

3GHz-67GHz Broadband Amplifier



Product Overview

AT-BB-0367-2715C is broadband amplifier from 3GHz-67GHz, with $P_{out}=+15\text{dBm}$, $NF=6\text{dB}$. 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

Advantages

- ✓ Frequency: 3GHz-67GHz
- ✓ P_{sat} : +15dBm
- ✓ Small signal gain: 27dB
- ✓ Single Power Supply

Application

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

Key Features

Parameter	Min	Typical	Max
Frequency		3GHz-67GHz	
Gain	25dB	27dB	
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

Caution:

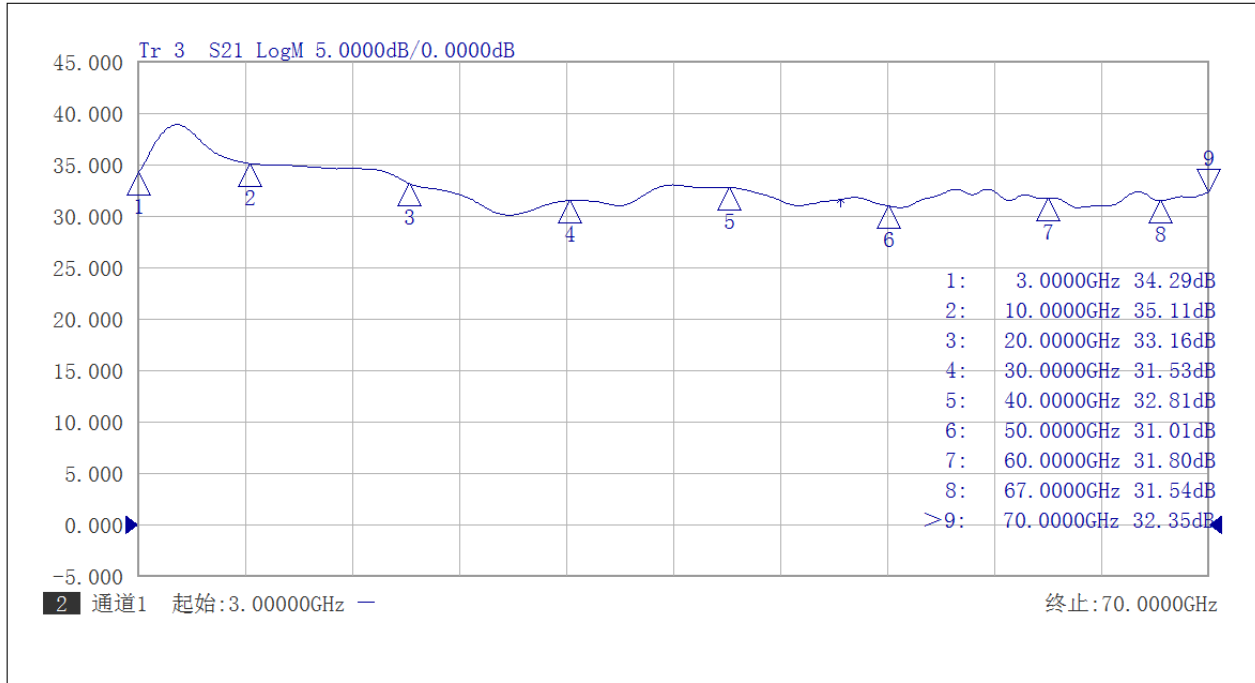
Please pay attention to the case temperature. If case temperature exceed higher than +50C, heat sink and fan are required, or the amplifier may be damaged.

