

# 3GHz-67GHz Broadband Amplifier



### Product Overview

AT-BB-0367-3015C is broadband amplifier from 3GHz-67GHz, with  $P_{out}=+15dBm$ ,  $NF=6dB$ . It can be used both as Power amplifier or low noise amplifier. The DC power requirement is +8V/220mA. The module is with 1.85mm Female

The broadband amplifier has high gain, high linearity, low input/output return loss and flat gain response. Bench-top test equipment type with 110-240V power supply is available according to request.

More information, please visit [www.atmicrowave.com](http://www.atmicrowave.com)

### Advantages

- ✓ Frequency: 3GHz-67GHz
- ✓  $P_{sat}$ : +15dBm
- ✓ Small signal gain: 30dB
- ✓ Single Power Supply

### Application

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

### Key Features

Parameter	Min	Typical	Max
Frequency		3GHz-67GHz	
Gain	27dB	30dB	
P1dB		3-50GHz: +15dBm 50GHz-67GHz: +13dBm	
$P_{sat}$		3-50GHz: +18dBm 50GHz-67GHz: +14dBm	
Drain Supply		+8V	+12V
Current		330 mA	
NF(3-50GHz)		6dB	8dB
Input Return Loss		-8dB	
Output Return Loss		-8dB	
Spec Temp		25C	





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## Mechanical Information

Item	Description
Input Port	1.85mm Female
Output Port	1.85mm Female
Case Material	Copper
Finish	Gold Plated
Package Sealing	Epoxy Sealed
Weight (Without Heatsink)	80g
Size:	See outline

## Absolute Maximum Ratings Table

Parameter	Value
Drain Supply	+13V
RF Input Power	+5 dBm
Operating Temperature	-20 to +70C
Storage Temperature	-65 to +150C

