Broadband Low Noise RF Amplifier (LNA)

100MHz-8GHz, 17 dB gain

DATASHEET

Return to the Webpage

This is high gain low noise amplifier with 17dB gain in the frequency of 100MHz-8GHz. The DC power requirement is +5/80mA. The module is with SMA connector.

We can provide all kinds of coaxial low noise amplifiers, with frequency from 0.01-67GHz, gain from 20 to 60dB, Pout from +5 to +27dBm, and connectors from SMA to 1.85mm.

Features

- Frequency: 100MHz-8GHz
- Small signal gain: 17dB
- NF=2dB
- Single Power Supply

Applications

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

Specifications

Parameter	Min	Typical	Max	Unit
Frequency Range		100MHz-8GHz		MHz - GHz
Gain (0.1-6GHz)	15	17		dB
NF (0.1-6GHz)		2	4	dB
Input Power		-20	-10	dBm
P1dB		+17		dBm
Psat		+19		dBm
Output Vpp				Vpp
Drain Supply		+5	+8	V
Current		80	100	mA
Input Return Loss		-10		dB
Output Return Loss		-10		dB
Spec Temp		25		°C
Weight (Without Heatsink)		55		g
Size		See outline		mm
Drain Supply		+13		V
RF Input Power		+10		dBm
Input Vpp				Vpp
Operating Temperature(note)		-40 to +85		°C
Storage Temperature		-55 to +125		°C
Input Port		SMA Female		
Output Port		SMA Female		
Case Material		Copper		
Finish		Gold Plated		

Note

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 02/04/25

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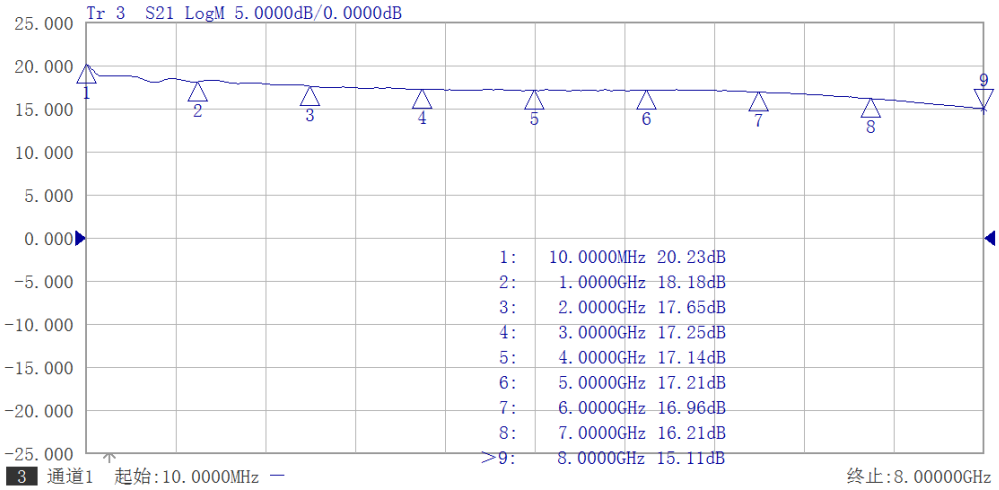
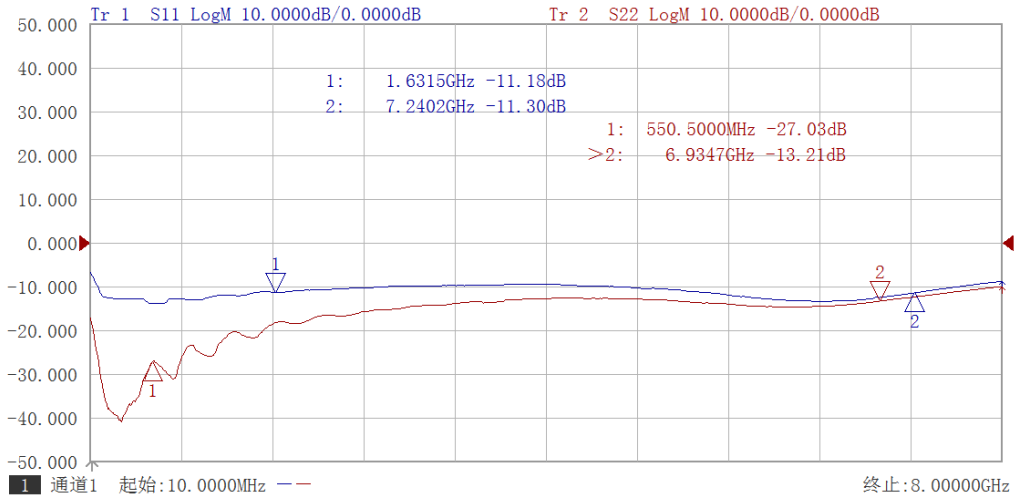
Test Data (25°C)

