

### 10MHz-70GHz Broadband Amplifier Gain=18dB, Pout=+15dBm, 1.85mm

2023-7-7



#### Product Overview

AT-BB-0070-1815C 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/250mA. 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: 10MHz-70GHz
- ✓ Psat:+15dBm
- ✓ Small signal gain: 18dB
- ✓ Single Power Supply

#### Application

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

#### Key Features

Parameter	Min	Typical	Max
Frequency		10MHz-70GHz	
Gain		18dB	
P1dB		10MHz-30GHz: +14dBm 30GHz-70GHz: +12dBm	
Psat		10MHz-30GHz: +15dBm 30GHz-70GHz: +13dBm	
Drain Supply	+6V	+8V	+12V
Current		250 mA	
NF (1-50GHz)		6dB	
Input Return Loss		-10dB	
Output Return Loss		-7dB	
Spec Temp		25C	





# AT-BB-0070-1815C

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)	80g
Size:	30x30x14 mm

## Absolute Maximum Ratings Table

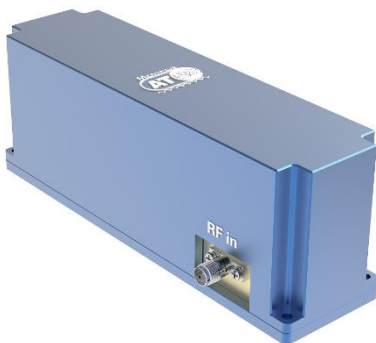
Parameter	Value
Drain Supply	+13V
RF Input Power	+10 dBm
Operating Temperature	-40 to +85C
Storage Temperature	-55 to +125C

## 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.

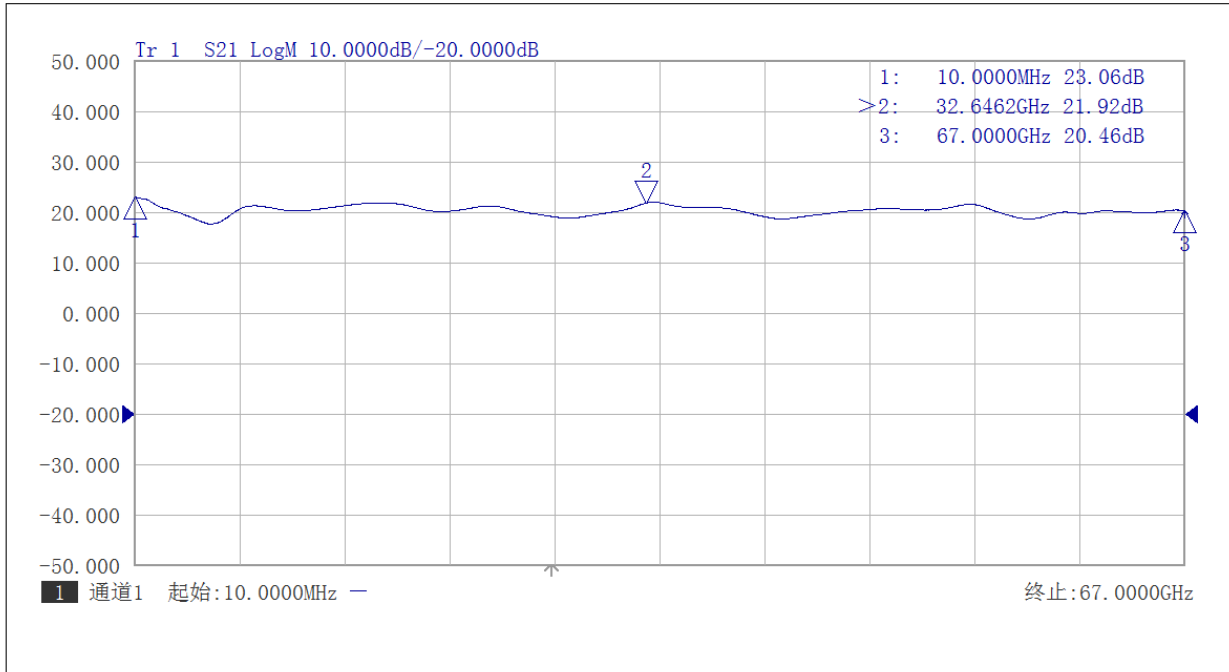
## Part Number Selection Guide

Item	Description
AT-BB-0070-1815C	Stand Module with DC Power Supply
AT-BB-0070-1815C <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