## 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.

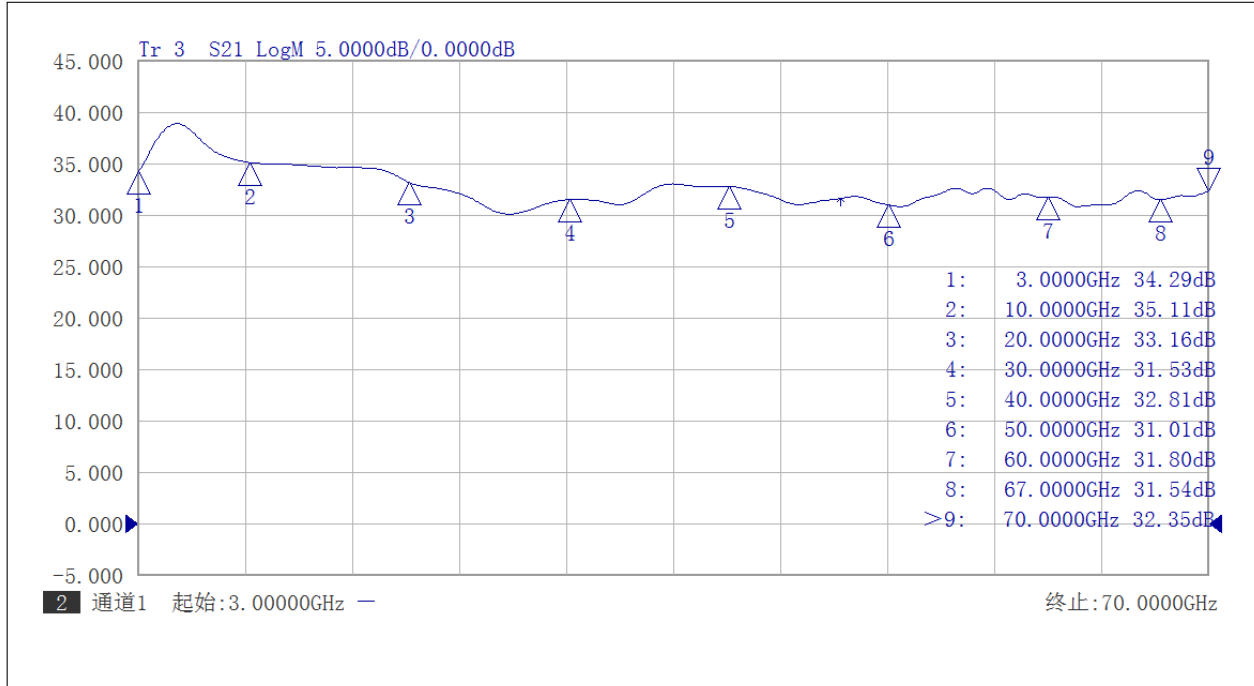
## Part Number Selection Guide

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