Gain vs Frequency



Return Loss vs Frequency



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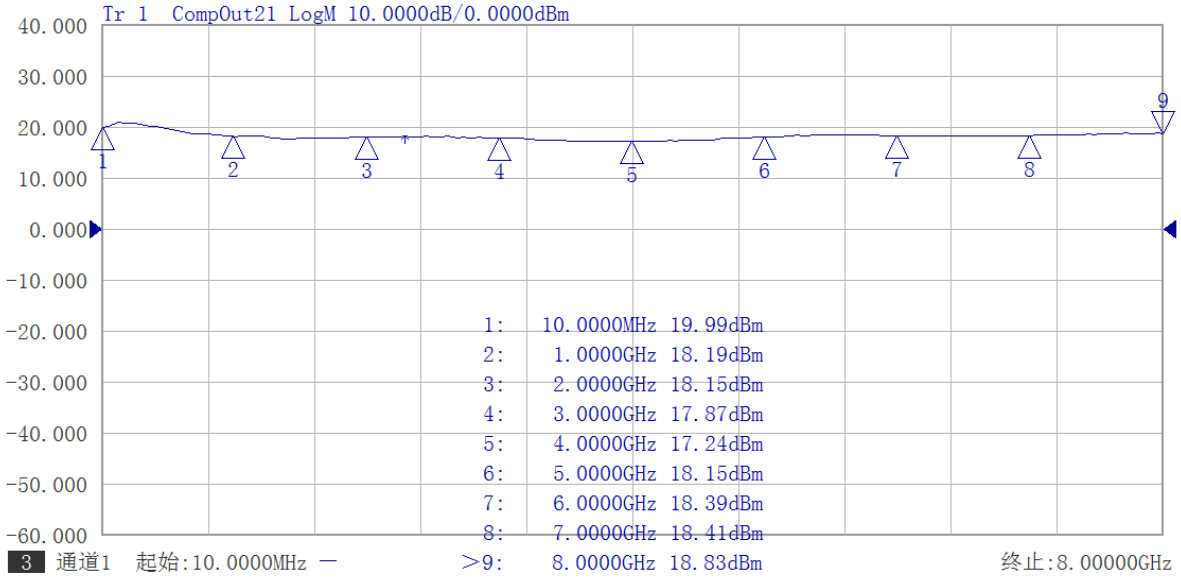
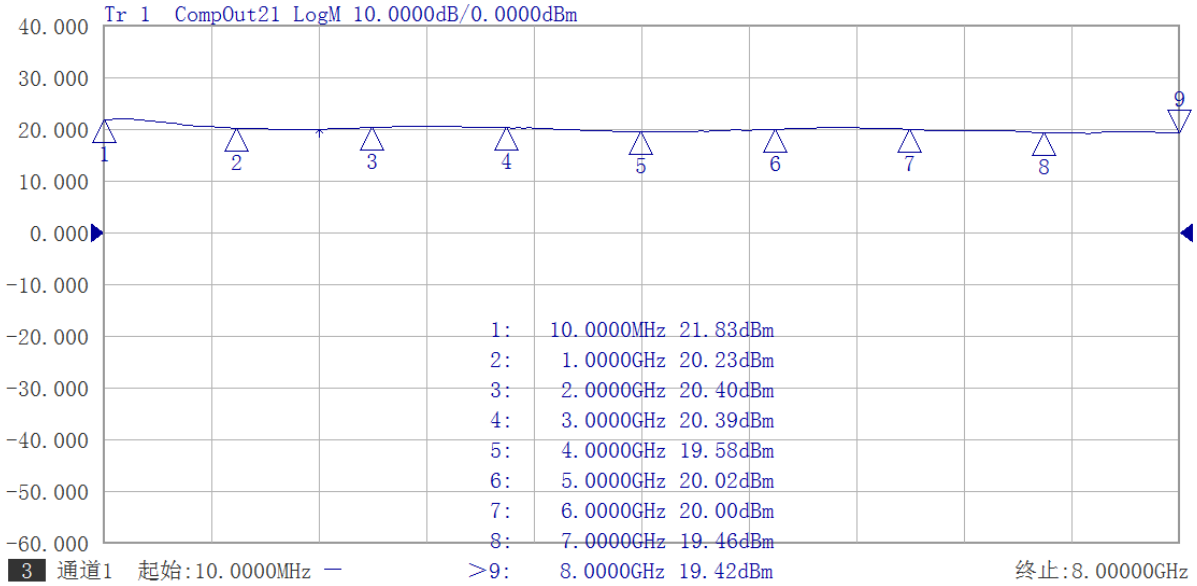
DATASHEET

