Broadband Low Noise RF Amplifier (LNA)

0.5-18GHz, 12dB Gain

DATASHEET

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This is high gain low noise amplifier with 12dB gain in the frequency of 0.5-18GHz. The DC power requirement is +5V/50mA. The module is with SMA connector.

We can provide all kinds of coaxial low noise amplifiers, with frequency from DC-67GHz, gain from 10 to 60dB, Pout from +5 to +27dBm, and connectors from SMA to 1.85mm. If you don't find what you need, just send us .

Features

- Frequency: **0.5-18GHz**
- Small signal gain: 12dB
- NF=2.5dB
- Single Power Supply

Applications

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

Specifications

Parameter	Min	Typical	Max	Unit
Frequency	0.5		18	GHz
Gain	10	12		dB
Gain Flatness		+/-0.7	+/-1.5	dB
Input Power		-20	0	dBm
NF		2.5	3.3	dB
P1dB		+12		dBm
Psat		+15		dBm
Drain Supply		+5	+8	V
Current		50		mA
Input Return Loss		-8		dB
Output Return Loss		-10		dB
Spec Temp		25		℃
Drain Supply		+13		V
RF Input Power		+13		dBm
Operating Temperature	-40		+85	℃
Storage Temperature	-55		+125	℃
Input Port		SMA Female		
Output Port		SMA Female		
Case Material		Copper		
Finish		Gold Plated		
Weight		50		g
Size		See outline		

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 our team to make sure you have the most current data.

Rev 10/24/24

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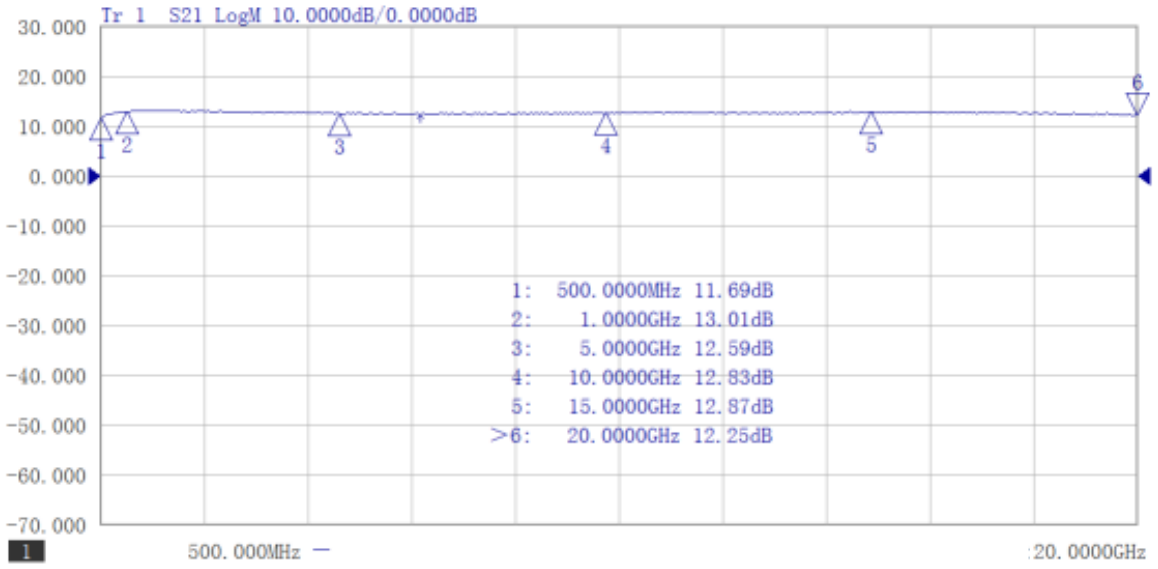
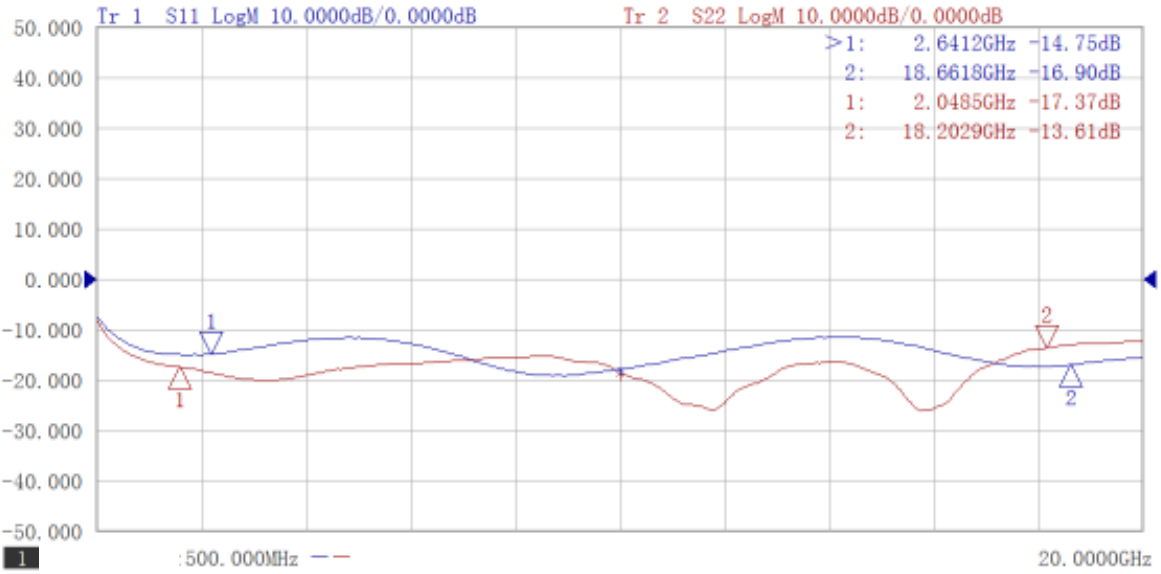
Test Data (25°C) Please note that test curves will vary slightly from unit to unit