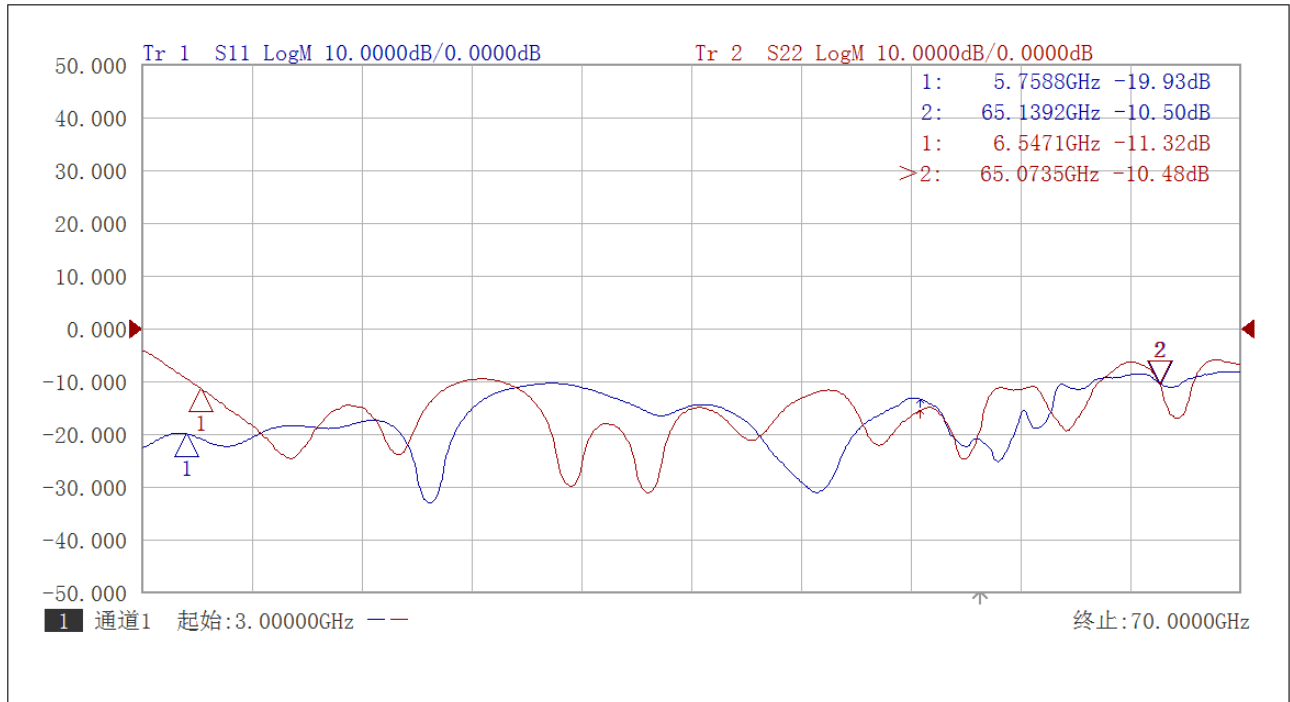


### Test Data (25C)

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

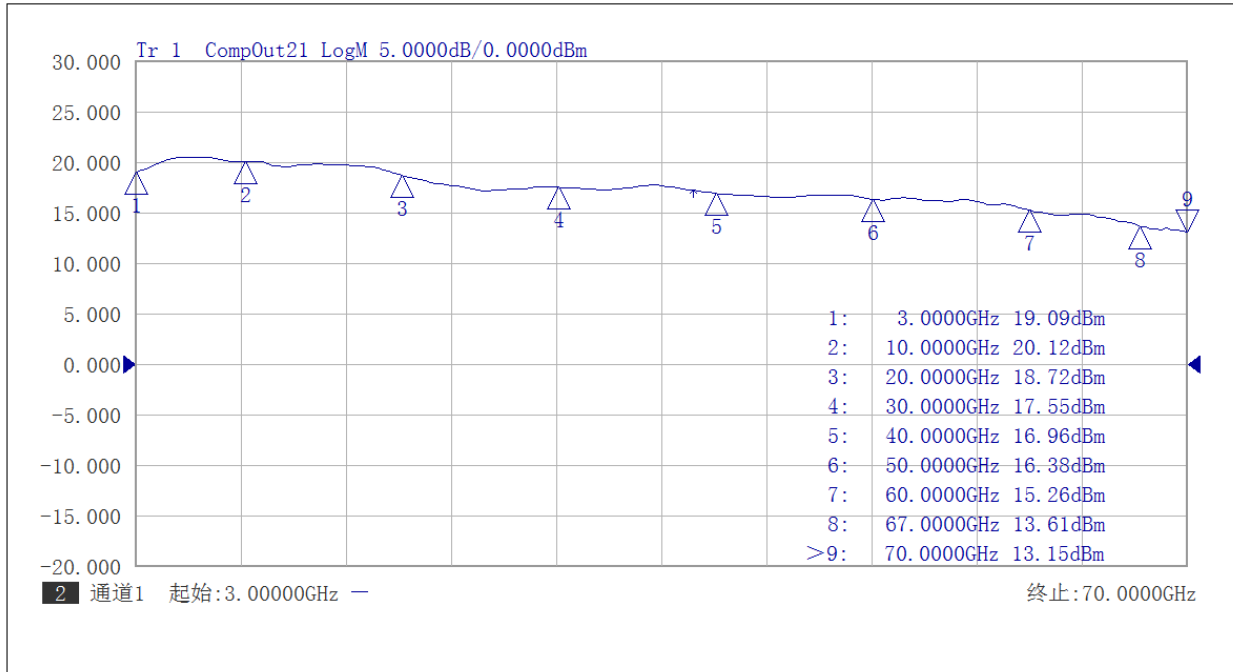


