

### 10MHz-70GHz Broadband Amplifier Gain=50dB, Pout=+15dBm, 1.85mm

2023-7-7



#### Product Overview

AT-BB-0070-5015C is broadband amplifier from 10MHz-70GHz, with Pout=+15dBm, NF=6dB. It can be used both as Power amplifier or low noise amplifier. The DC power requirement is +8V/450mA. The module is with 1.85mm Female

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

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

#### Advantages

- ✓ Frequency: 10MHz-70GHz
- ✓ Psat:+15dBm
- ✓ Small signal gain: 50dB
- ✓ Single Power Supply

#### Application

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

#### Key Features

Parameter	Min	Typical	Max
Frequency		10MHz-70GHz	
Gain	45dB	50dB	
Gain Flatness		+/-5dB	
P1dB		10MHz-30GHz: +14dBm 30GHz-70GHz: +12dBm	
Psat		10MHz-30GHz: +15dBm 30GHz-70GHz: +13dBm	
Drain Supply	+6V	+8V	+10V
Current		560 mA	
NF(1-50GHz)		6dB	
Input Return Loss		-5dB	
Output Return Loss		-5dB	
Spec Temp		25C	





# AT-BB-0070-5015C

10MHz-70GHz Broadband Amplifier

## 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)	180g
Size:	See outline

## Absolute Maximum Ratings Table

Parameter	Value
Drain Supply	+13V
RF Input Power	+0 dBm
Operating Temperature	-40 to +85C
Storage Temperature	-55 to +125C

## 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.

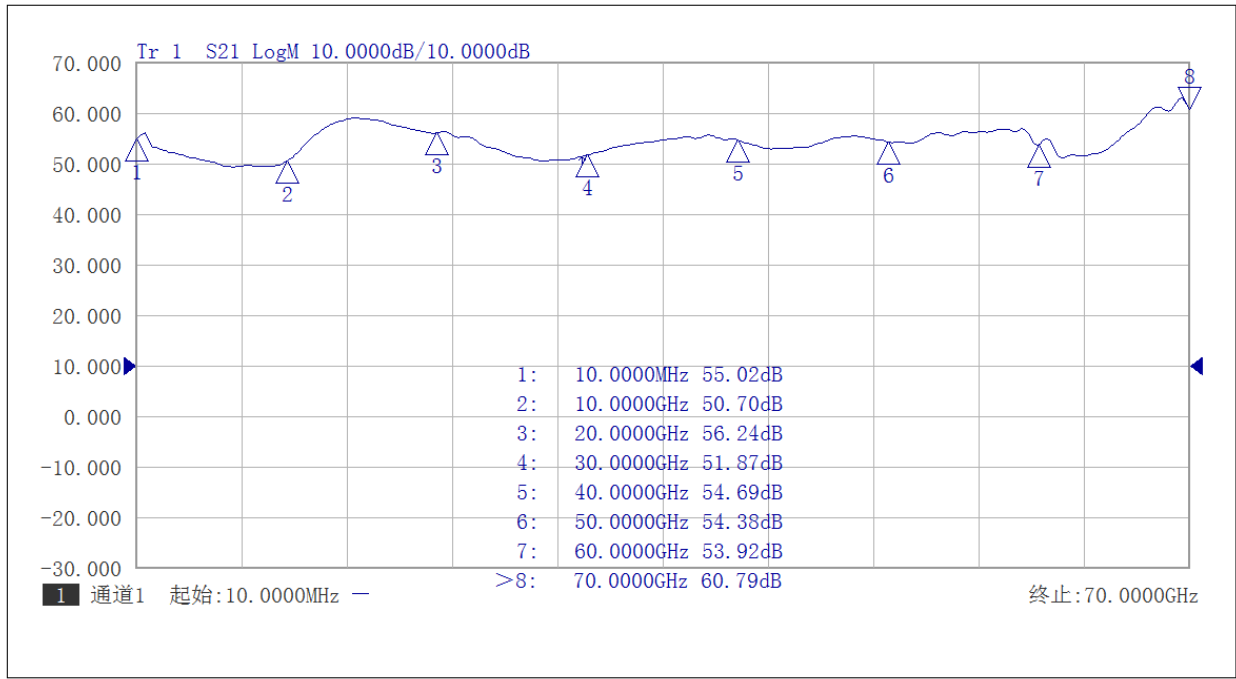
## Part Number Selection Guide

Item	Description
AT-BB-0070-5015C	Stand Module with DC Power Supply
AT-BB-0070-5015C- <b>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