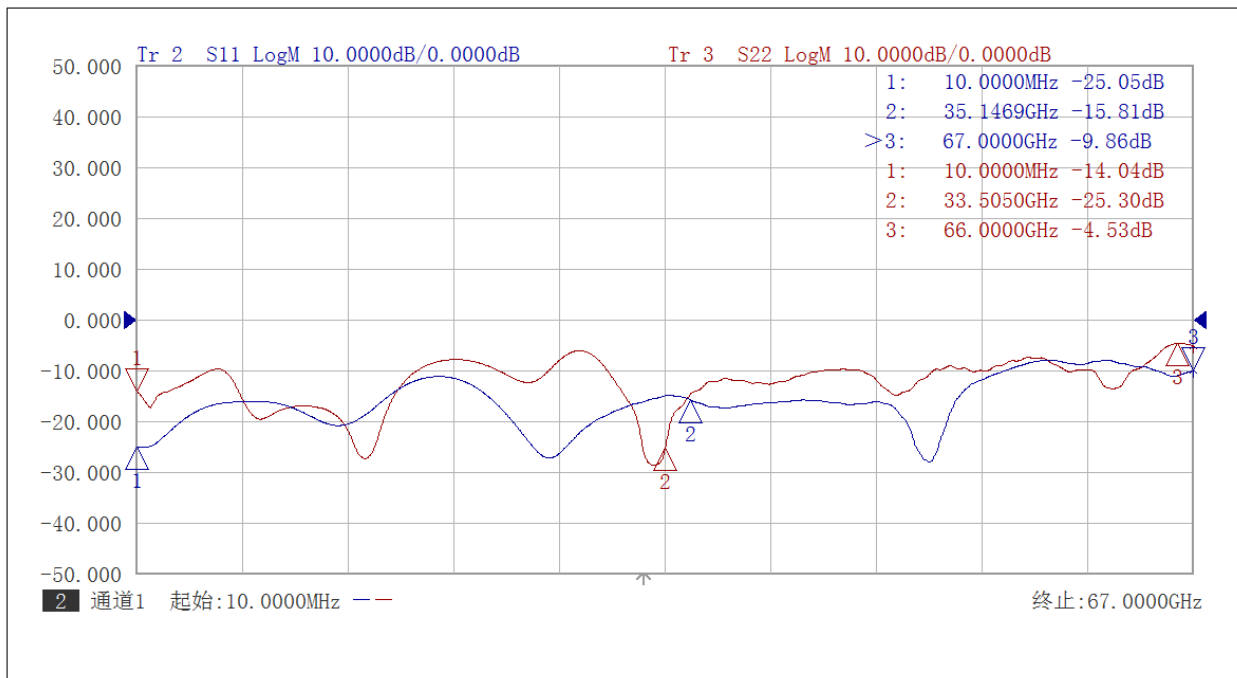


### Test Data (25C)

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

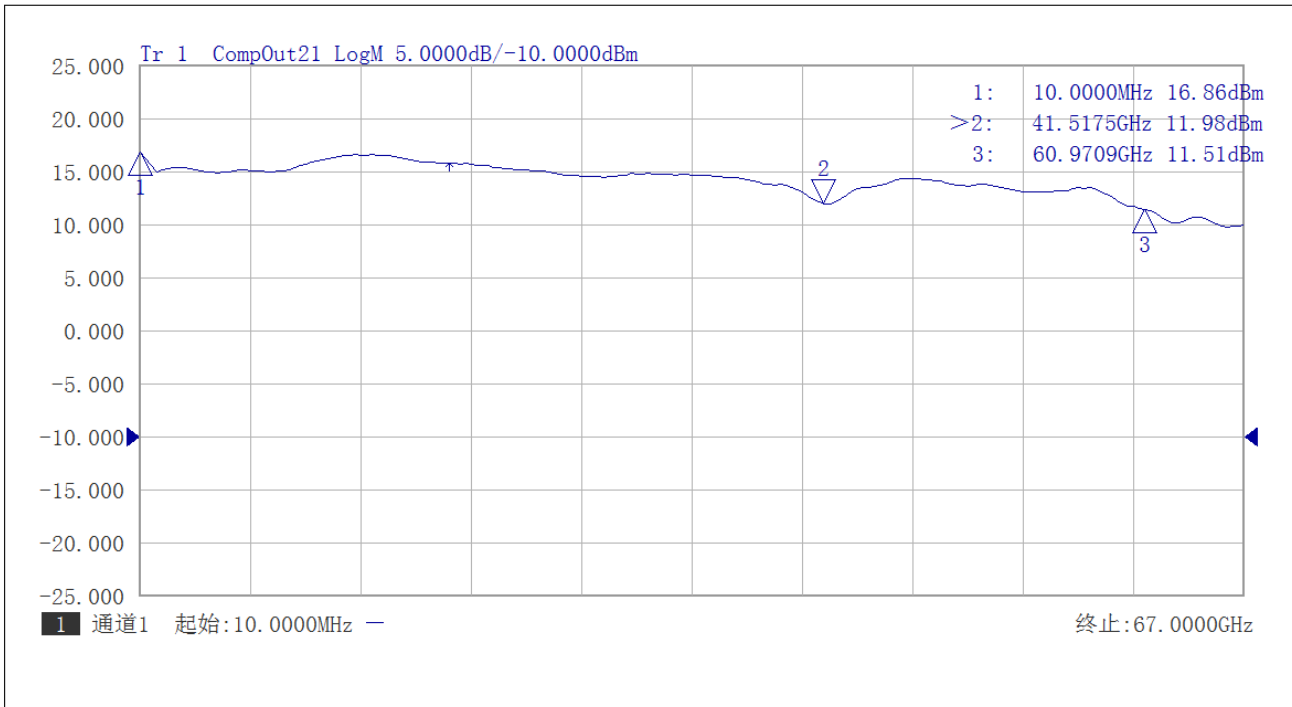


