

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

2023-5-5



Product Overview

AT-BB-0070-5015L 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. Bench-top test equipment type with 110-240V power supply is available according to request.

More information, please visit 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-0070-5015L

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.

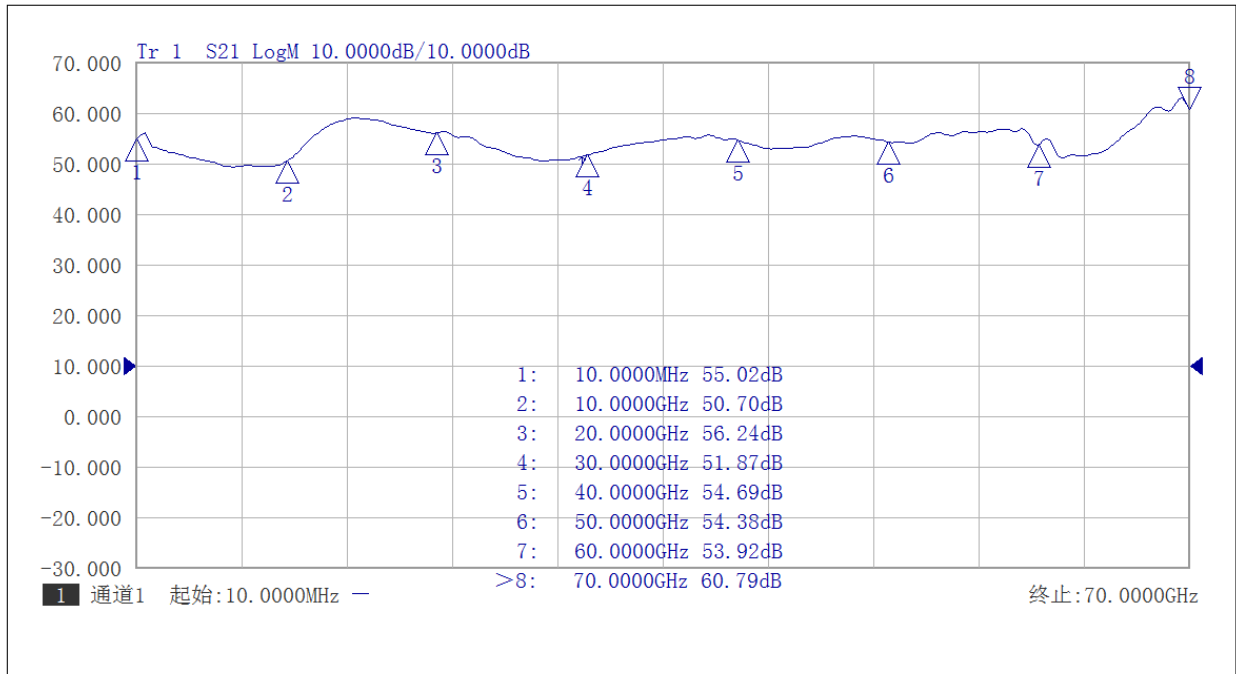
Part Number Selection Guide

Item	Description
AT-BB-0070-5015L	Stand Module with DC Power Supply
AT-BB-0070-5015L- LCBT	L ow Cost, C ompact B ench- T op, +220V Supply with AC/DC Adapter