Gain vs Frequency

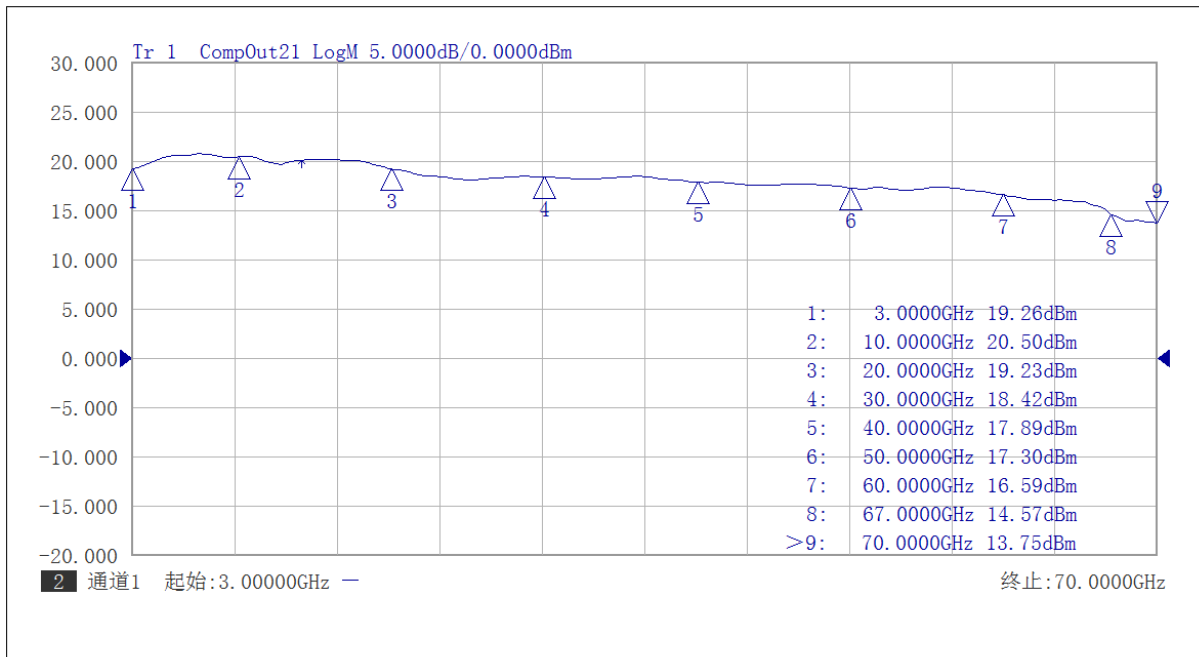


Return Loss vs Frequency





P1db vs Frequency



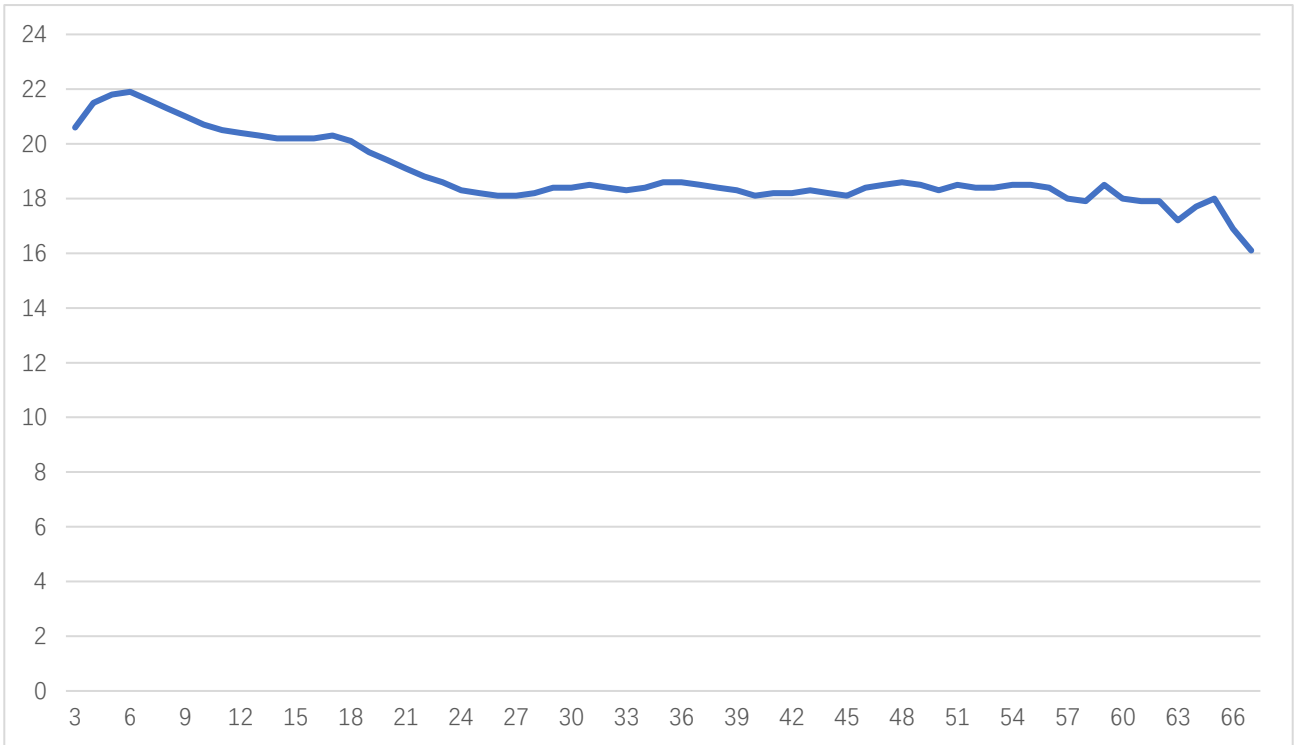