Gain vs Frequency

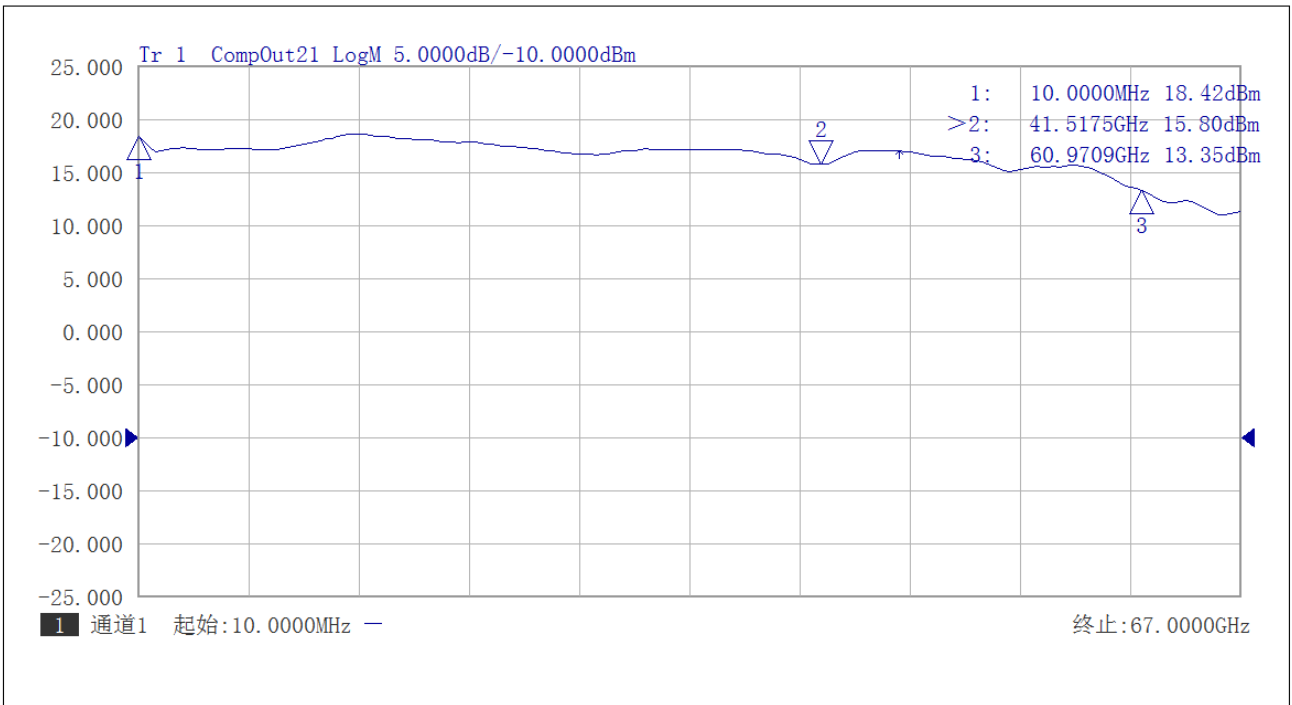


S11/S22 Return Loss vs Frequency





P1dB Test vs Frequency



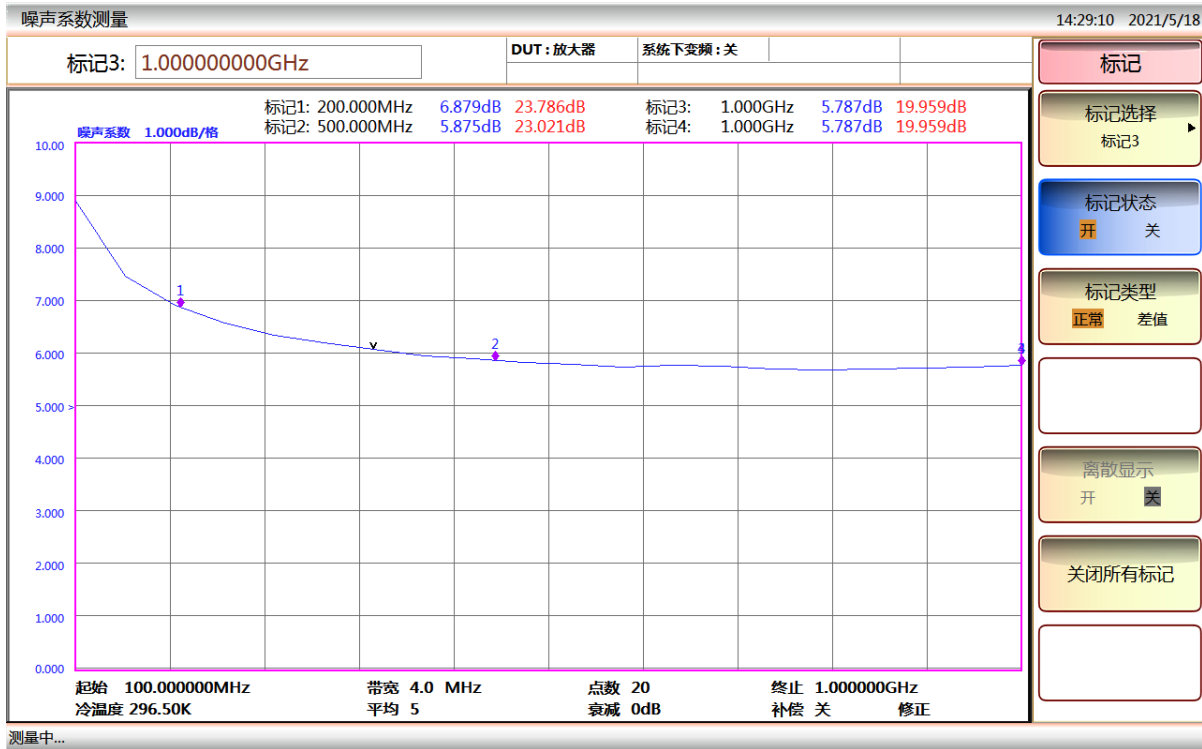