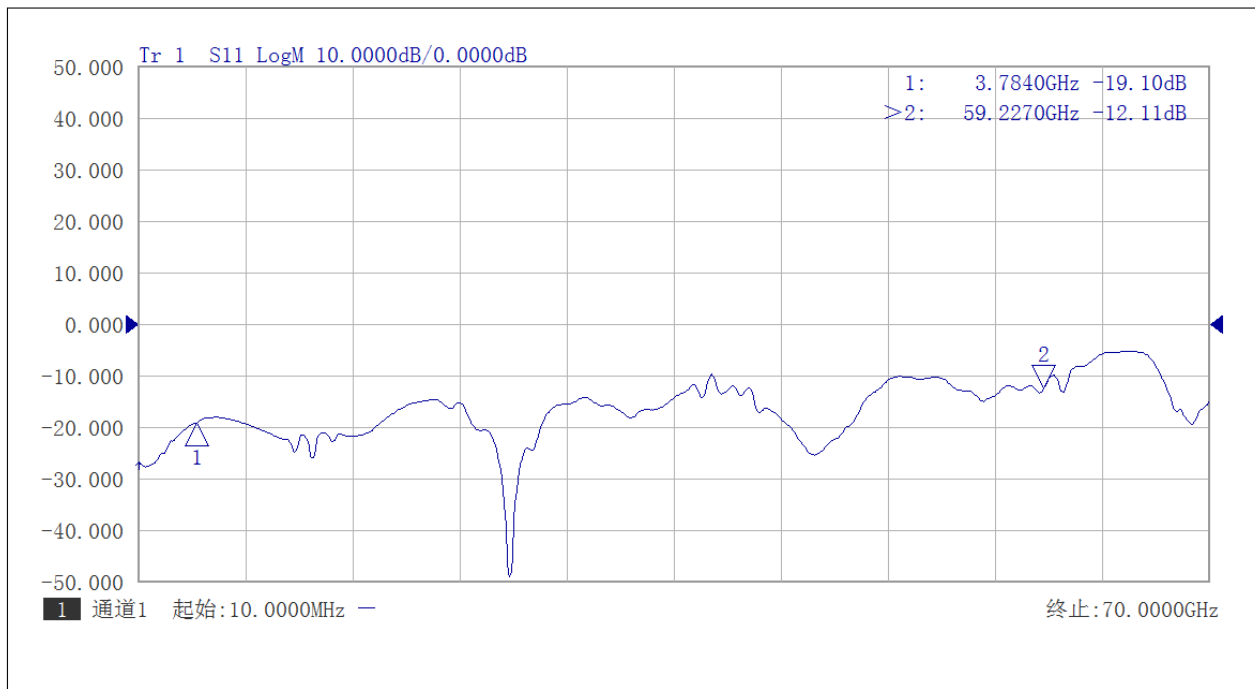


Test Data (25C)