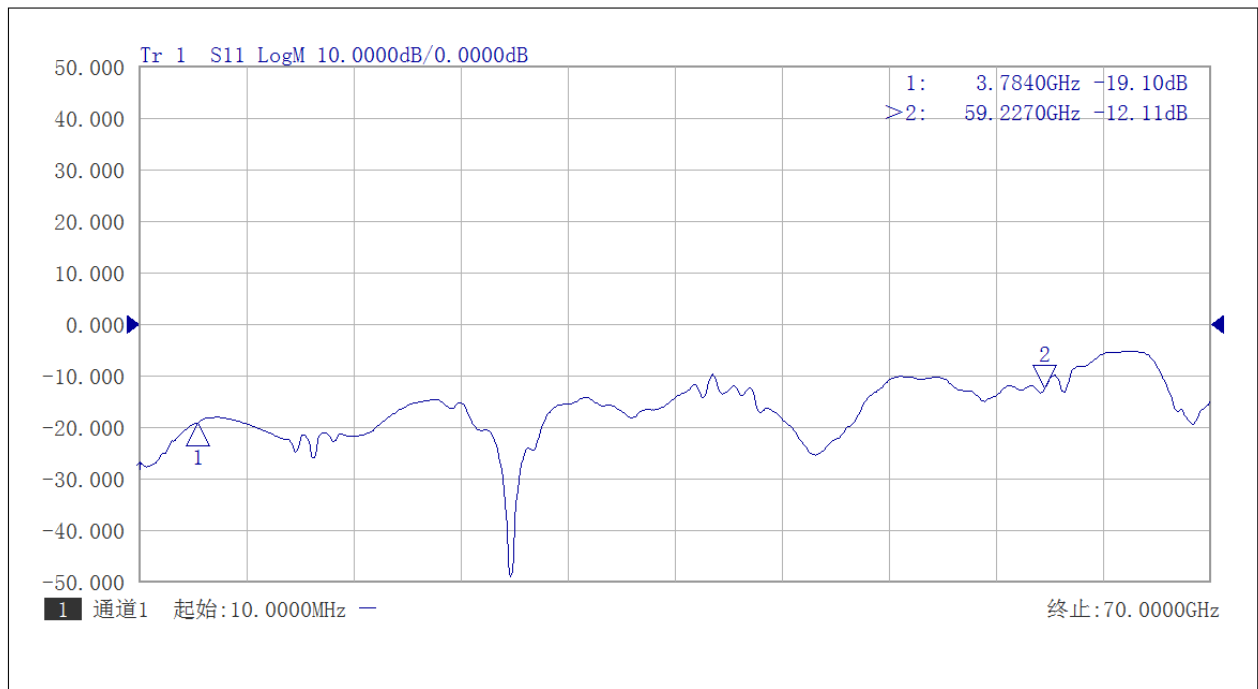


### Test Data (25C)

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

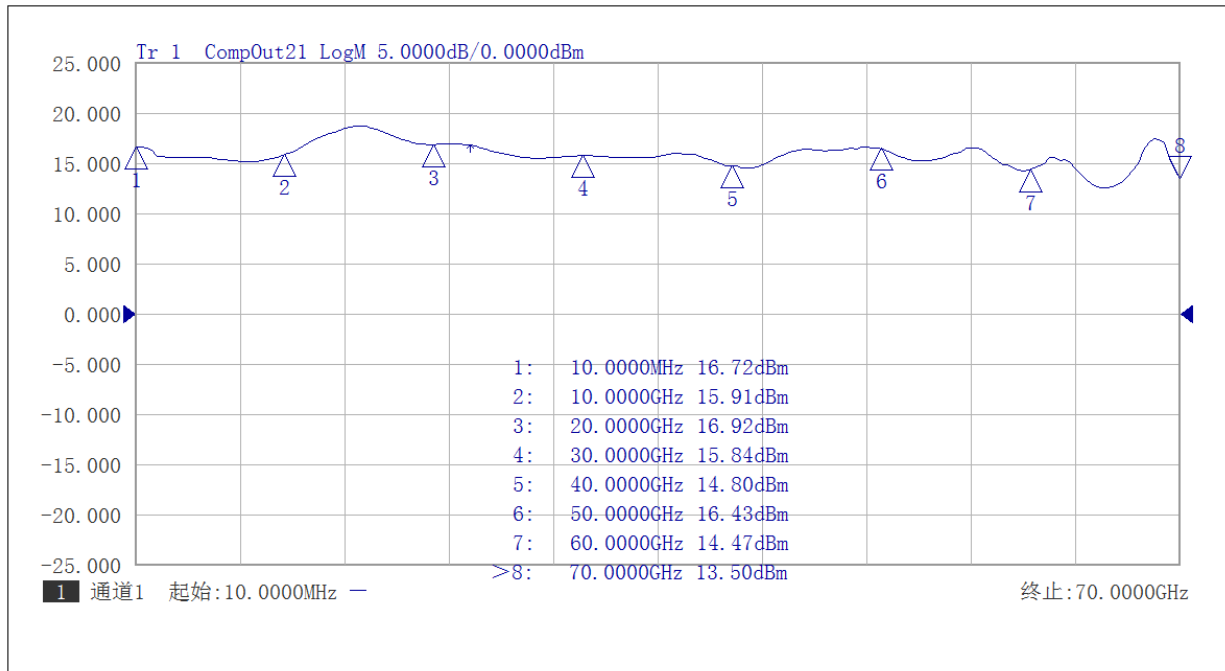


Gain vs Frequency

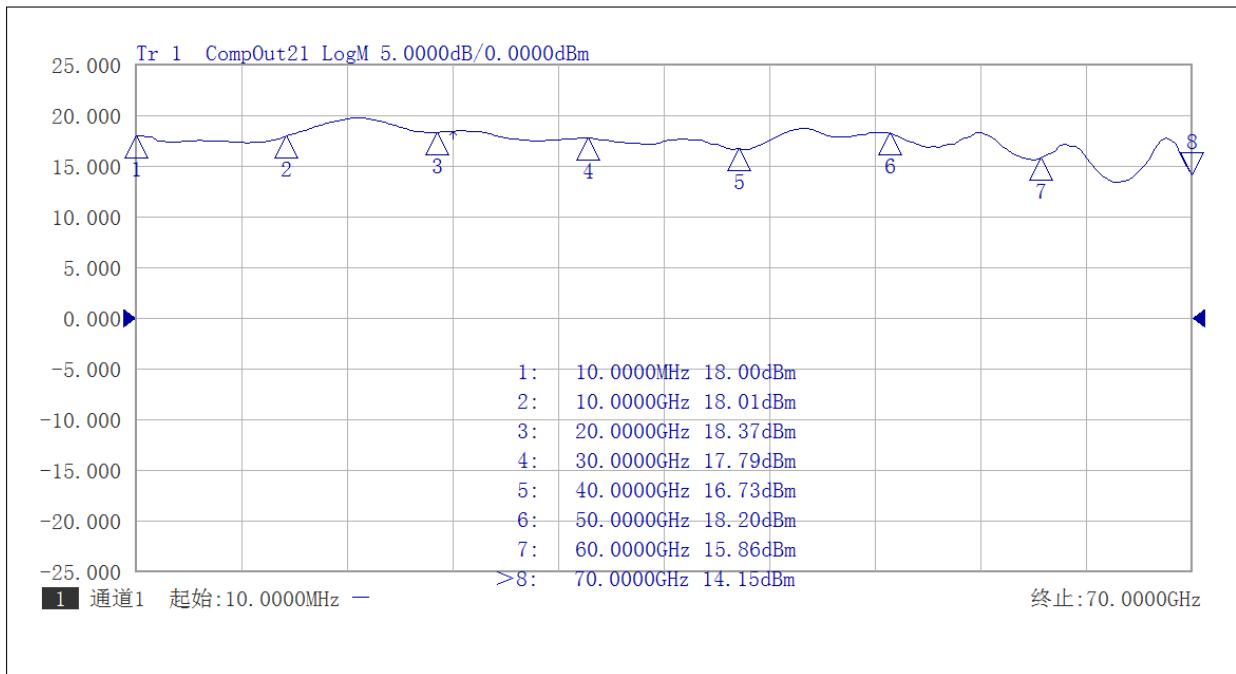


Input Return Loss vs Frequency