P1db vs Frequency



P3db vs Frequency



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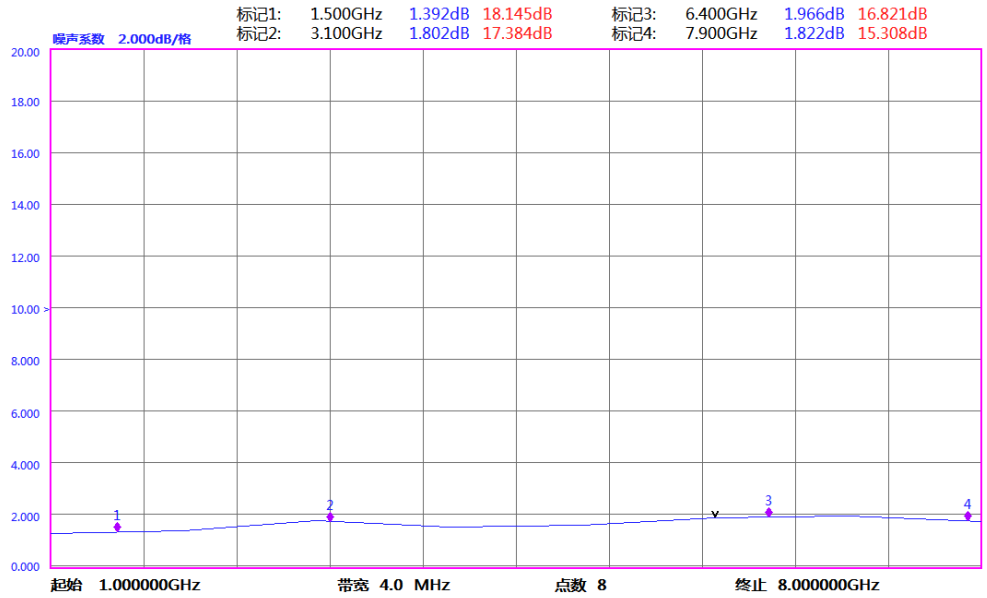
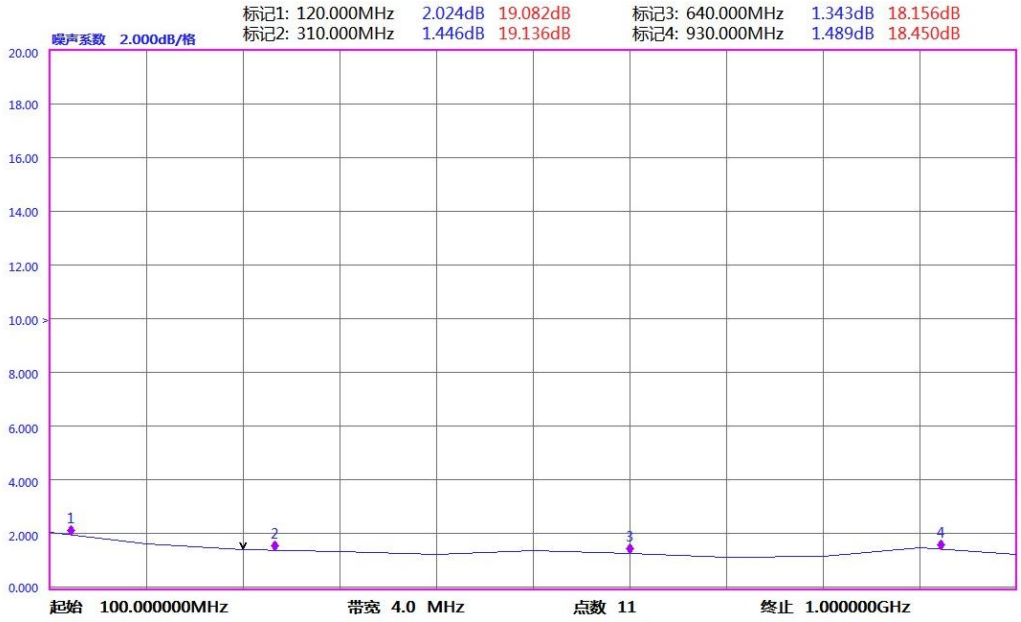
NF Test 1-8GHz



