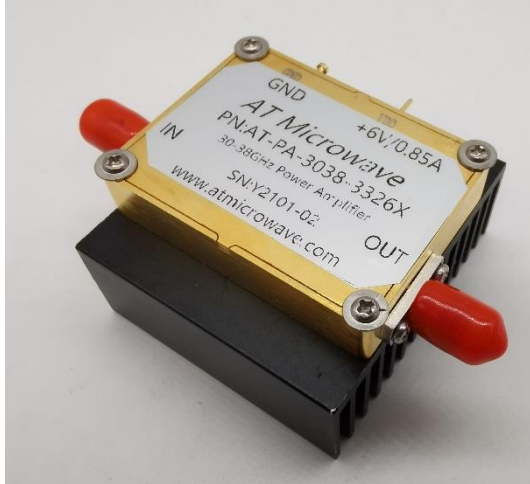


30-38GHz High Power Amplifier



Product Overview

AT-PA-3038-3326X is high gain medium power amplifier with 33dB gain in the frequency of 30-38GHz. The DC power requirement is +6V/0.85A. The module is with 2.92mm 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: 30-38GHz
- ✓ Small signal gain: 33dB
- ✓ Pout=+26dBm
- ✓ Single Power Supply

Application

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

Key Features

Parameter	Min	Typical	Max
Frequency Center		30-38GHz	
Gain	30dB	33dB	
P1dB		+25dBm	
Psat		+26dBm	
Drain Supply (Note)		+6V	+8V
Current NO RF		800 mA	
Current Psat		1A	
Input Return Loss		-10dB	
Output Return Loss		-5dB	
Spec Temp		25C	

Note: Same RF performance for +6V and +8V. +6V is recommended for lower power consumption.





AT-PA-3038-3326X

30-38GHz High Power Amplifier

Mechanical Information

Item	Description
Input Port	2.92mm Female
Output Port	2.92mm Female
Case Material	Copper
Finish	Gold Plated
Package Sealing	Epoxy Sealed
Weight (Without Heatsink)	150g
Size:	45x34x9.5 mm

Absolute Maximum Ratings Table

Parameter	Value
Drain Supply	+9V
RF Input Power	+10dBm
Operating Temperature	-20 to + 70C
Storage Temperature	-65 to +150C

Caution:

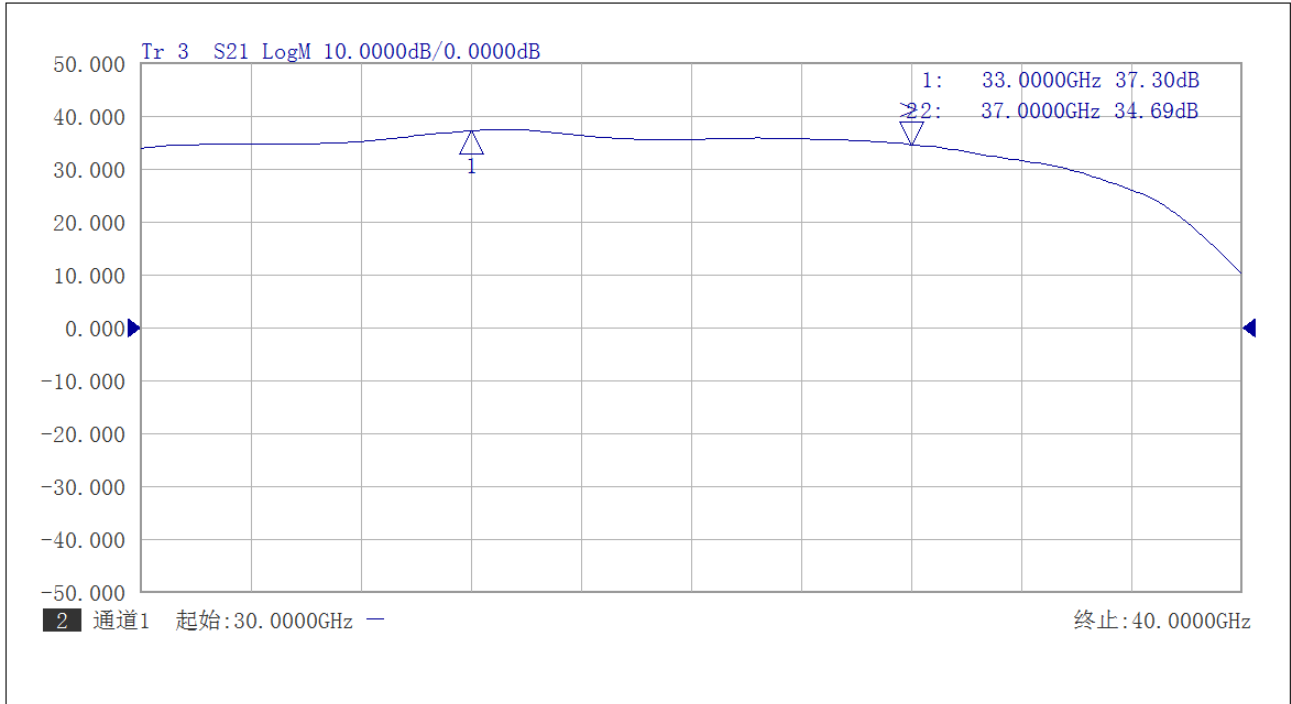
Please pay attention to the case temperature. If case temperature exceed higher than +50C, heat sink and fan are required, or the amplifier may be damaged.