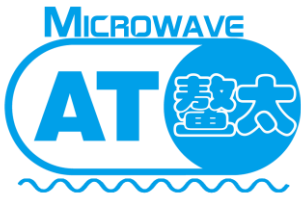


P1db vs Frequency



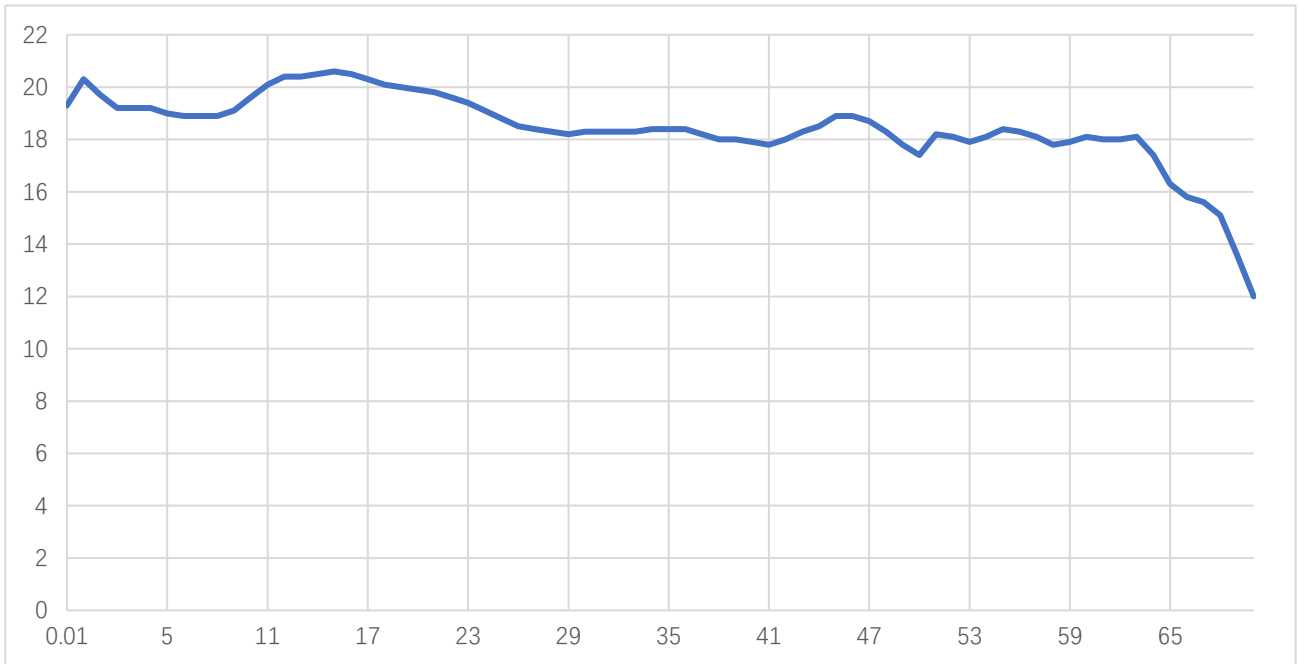
P3db vs Frequency



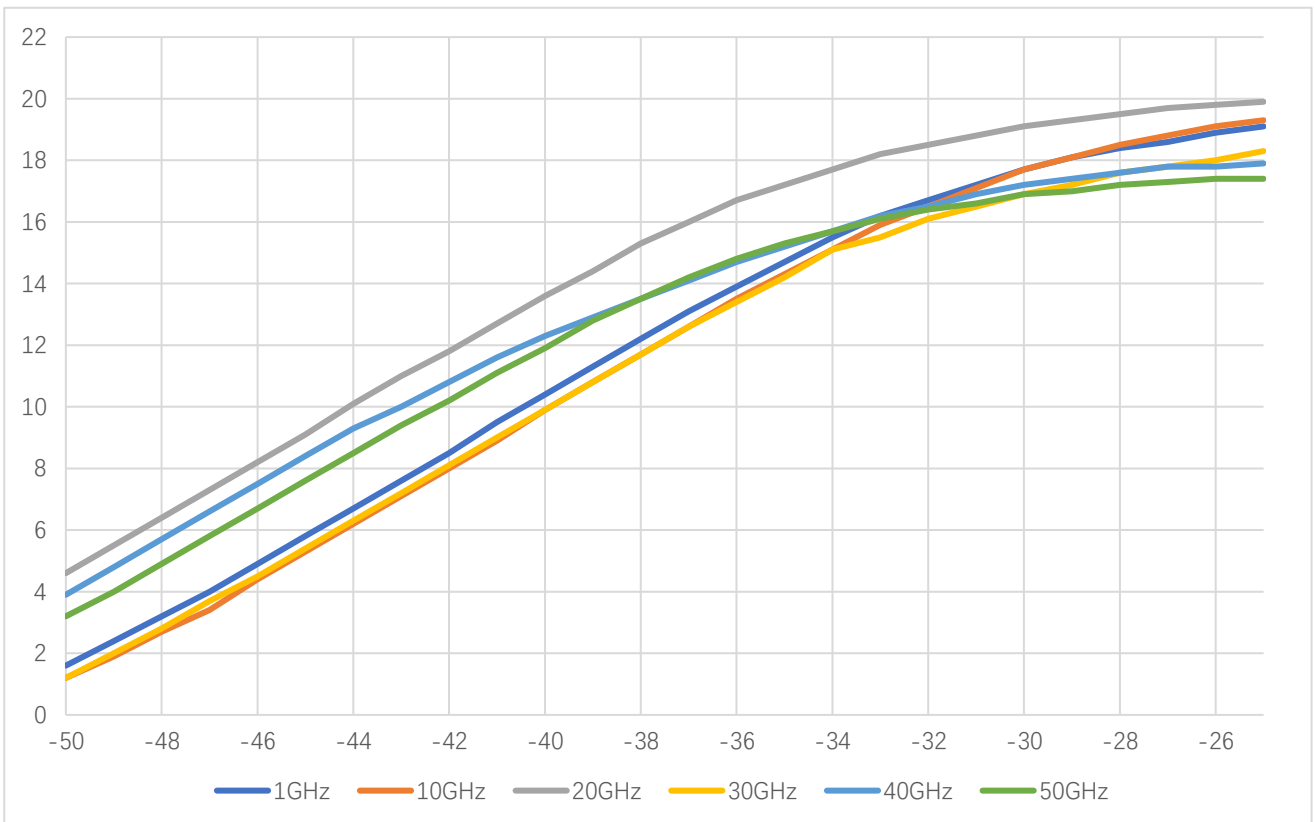


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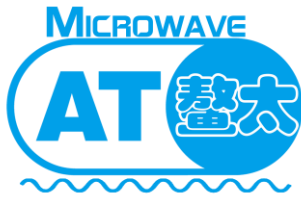


Psat vs Frequency