P3dB test vs Frequency



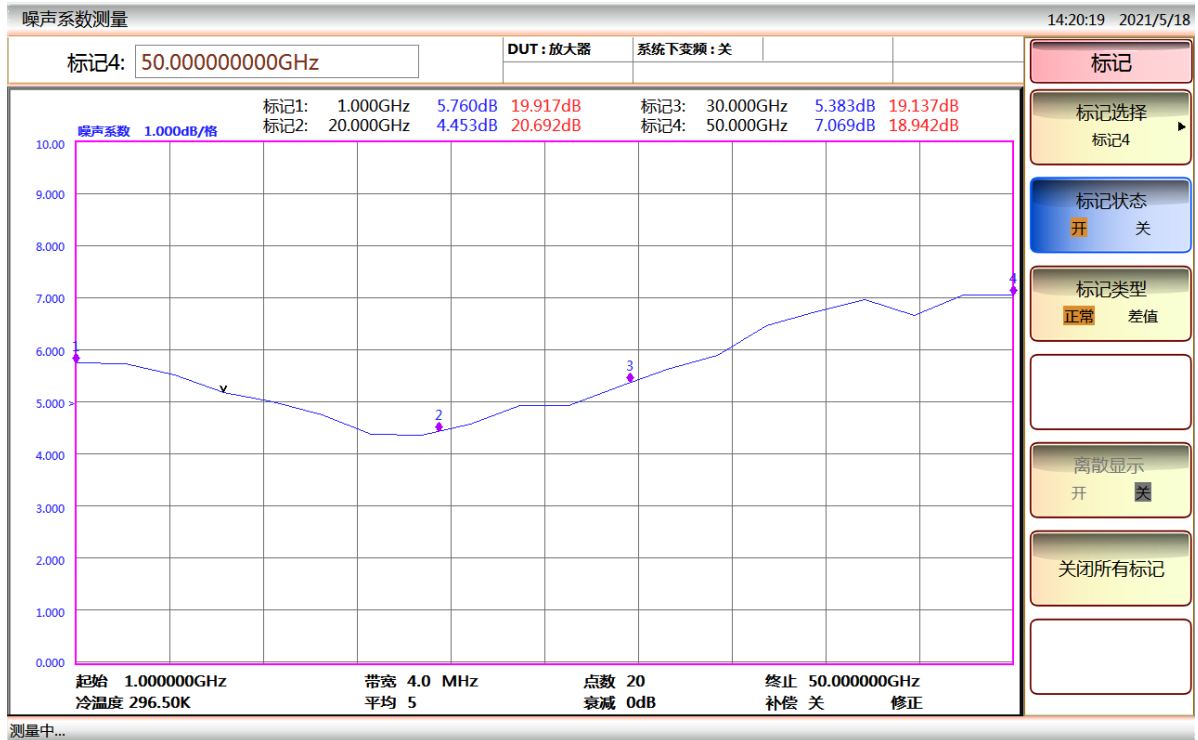


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## 10MHz-70GHz Broadband Amplifier