Notes:

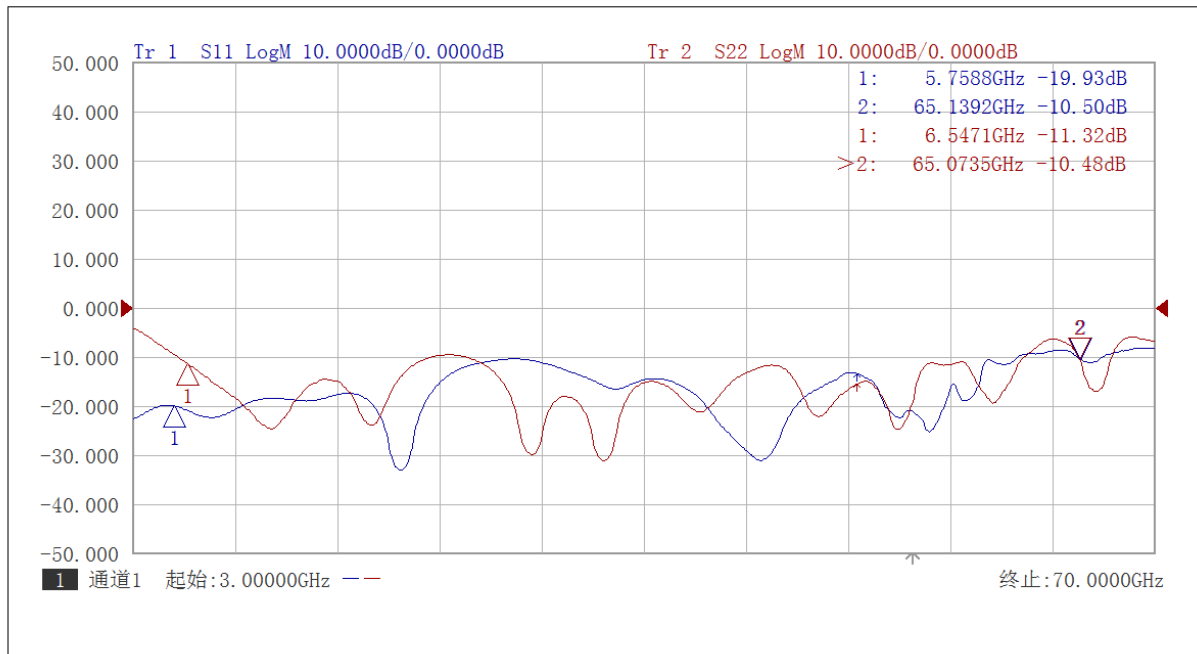
1. Datasheet may be changed according to update of MMIC, Raw materials , process, and so on.
2. This data is only for reference, not for guaranteed specifications.
3. Please contact AT Microwave team to make sure you have the most current data.



Test Data:

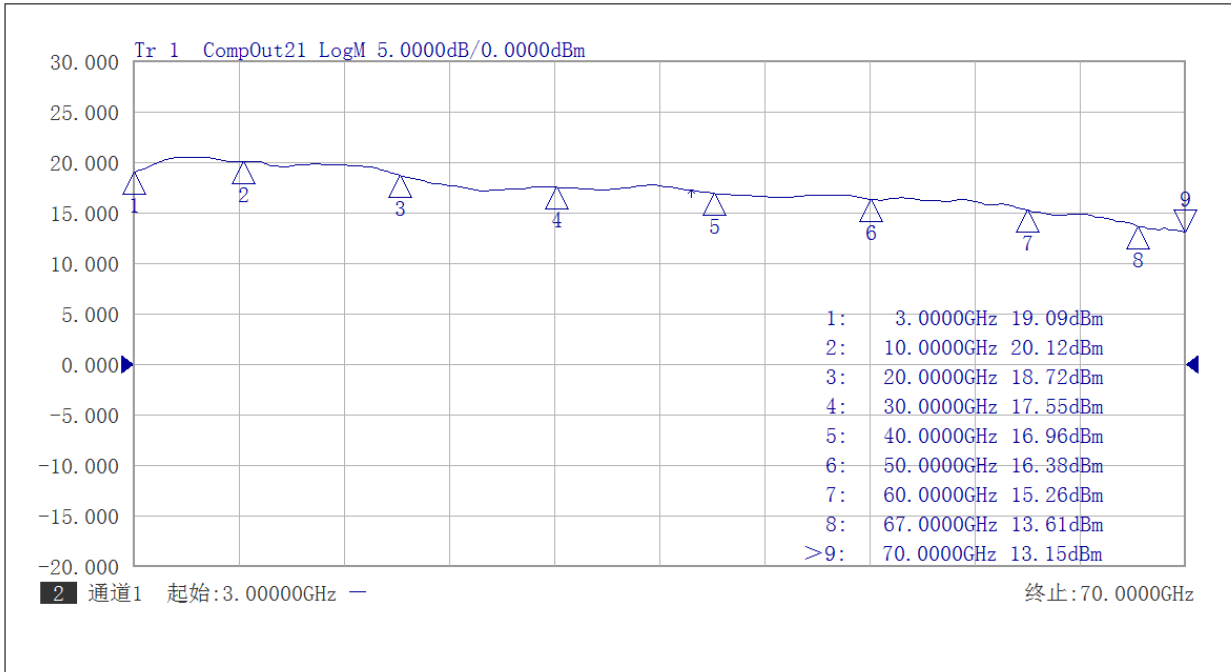


Gain vs Frequency

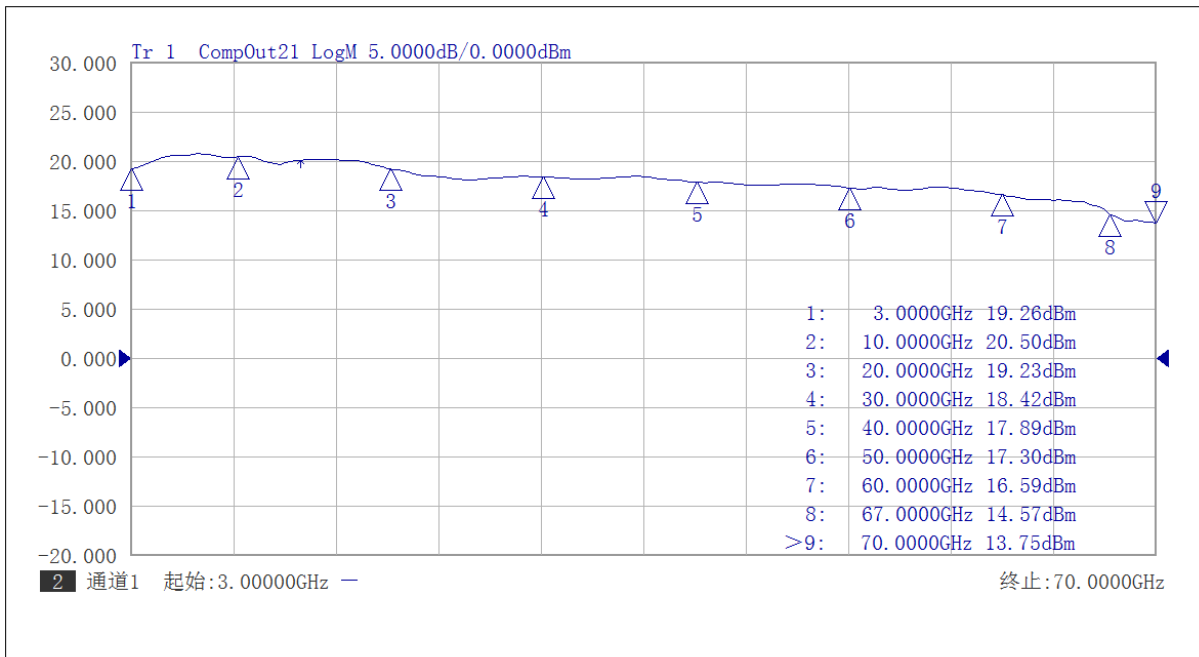


Return Loss vs Frequency