Notes:

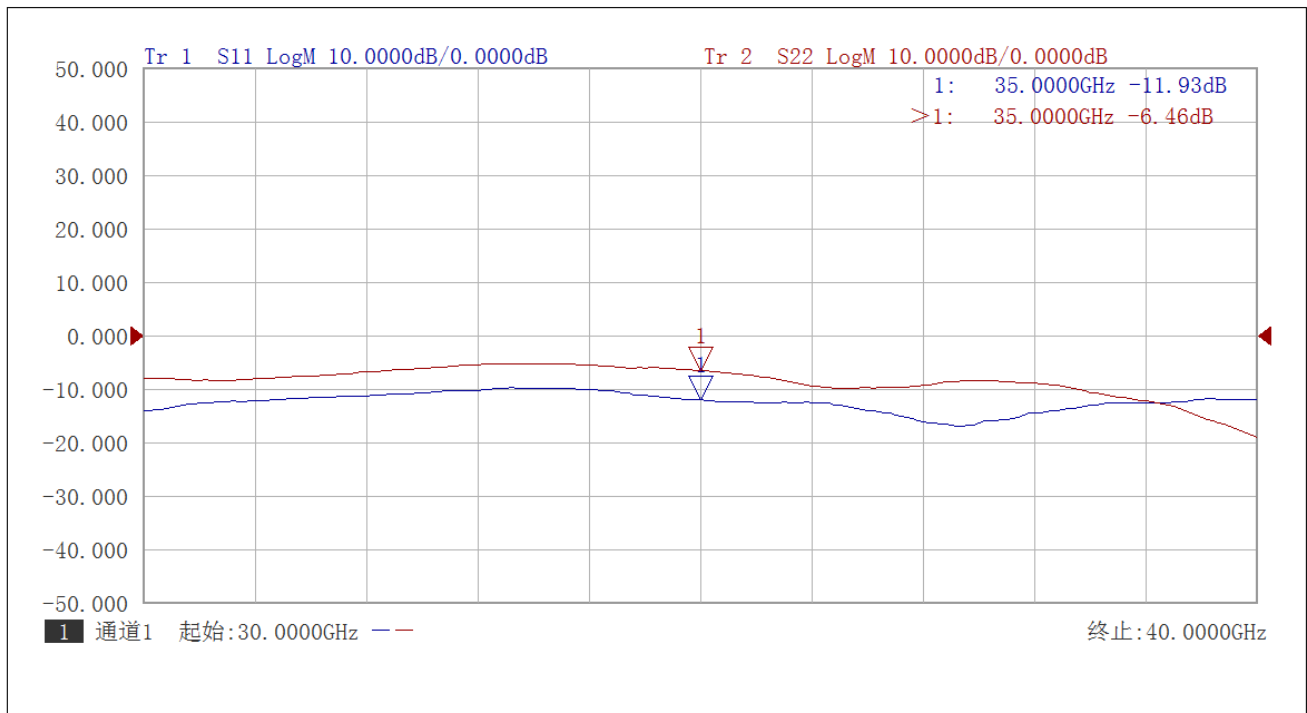
1. Datasheet may be changed according to update of MMIC, Raw materials , process, and so on.
2. This data is only for reference, not for guaranteed specifications.
3. Please contact AT Microwave team to make sure you have the most current data.