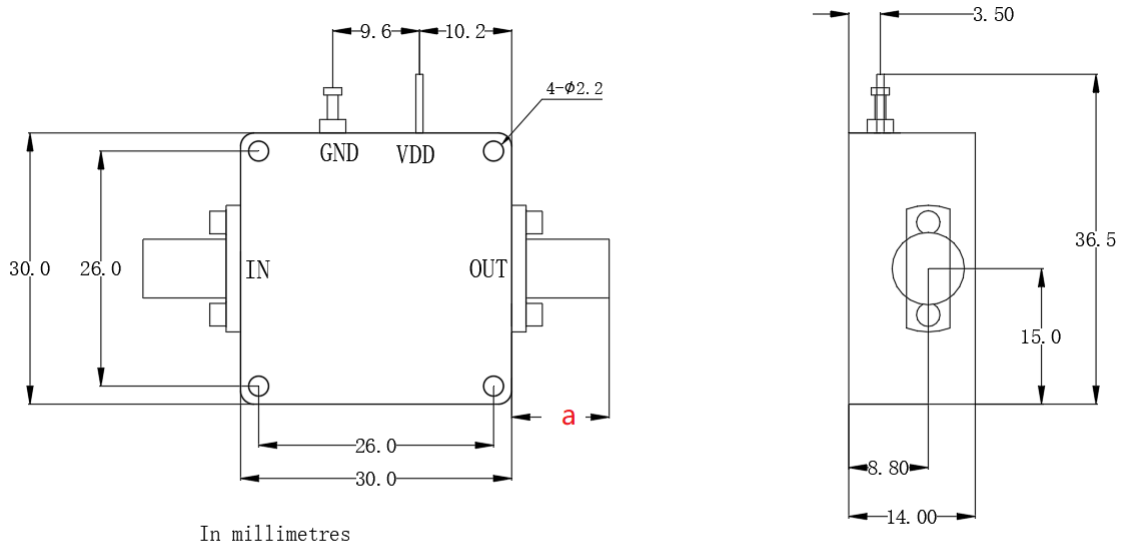
NF test from 100MHz to 1GHz



NF test From 1-50GHz



### 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.