P3db vs Frequency



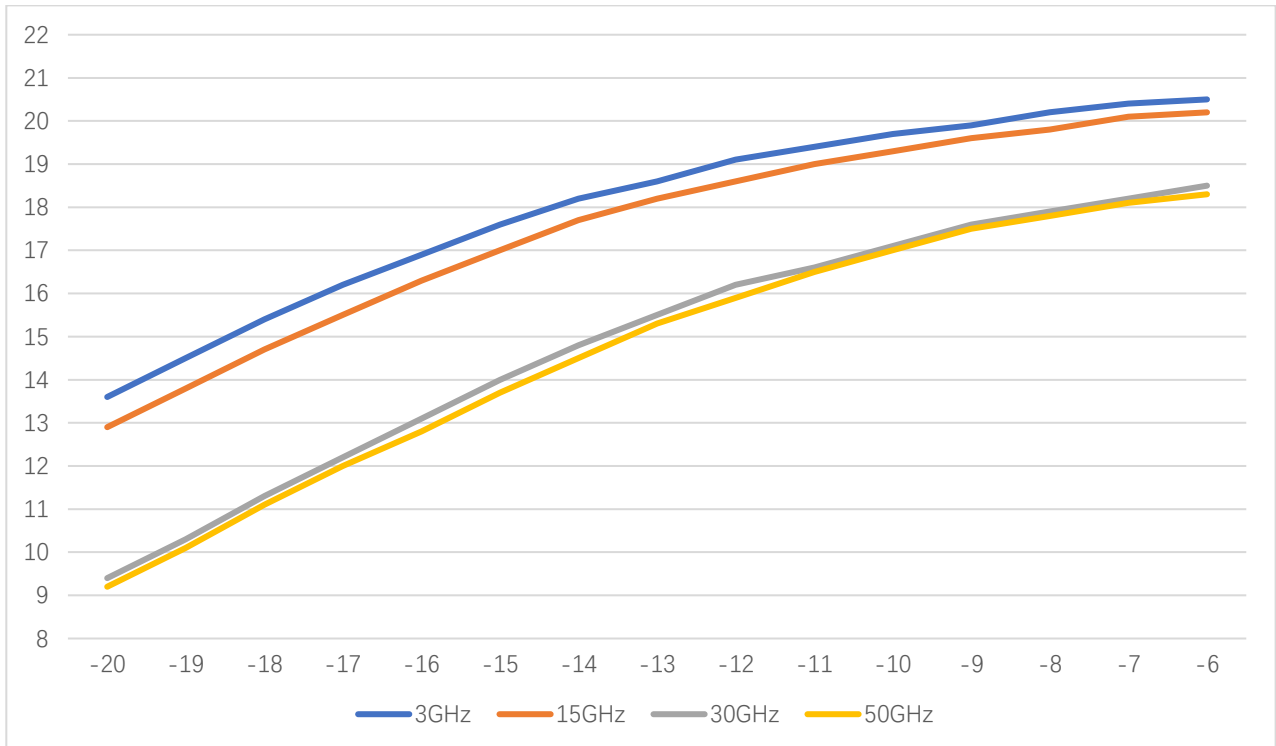


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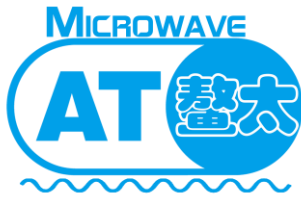