Test Data:



Gain vs Frequency



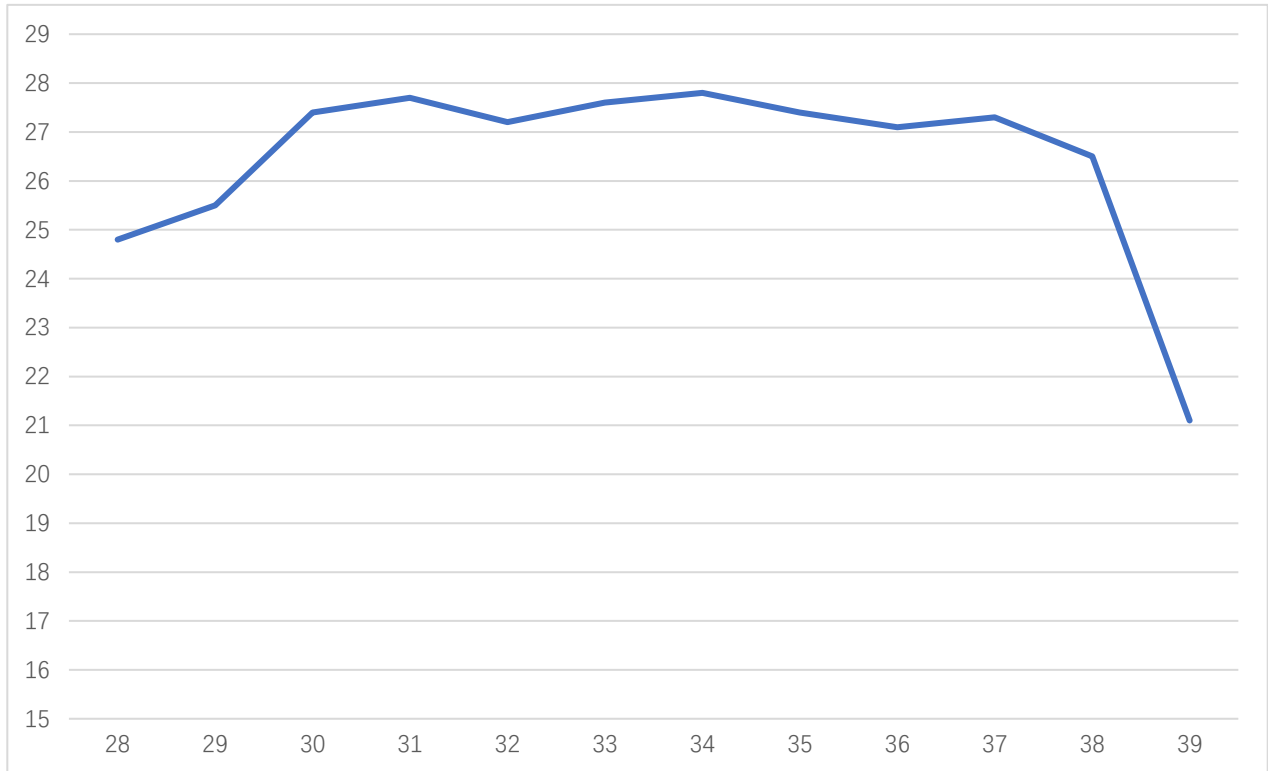
Return Loss vs Frequency



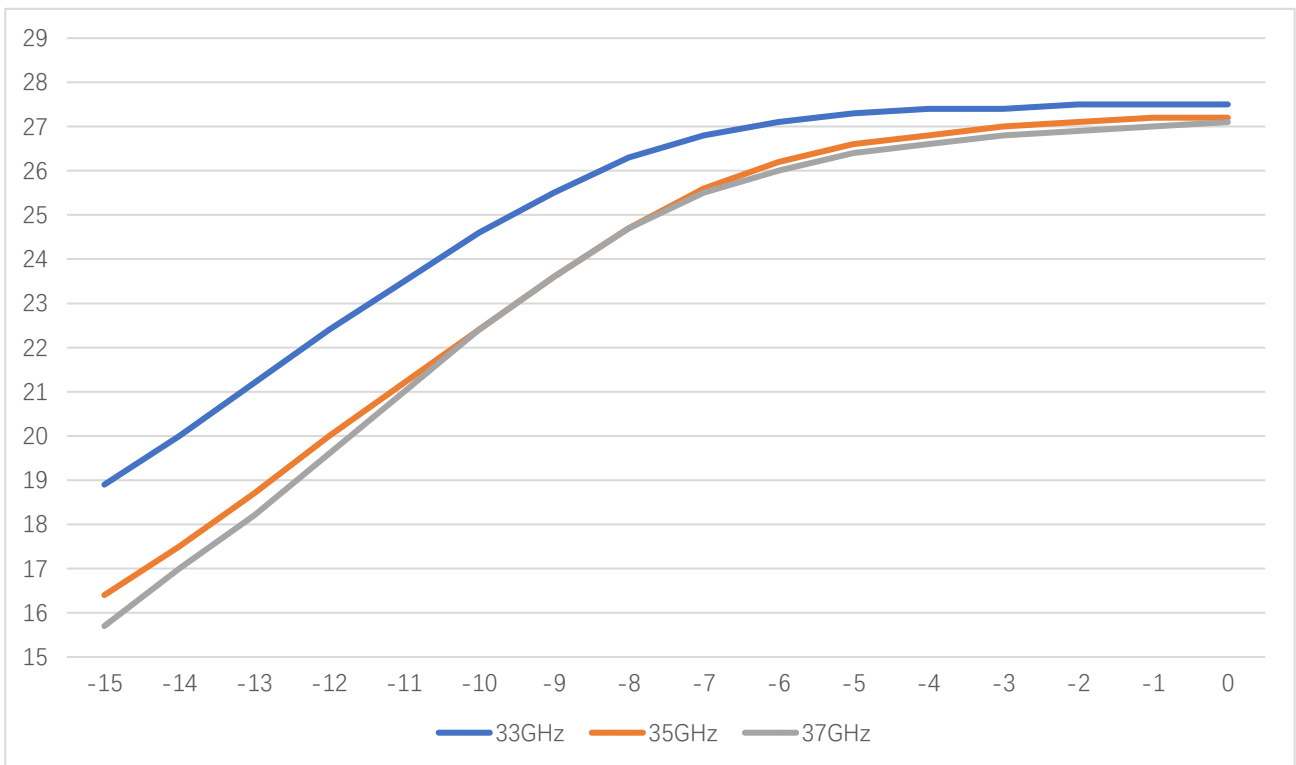


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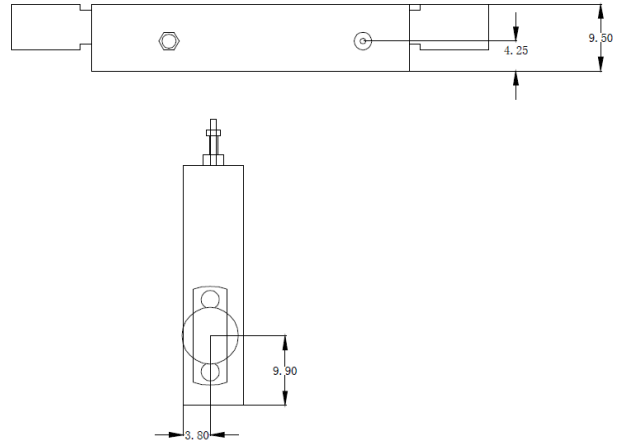
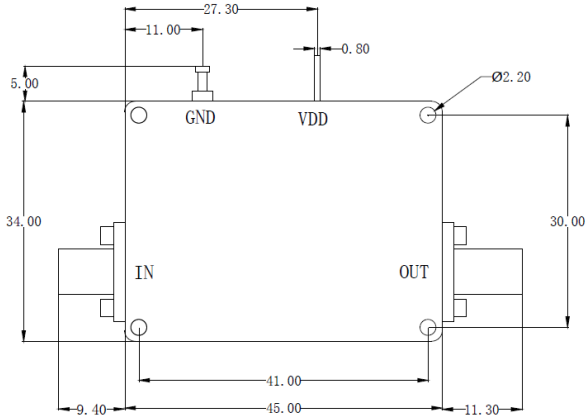
Psat vs Frequency



Pout vs Pin at 33/35/37GHz

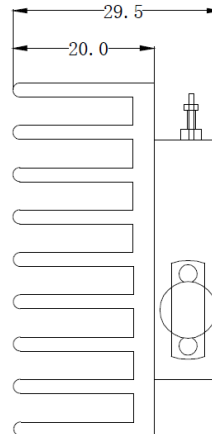
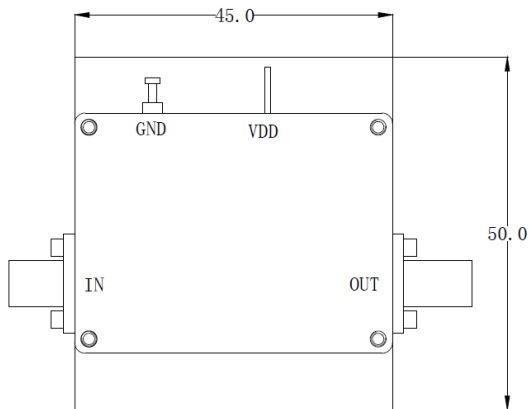


Dimension: (unit in mm)



	<26.5GHz	<40GHz	<50GHz	<67GHz
Connector	SMA	2.92mm	2.4mm	1.85mm
Lenth of a	9.4mm	9.5mm	10.8mm	11.3mm

Note: Female Default. Contact with us for other types.



Including a small heatsink without Fan if output Power higher than +20dBm.
Customers can removed it or use their own heatsink according to actual situation.

Heat Sink Required During Operation if case Temp higher than 50C

