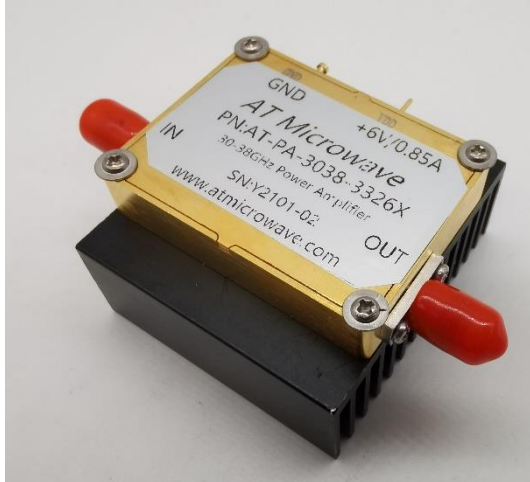


30-38GHz High Power Amplifier



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 +12V/0.5A. 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	+8V	+12V	+15V
Current NO RF @12V		0.45A	
Current Psat @12V		0.5A	
Input Return Loss		-10dB	
Output Return Loss		-5dB	
Spec Temp		25C	





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)	90g
Size:	45x34x9.5 mm

Absolute Maximum Ratings Table

Parameter	Value
Drain Supply	+17V
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 exceeds +50C, heat sink and fan are required.

Bias Procedure:

Make sure GND is connected before Vdd Power ON.

Module may be damaged when Vdd Power ON without GND.





AT-PA-3038-3326X

30-38GHz High Power Amplifier

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.

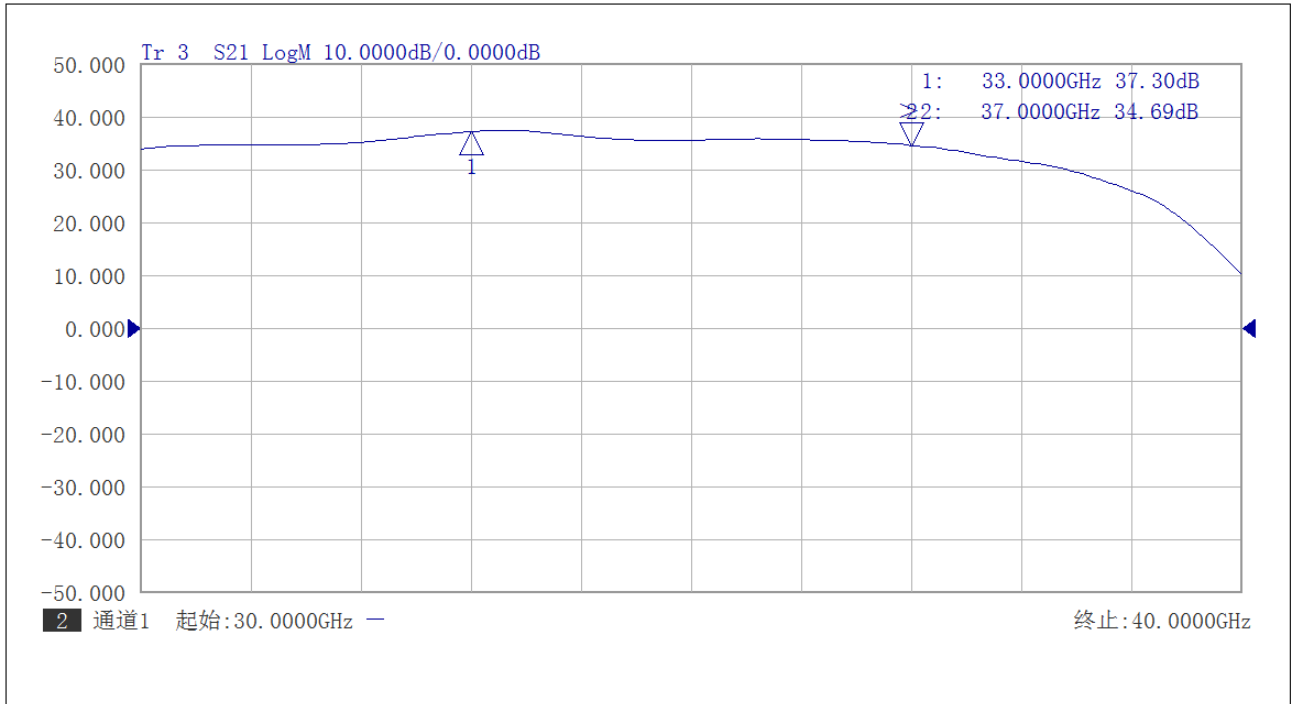
Part Number Selection Guide

Item	Description
PN	Stand Module with DC Power Supply
PN-LCBT	L ow Cost, C ompact B ench- T op, +220V Supply with AC/DC Adapter