.

Gain vs Frequency



Return Loss vs Frequency



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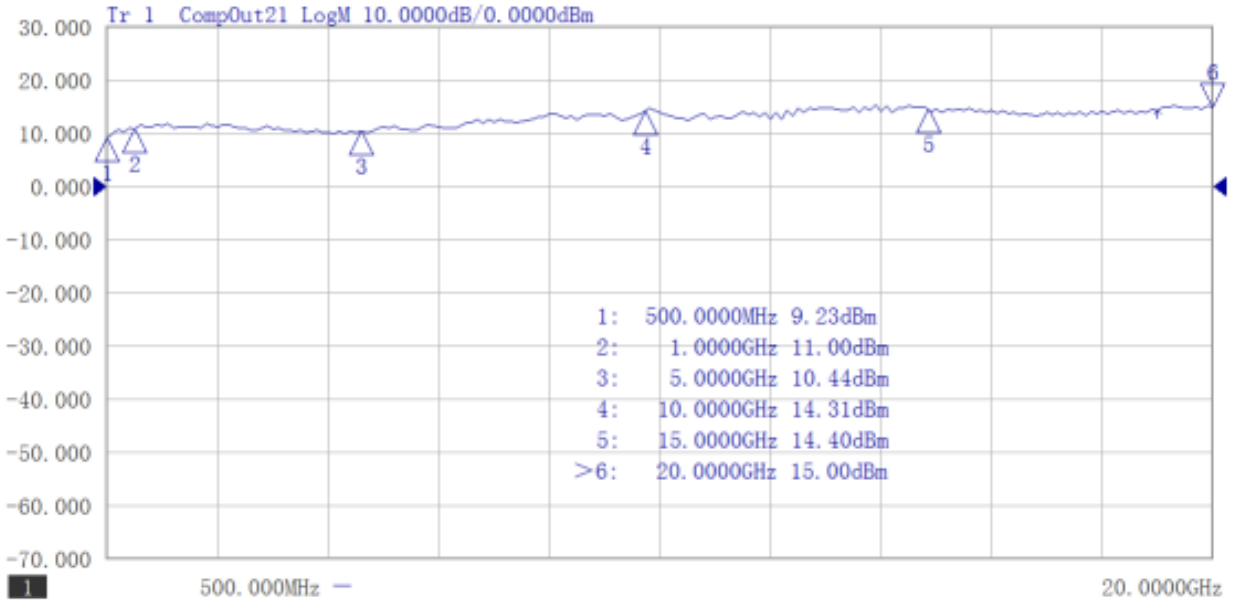
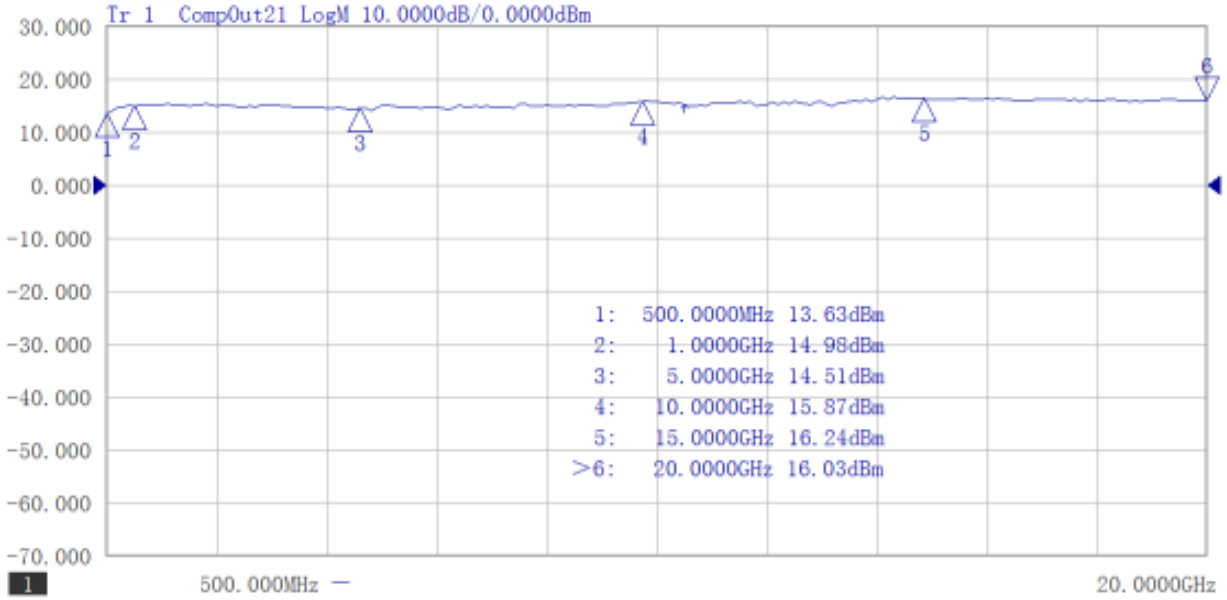
P1db vs Frequency



