

10MHz-70GHz Broadband Amplifier



Product Overview

AT-BB-0070-1815C is broadband amplifier from 10MHz-70GHz, with $P_{out}=+15dBm$, $NF=6dB$. 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

Advantages

- ✓ Frequency: 10MHz-70GHz
- ✓ $P_{sat}:+15dBm$
- ✓ 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-50GHz: +14dBm 50GHz-70GHz: +12dBm	
Psat		10MHz-50GHz: +15dBm 50GHz-70GHz: +13dBm	
Drain Supply	+6V	+8V	+12V
Current		250 mA	
NF (1-50GHz)		6dB	
Input Return Loss		-5dB	
Output Return Loss		-5dB	
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:	30x30x14 mm

Absolute Maximum Ratings Table

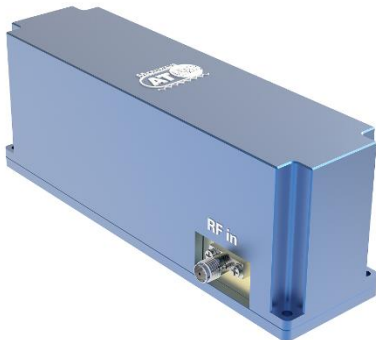
Parameter	Value
Drain Supply	+13V
RF Input Power	+15 dBm
Operating Temperature	-40 to +85C
Storage Temperature	-55 to +125C

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.