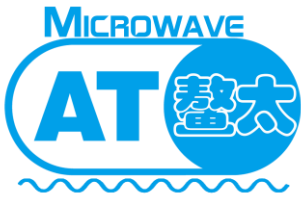


P1db vs Frequency



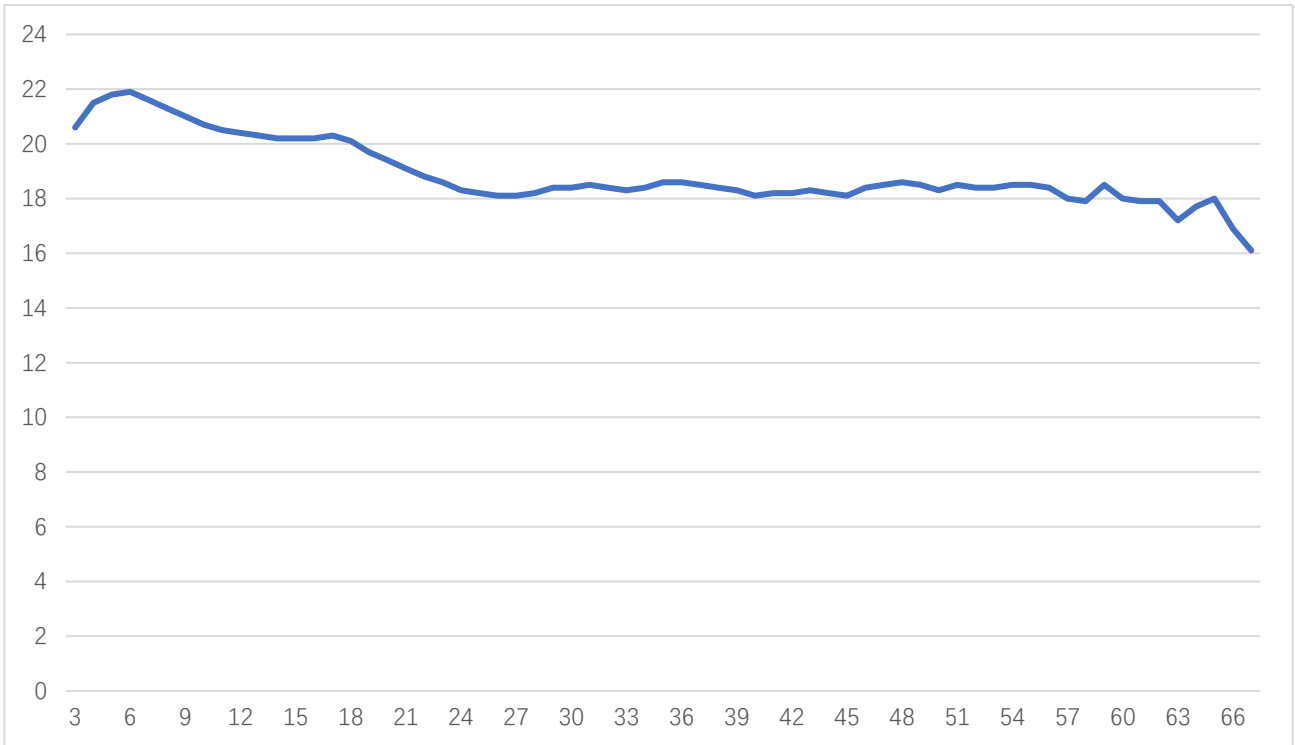
P3db vs Frequency