Pout vs Pin





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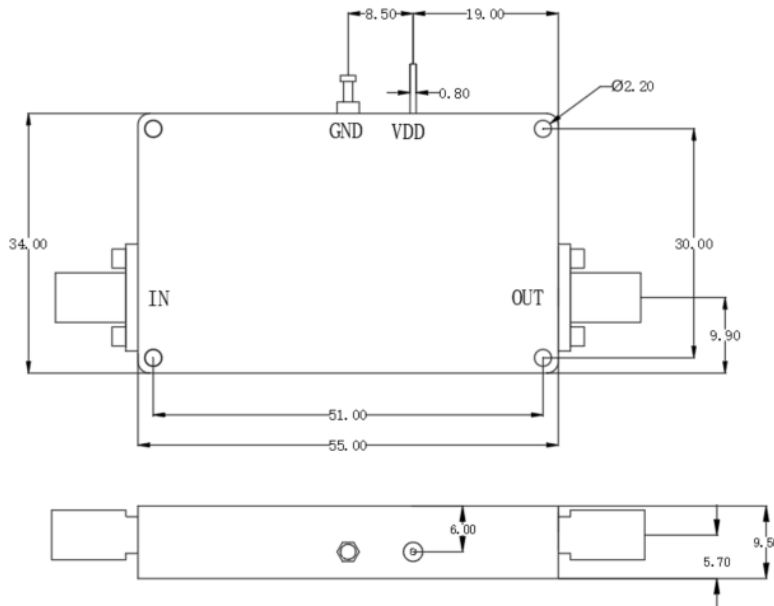
## 10MHz-70GHz Broadband Amplifier



NF vs Frequency



**Dimension:** (unit in mm)

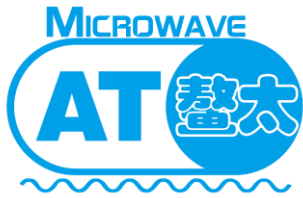


	<26.5GHz	<40GHz	<50GHz	<67GHz
Connector	SMA	2.92mm	2.4mm	1.85mm
Lenth of a	9.4mm	9.5mm	10.8mm	11.3mm

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

Heat Sink Required Duaring Operation.





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-LCBT Option Dimension: (unit in mm)