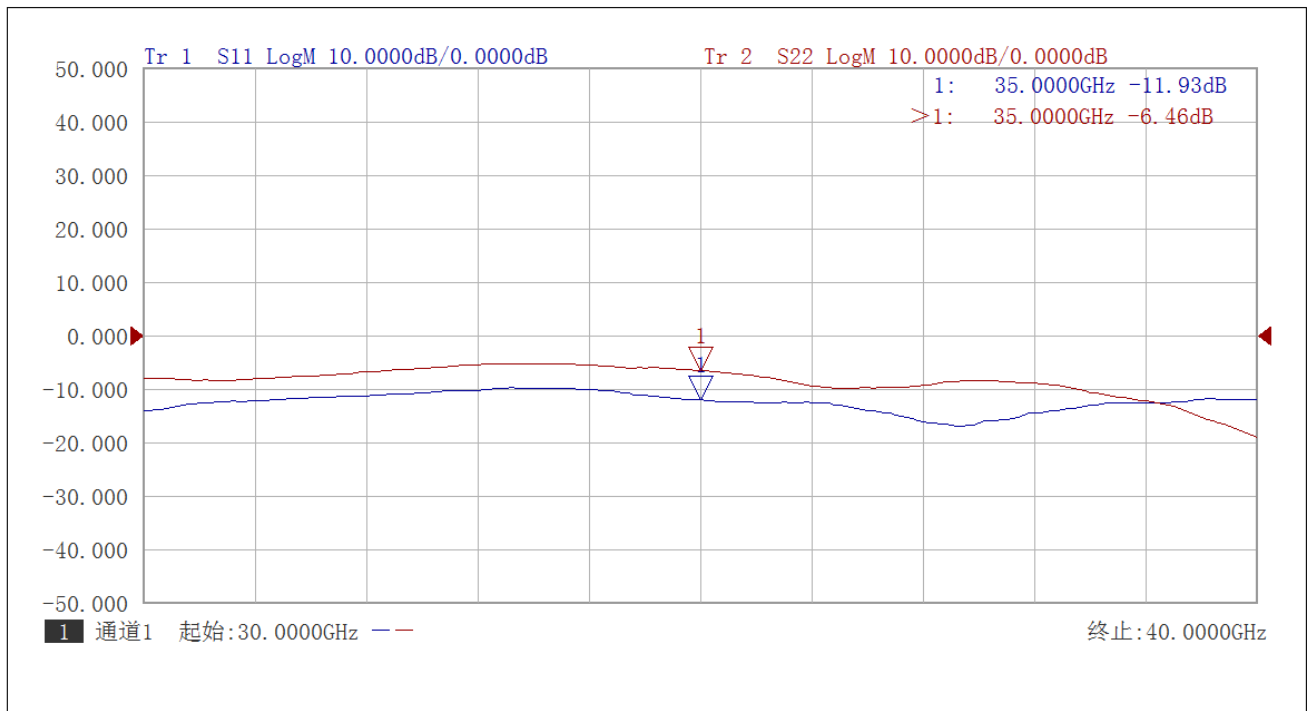


Test Data

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

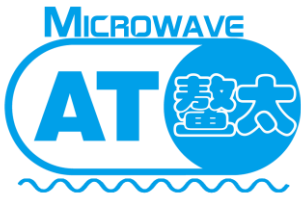


Gain vs Frequency



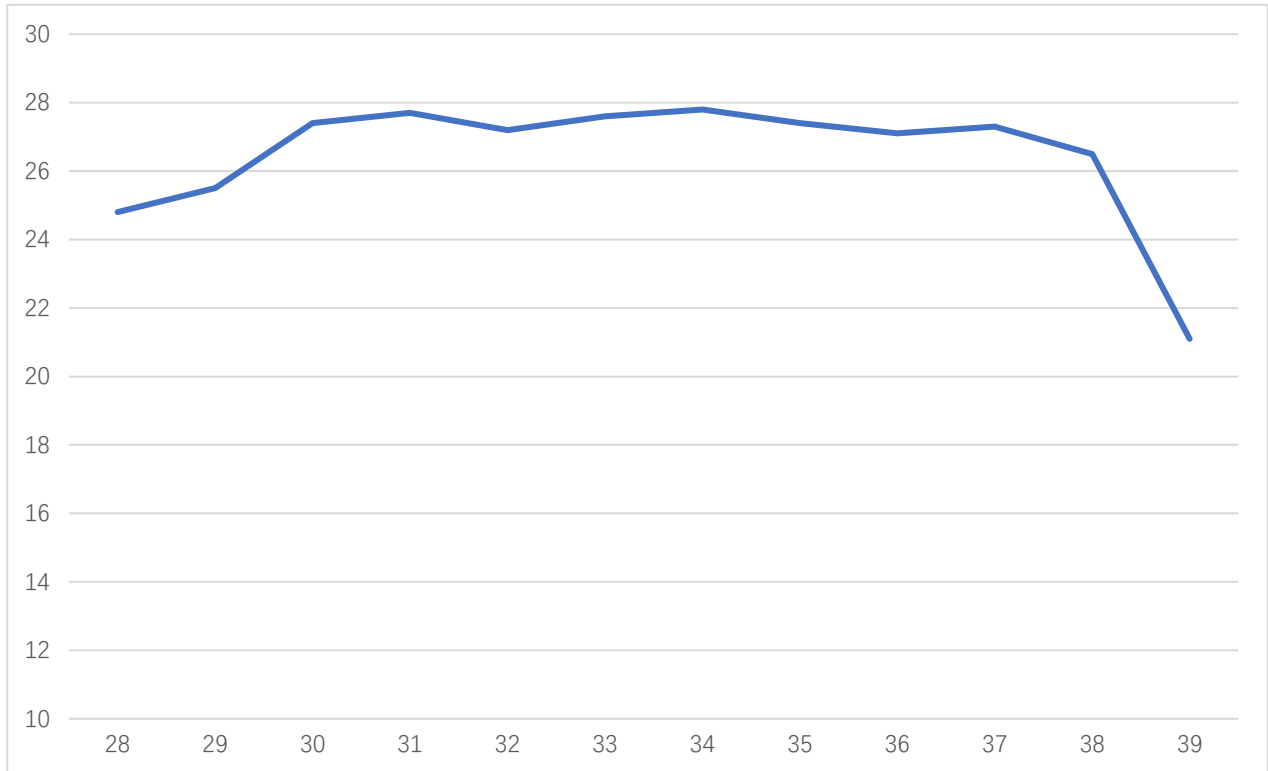
Return Loss vs Frequency



