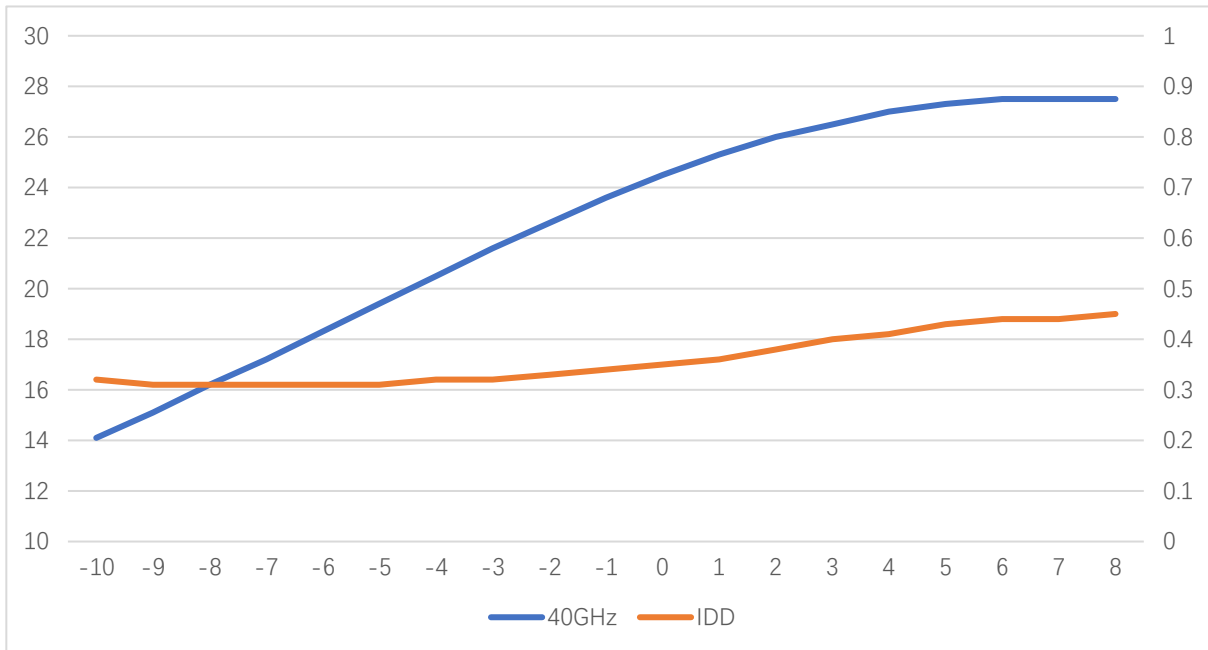
Pout vs Pin at 35/40/45GHz





AT-PA-3545-2325N

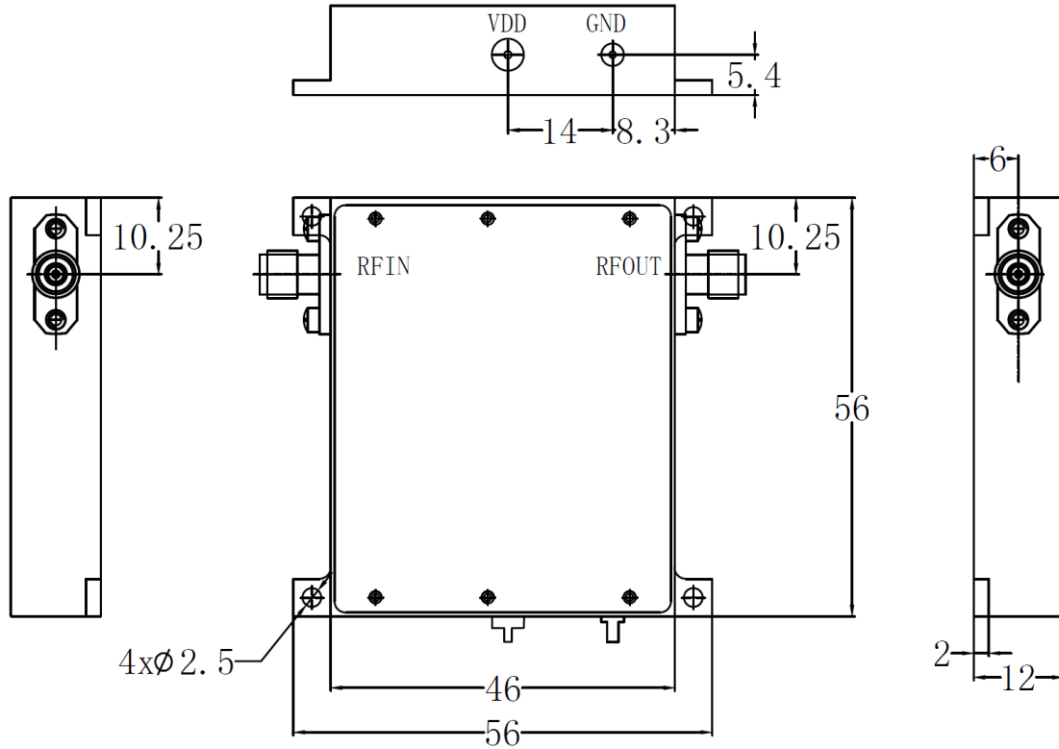
35-45GHz Power Amplifier



Pout and IDD vs Pin at 40GHz



Dimension: (mm)



Heatsink Required during Operation