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

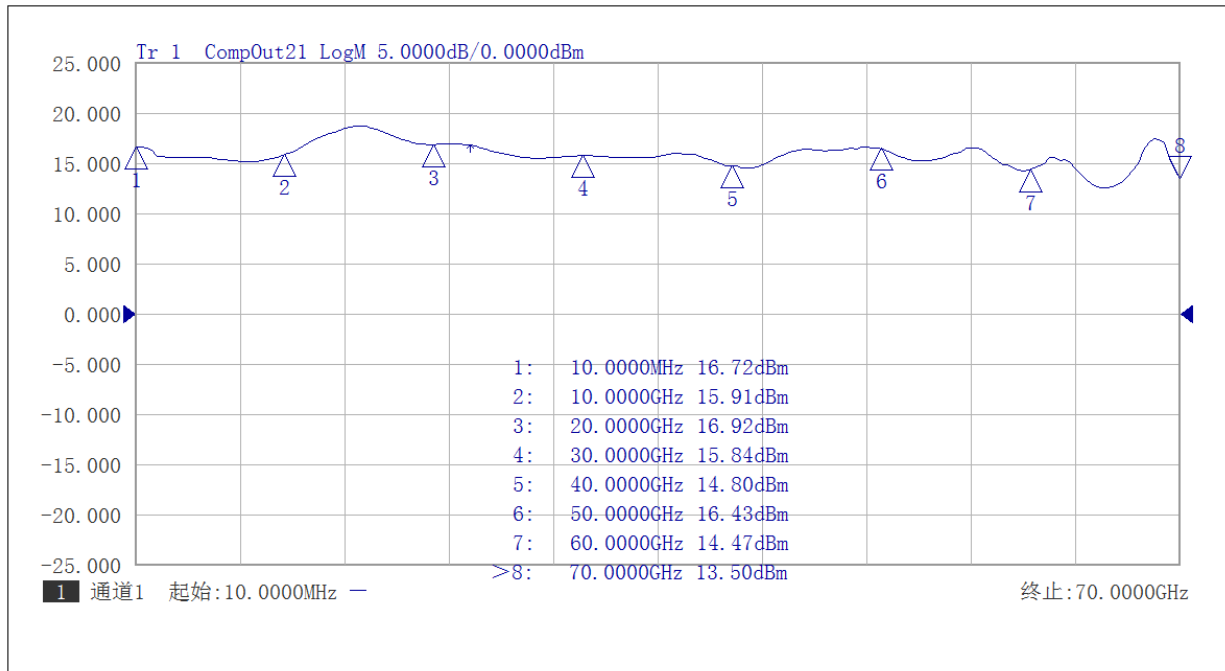


Gain vs Frequency

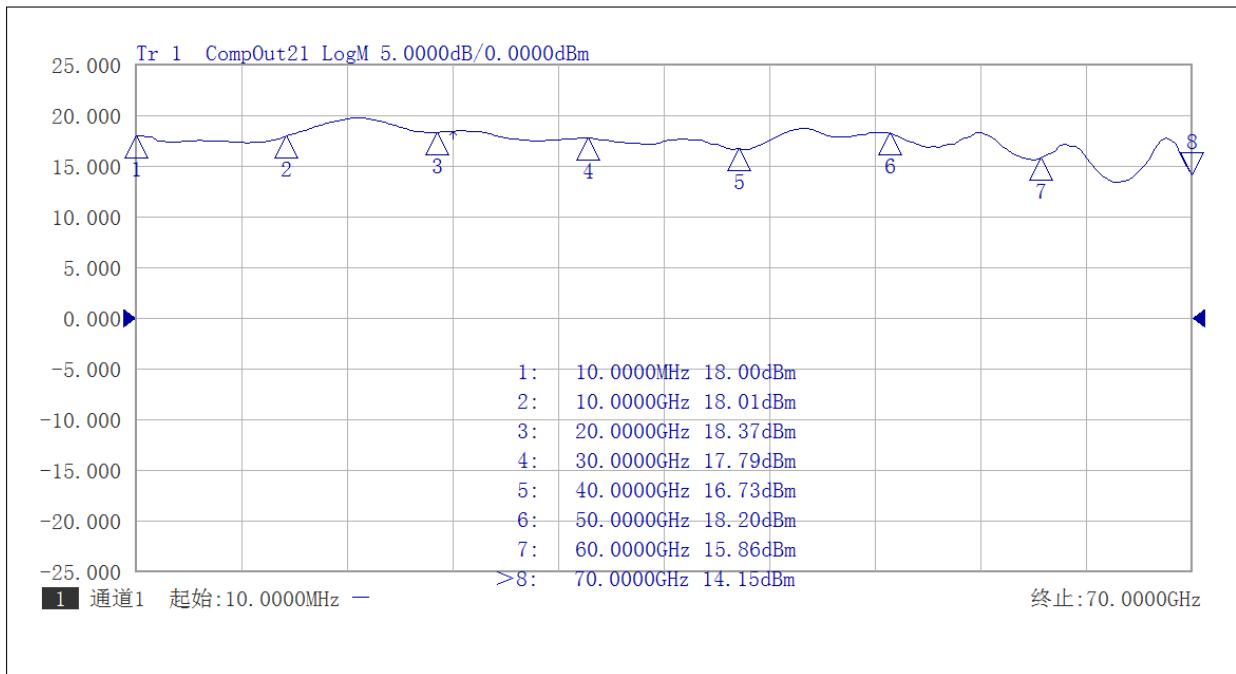


Input Return Loss vs Frequency





P1db vs Frequency