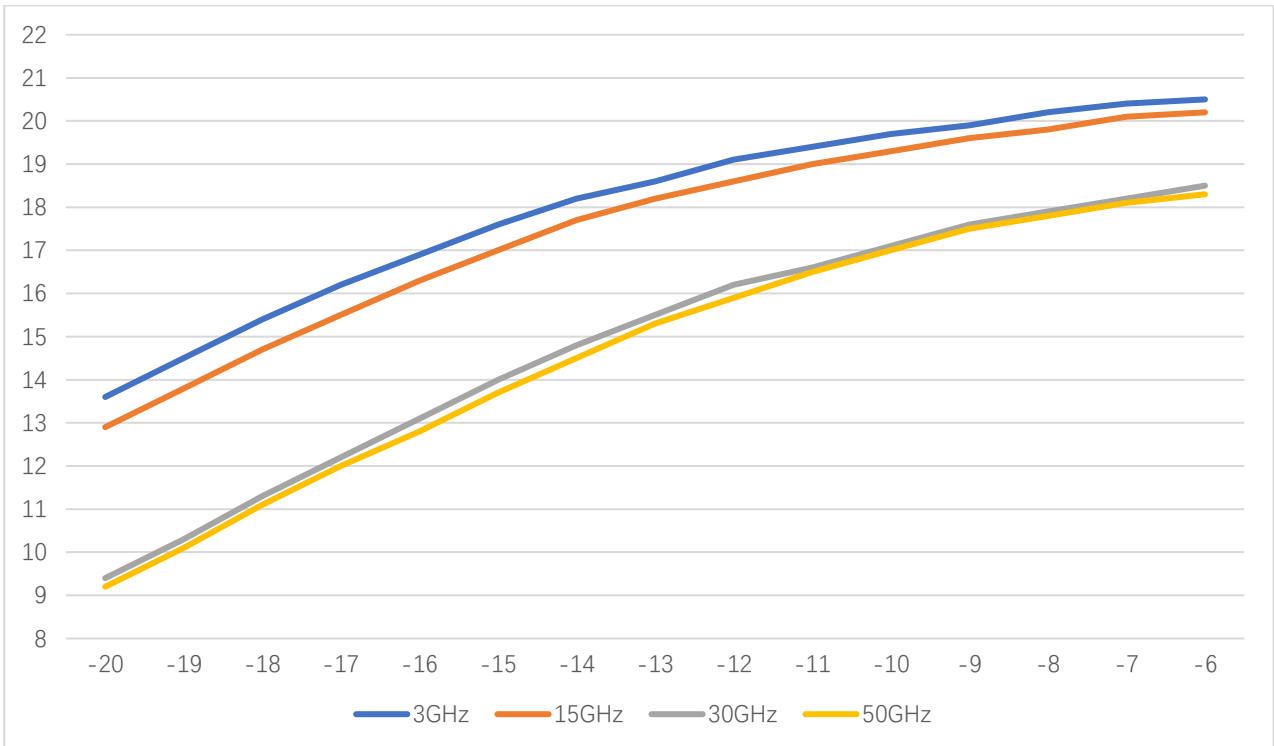


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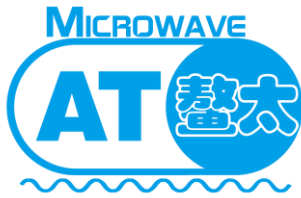