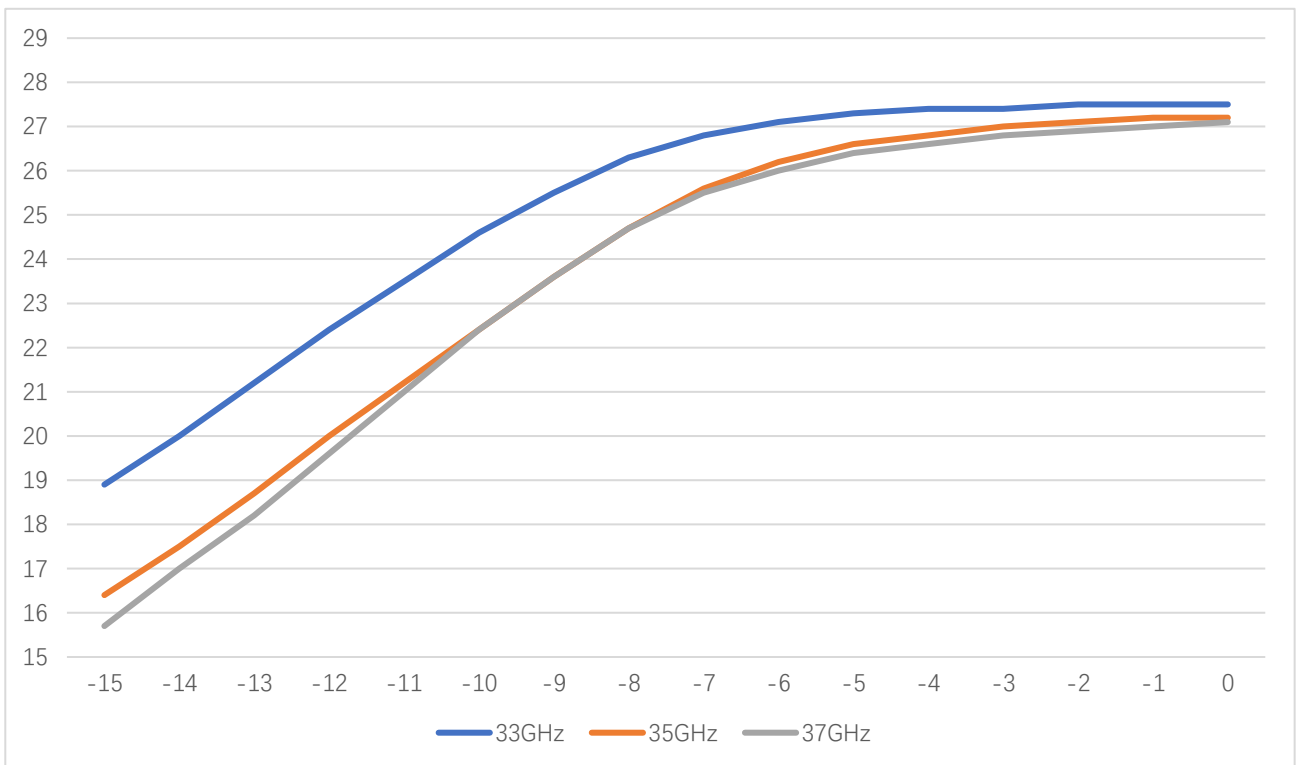


AT-PA-3038-3326X

30-38GHz High Power Amplifier



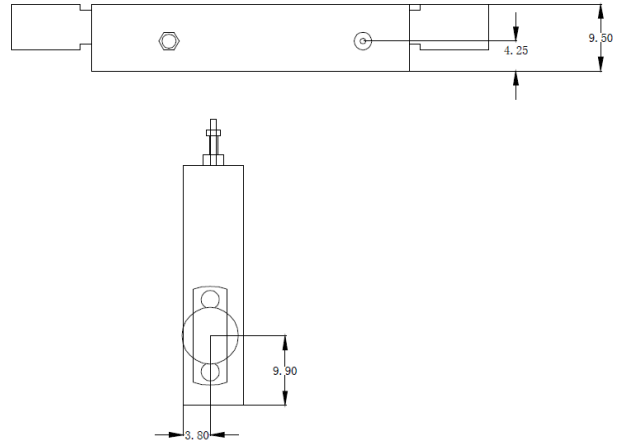
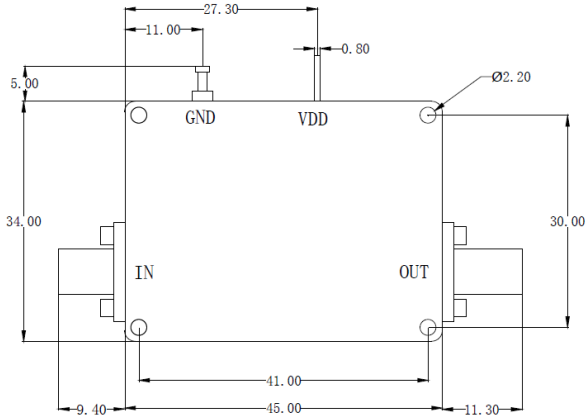
Psat vs Frequency



Pout vs Pin at 33/35/37GHz

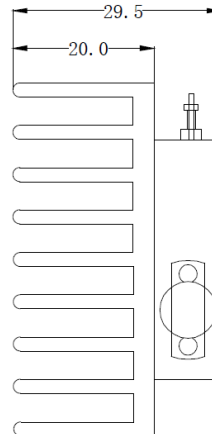
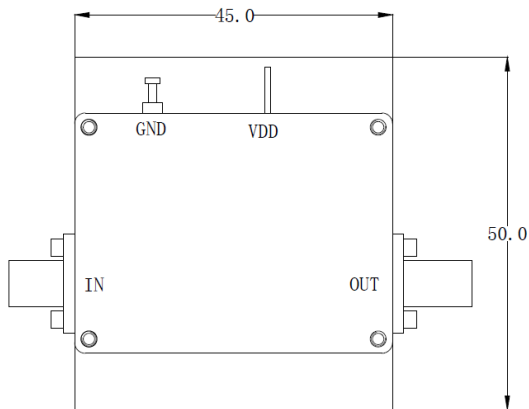


Dimension: (unit in mm)



	<26.5GHz	<40GHz	<50GHz	<67GHz
Connector	SMA	2.92mm	2.4mm	1.85mm
Length 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