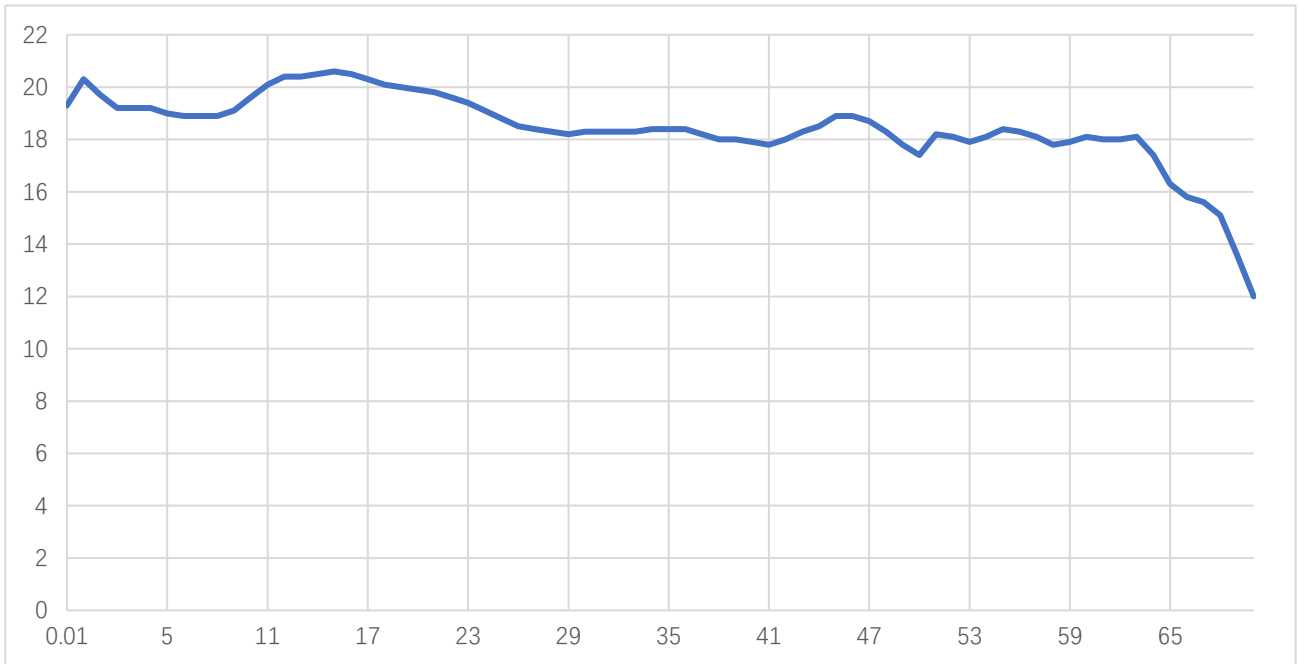
P3db vs Frequency



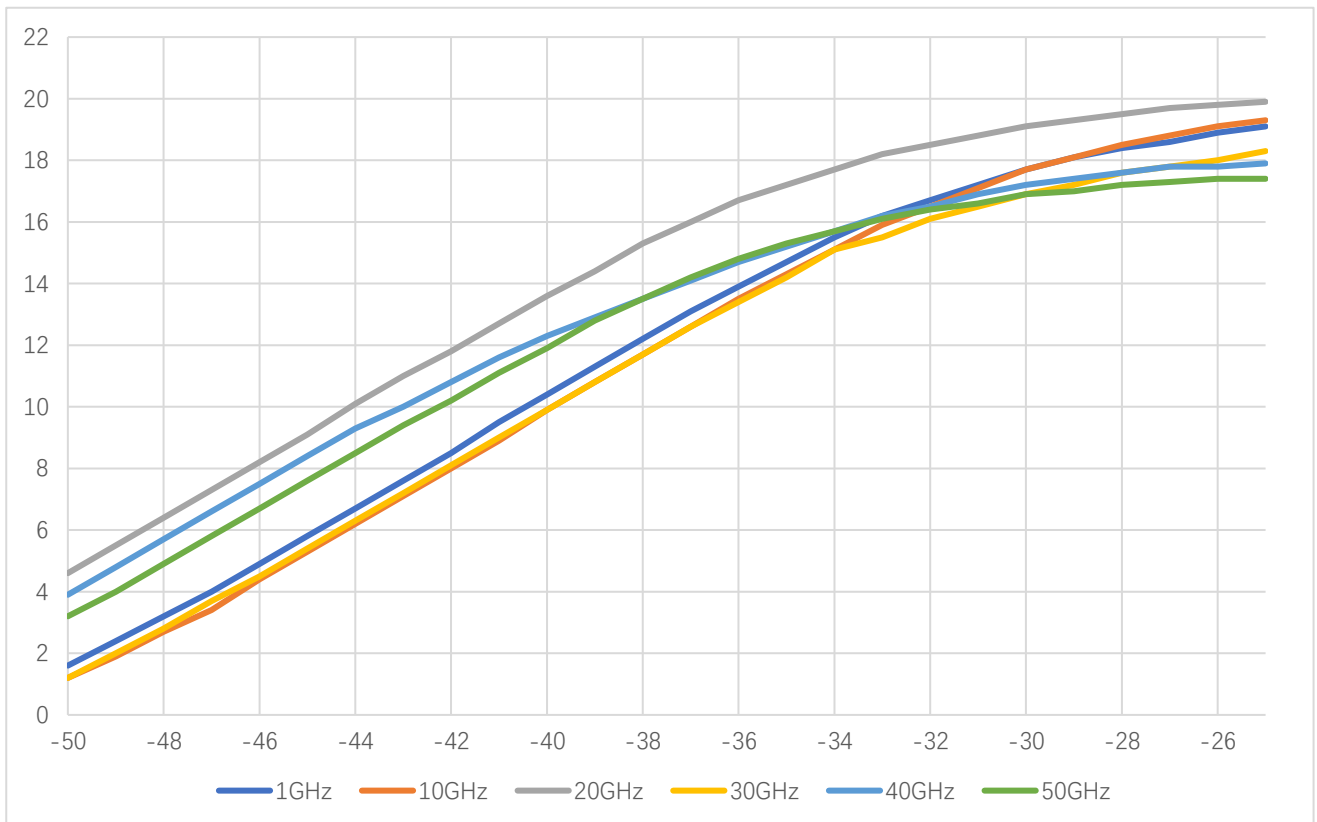


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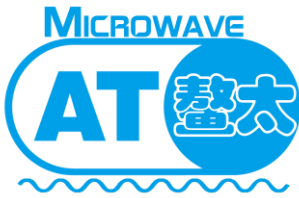


Psat vs Frequency



Pout vs Pin