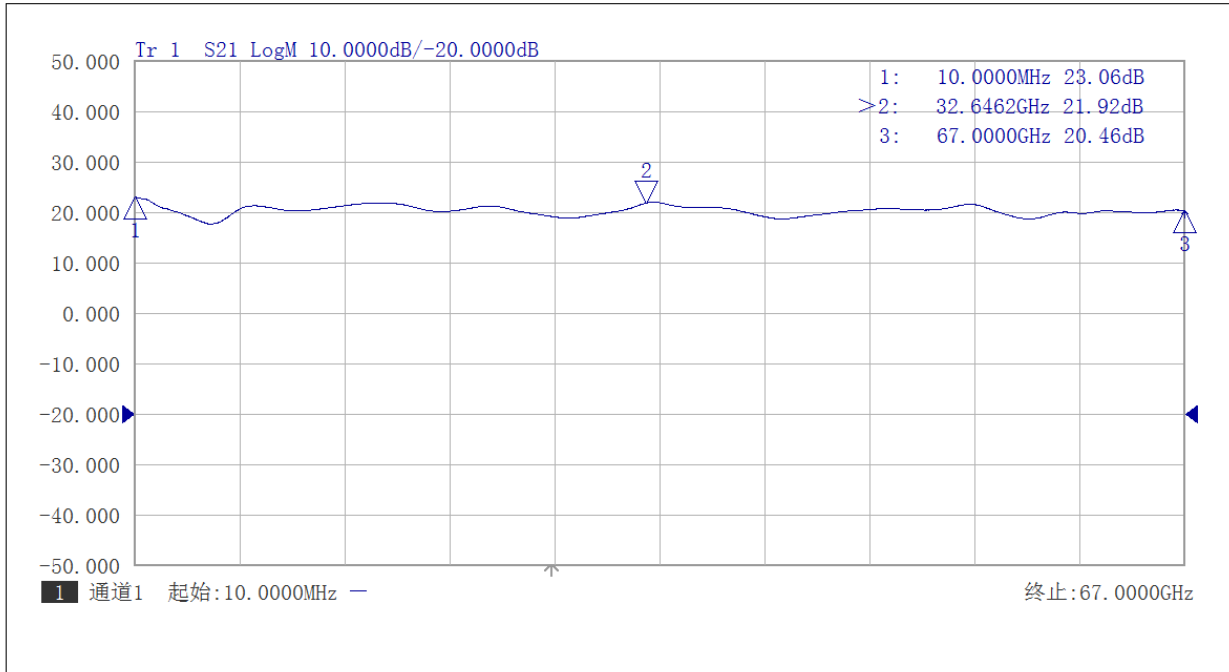
Part Number Selection Guide

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

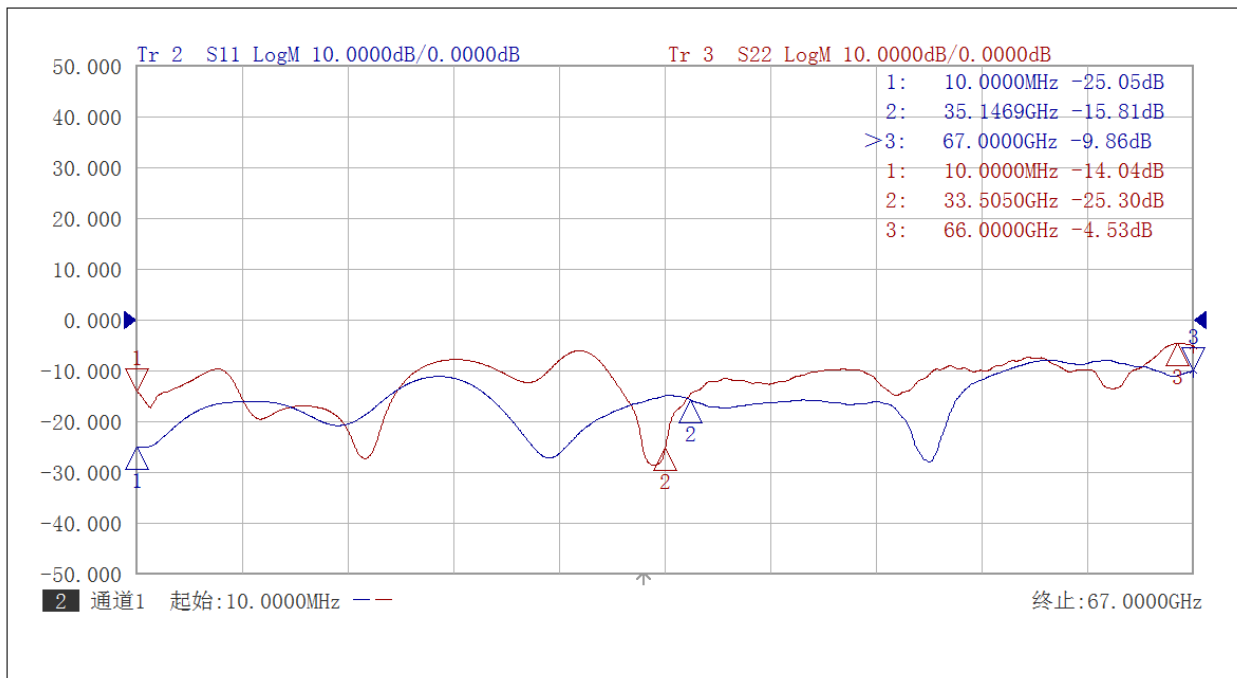


Test Data (25C)