Psat vs Frequency



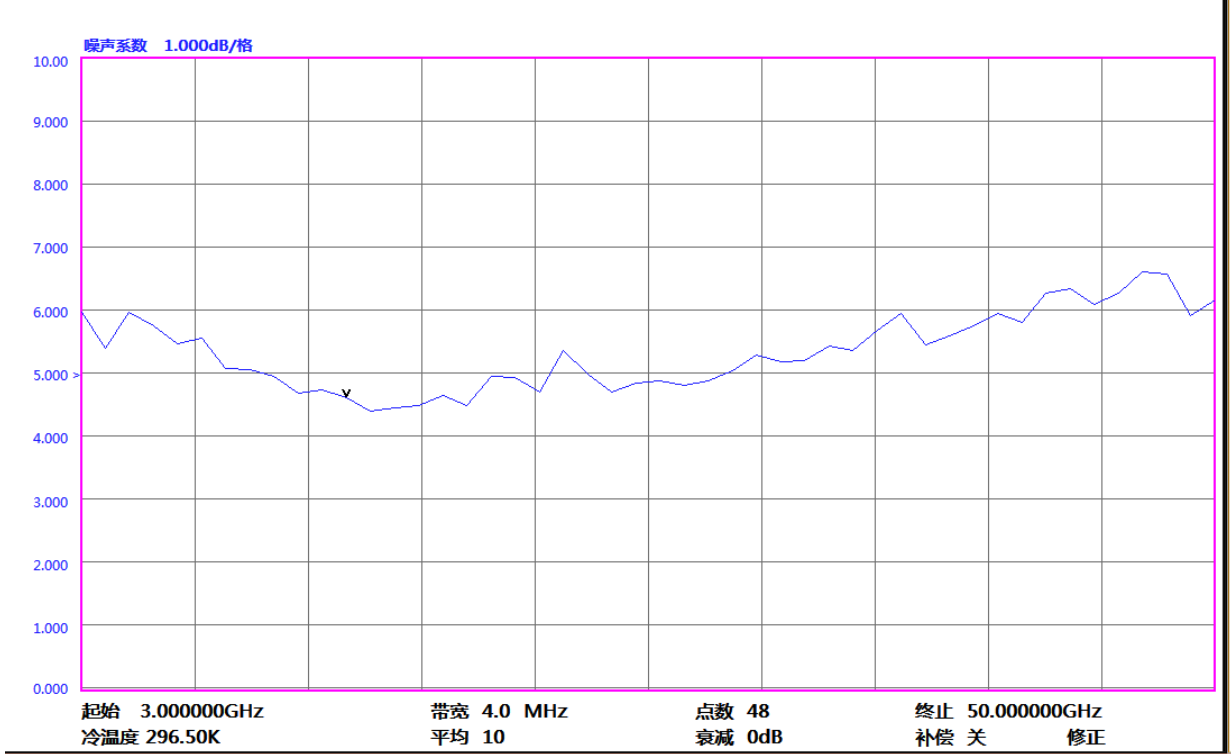
Pout vs Pin at 3/20/40/50GHz





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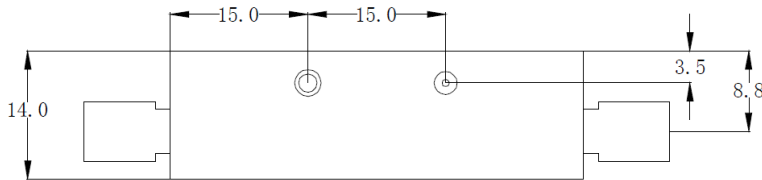
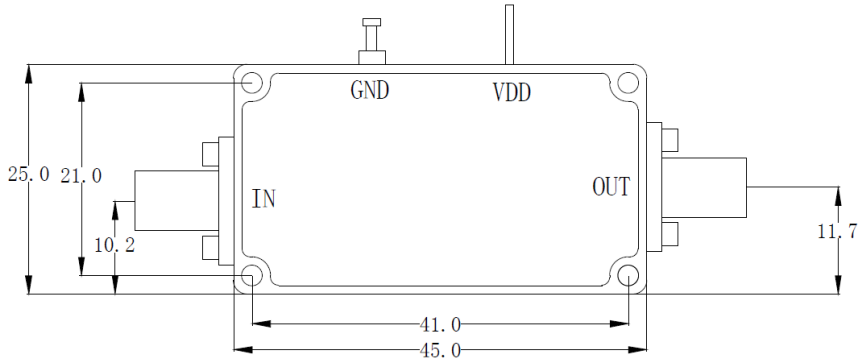
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NF vs Frequency

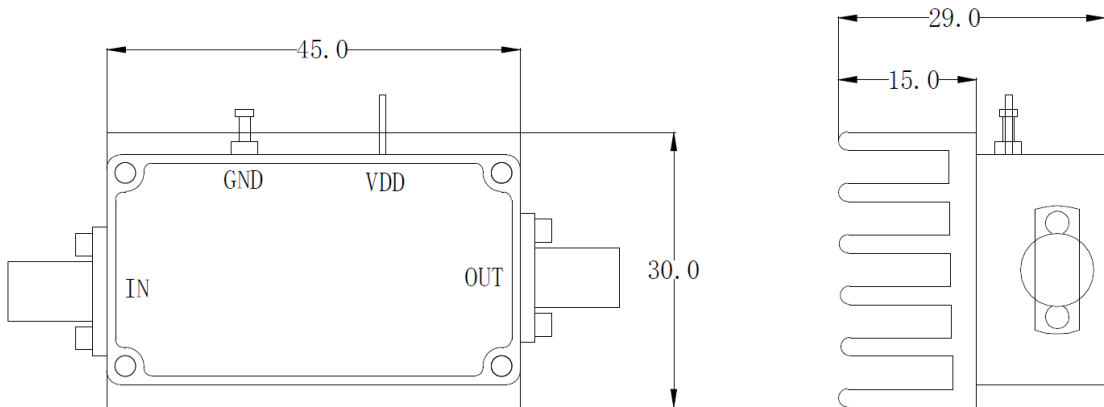


**Dimension:** (unit in mm)



	<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.