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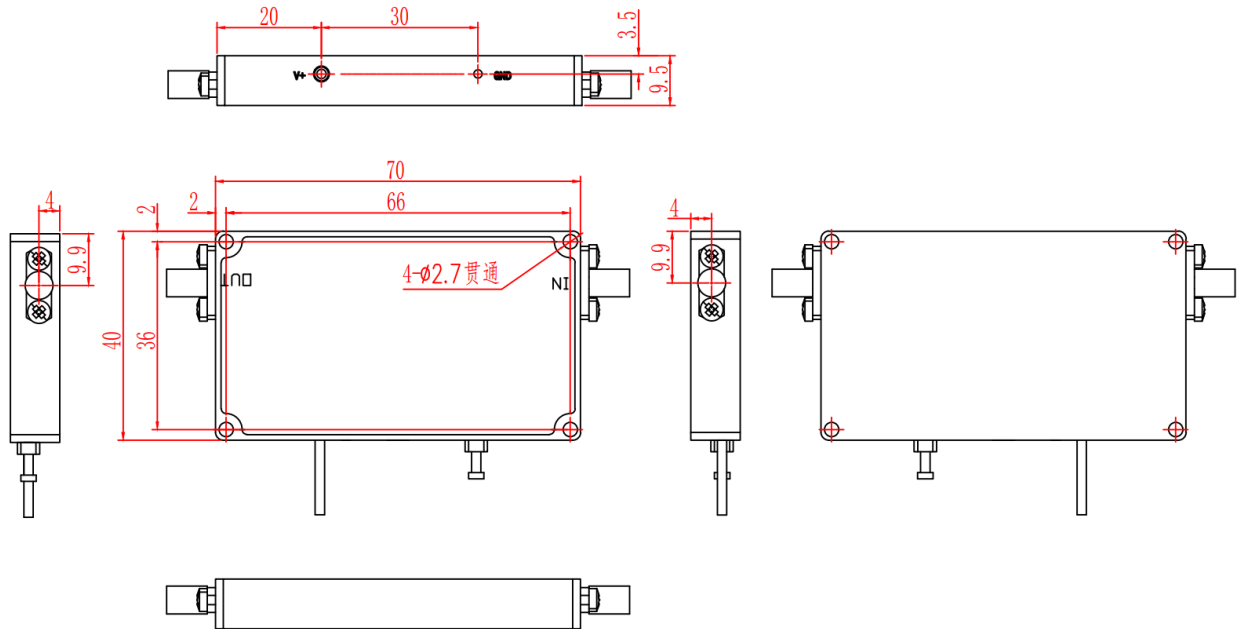
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NF vs Frequency



Dimension: (unit in mm)



Heat Sink Required If Case Temp Higher than 50C