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

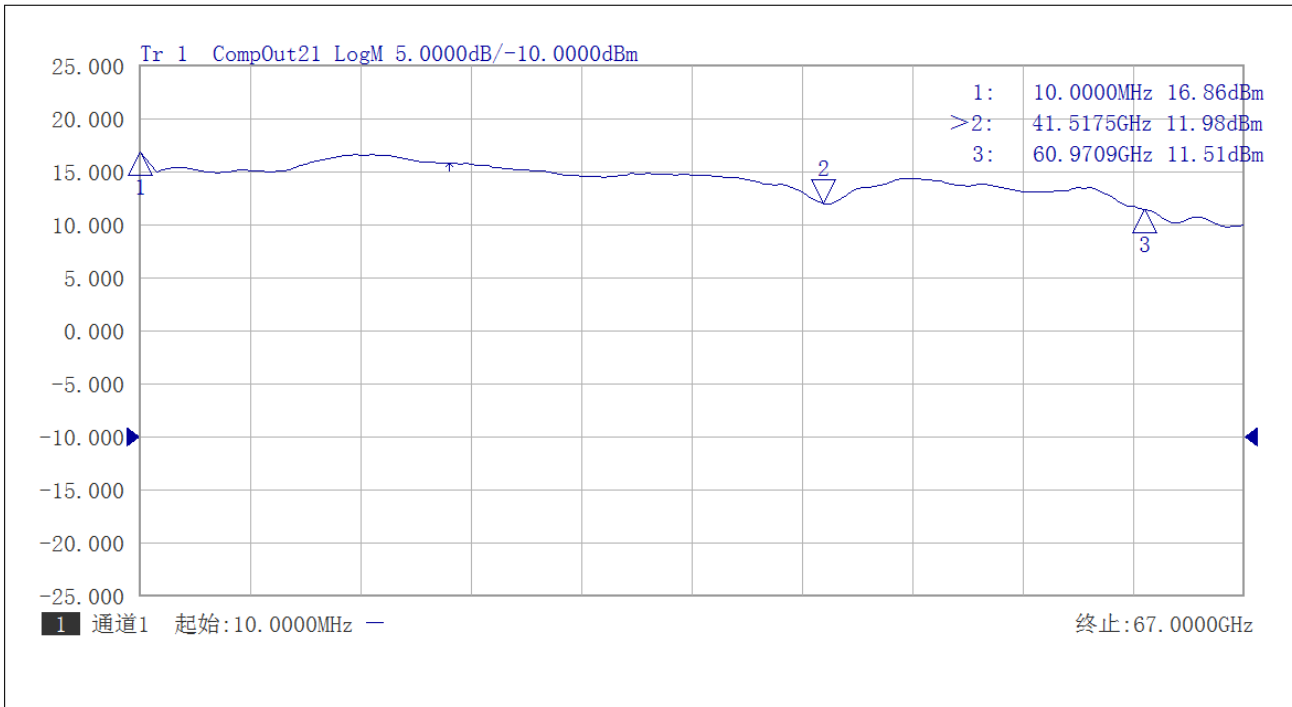


Gain vs Frequency

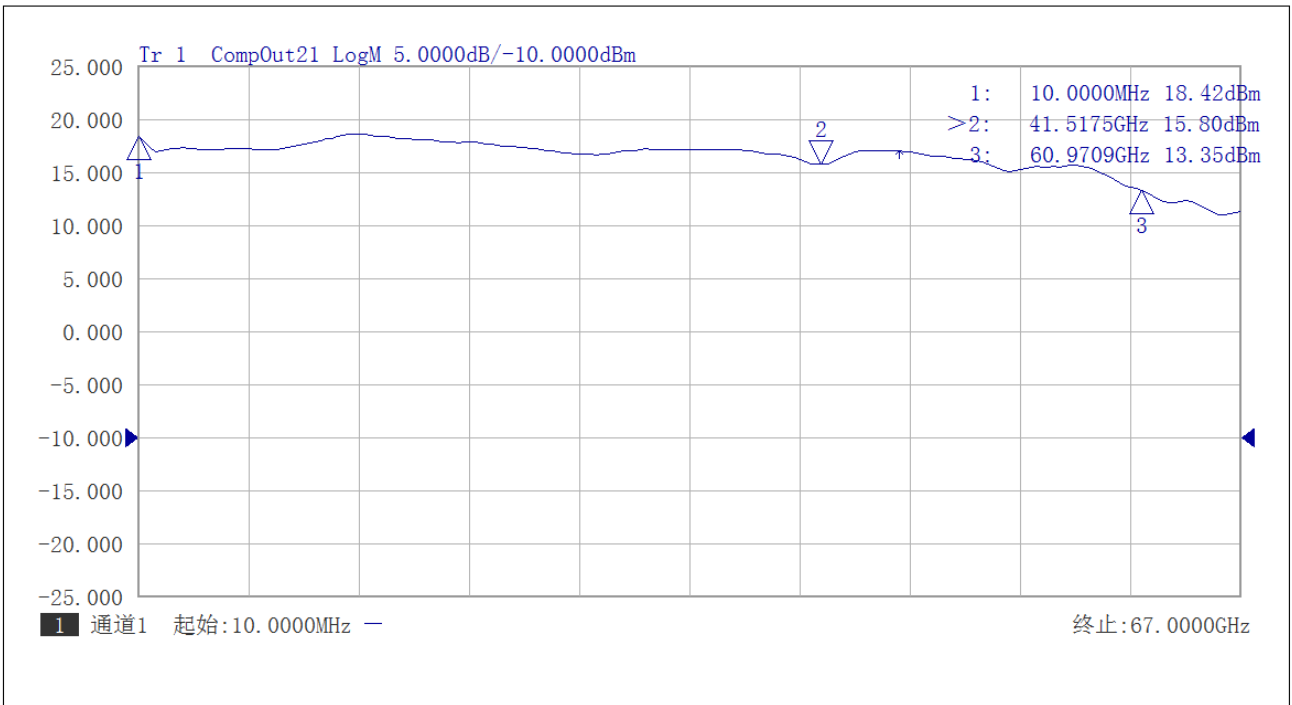


S11/S22 Return Loss vs Frequency



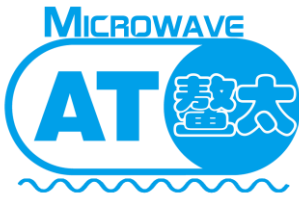