P3db vs Frequency



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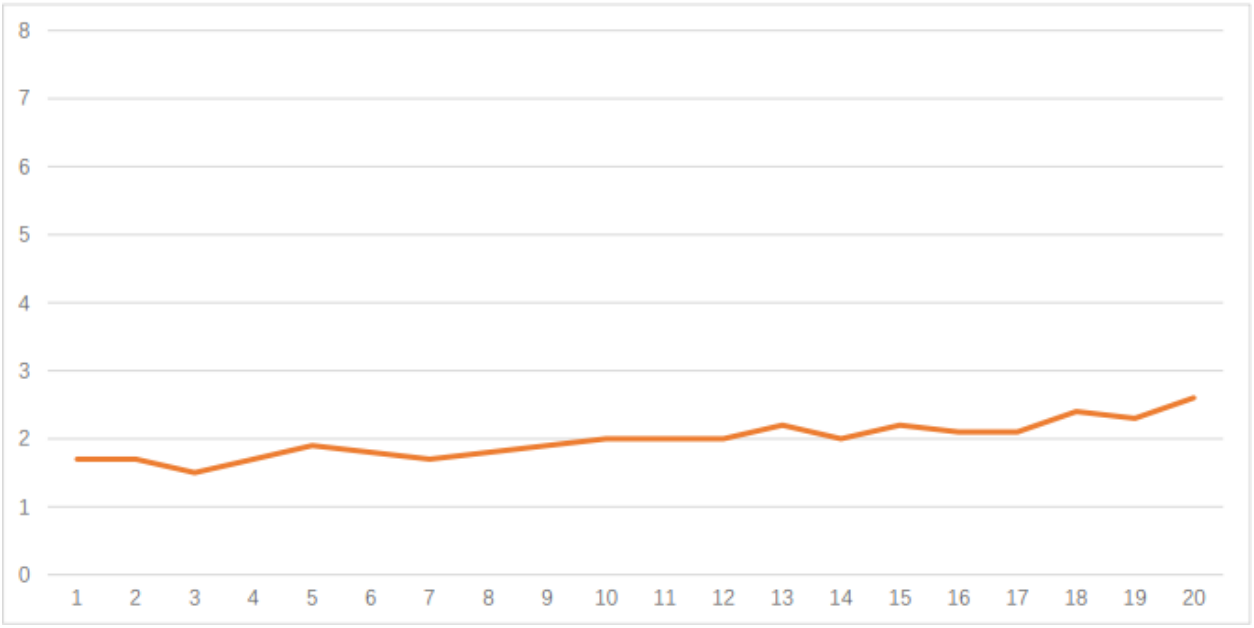
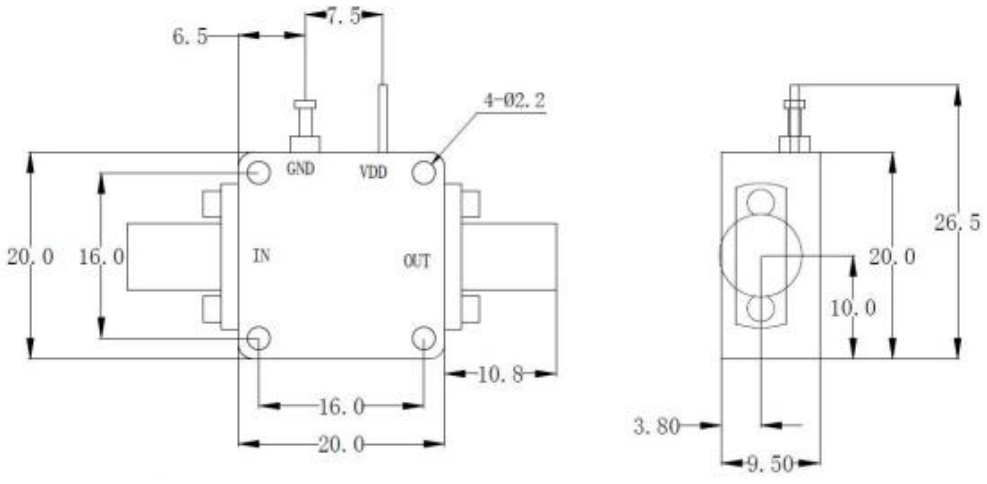
NF vs Frequency/GHz



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.

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Ordering Information (Part Number) *

	0050	18	12	2	12	☐
Prefix	**Low Frequency**	**High Frequency**	**Gain**	**NF**	**P1dB**	**Module***
LNAM-	0.5GHz = 0050	18GHz = 18	12dB = 12	2.5dB = 2	12dBm = 12	No = 0 Yes = 1

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