Psat vs Frequency



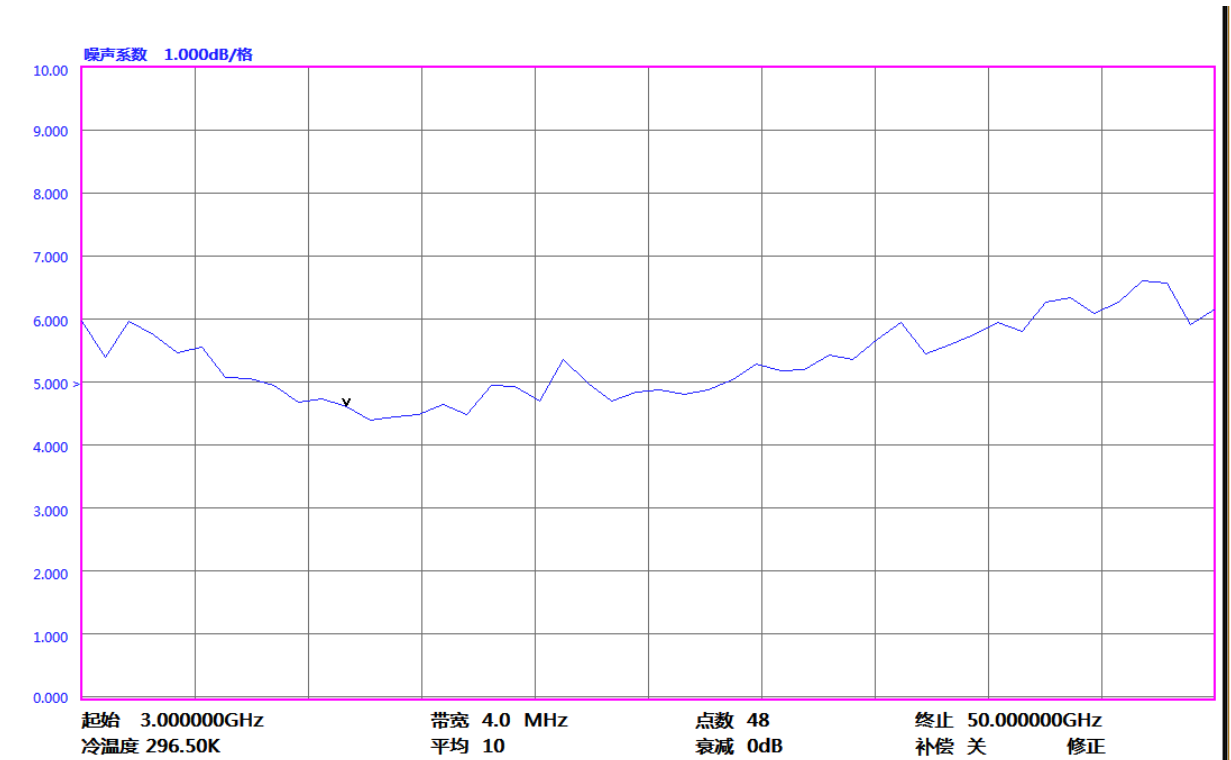
Pout vs Pin at 3/20/40/50GHz





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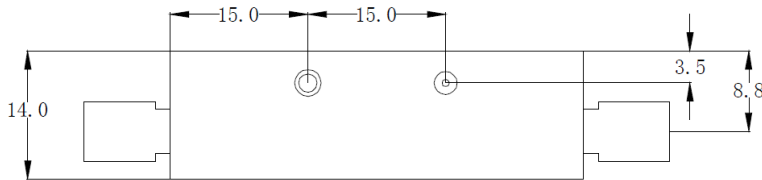
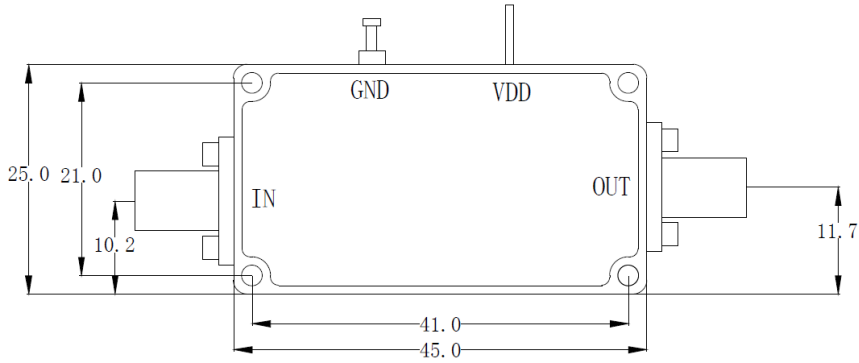
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NF vs Frequency

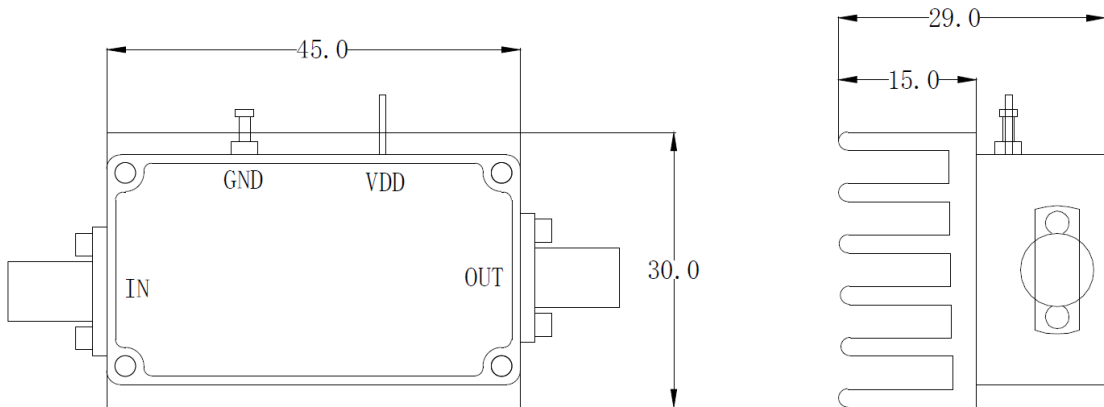


Dimension: (unit in mm)



	<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.