P1dB Test vs Frequency



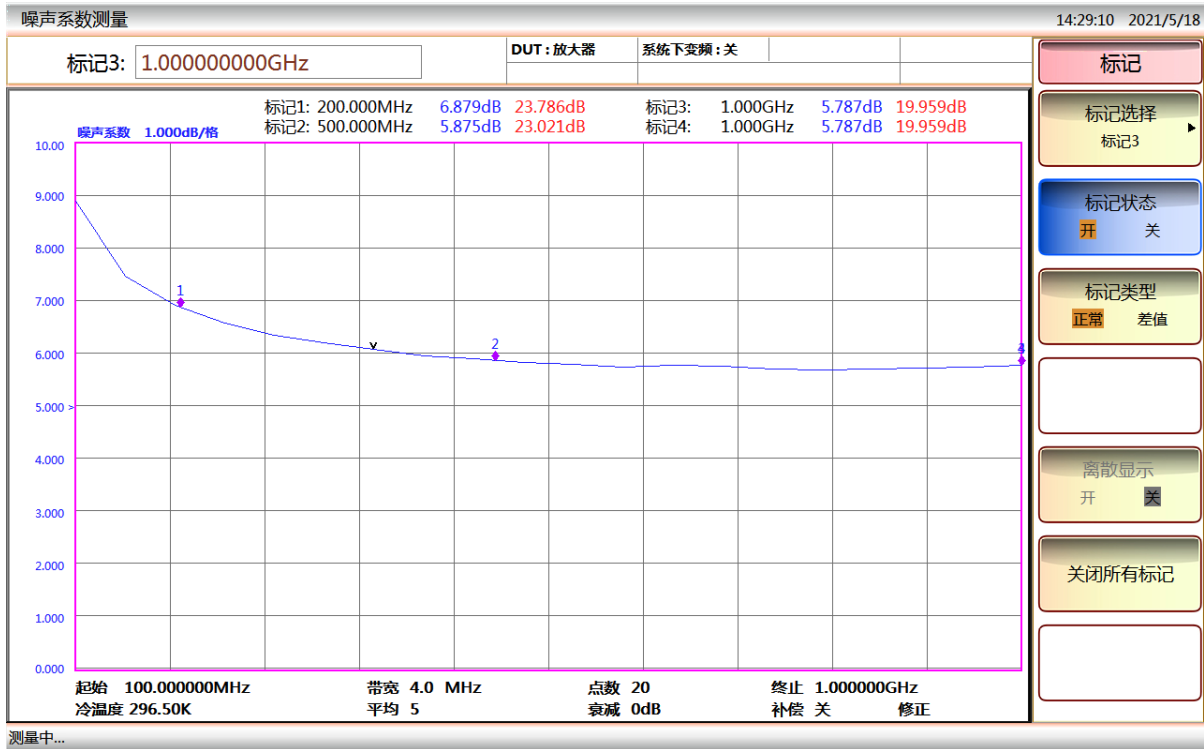
P3dB test vs Frequency



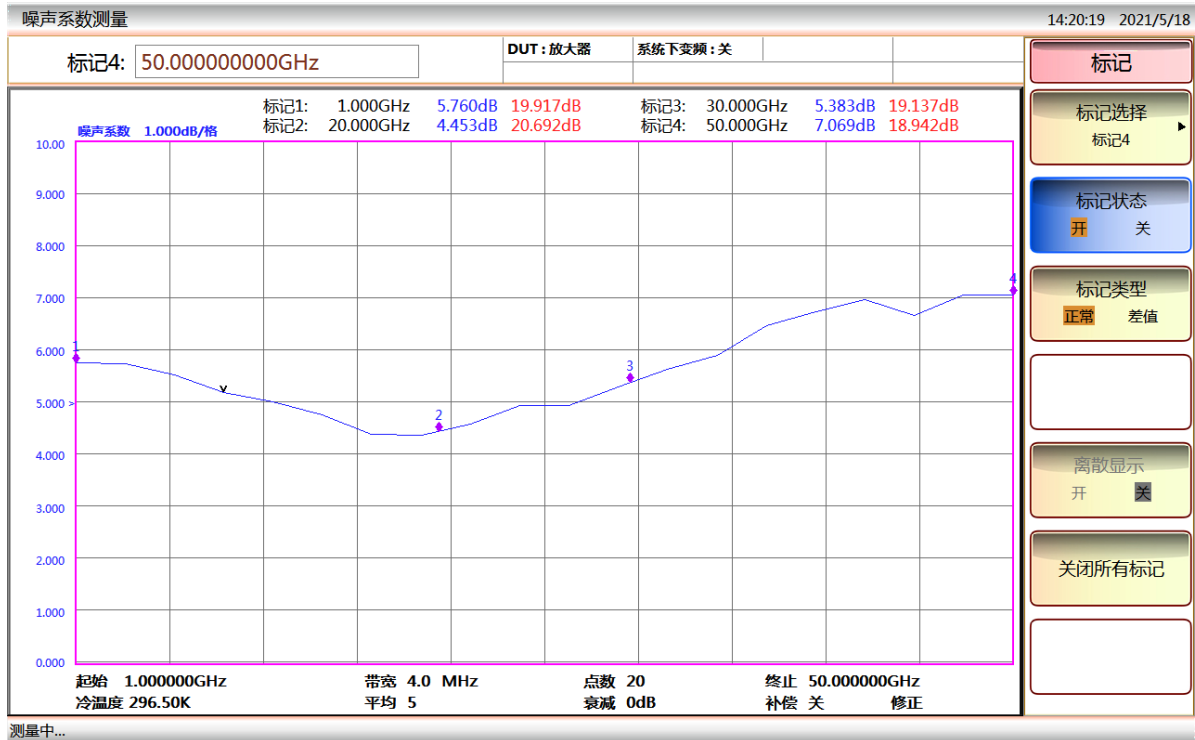


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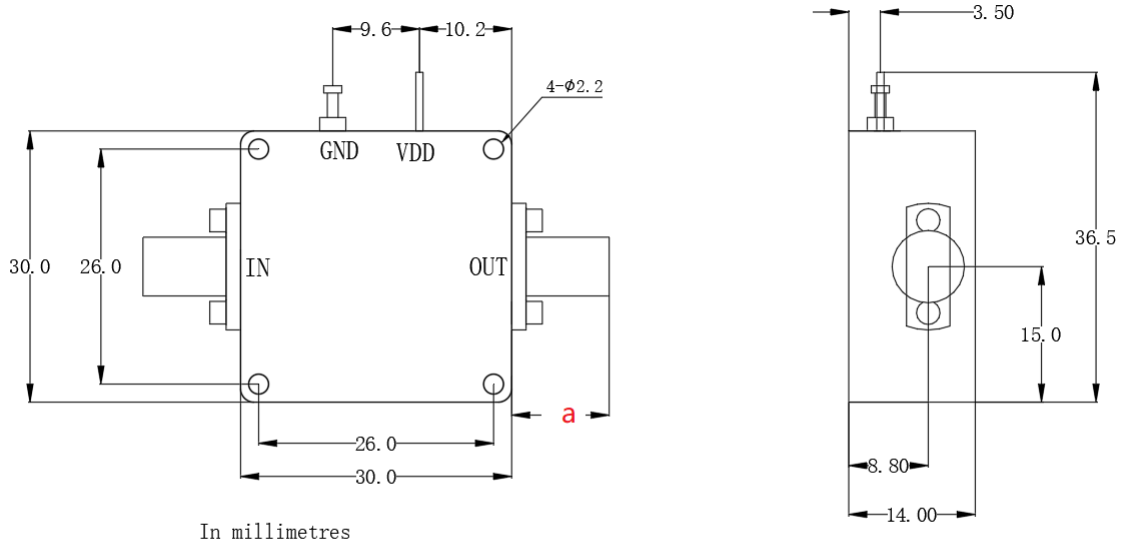
NF test from 100MHz to 1GHz



NF test From 1-50GHz



Dimension: (unit in mm)



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

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

Heat Sink Required During Operation