NF TEST 0.1-1GHz



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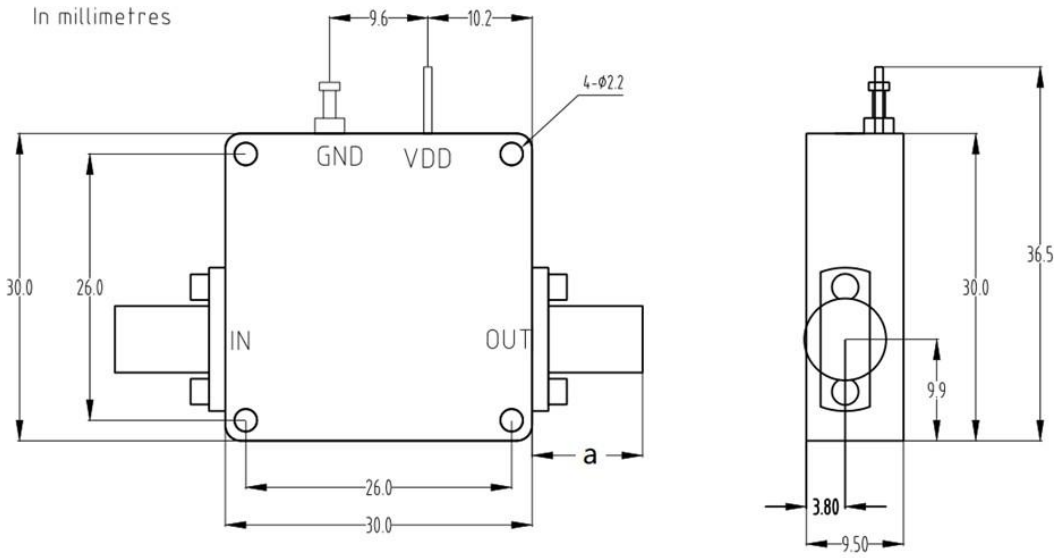
Dimensions (mm)



	<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.

Ordering Information (Part Number) *

	0010	08	17	2	17	☐
Prefix	**Low Frequency**	**High Frequency**	**Gain**	**NF**	**P1dB**	**Module***
LNAM-	100MHz = 0010	8GHz = 08	17dB = 17	2dB = 2	17dBm = 17	No = 0 Yes = 1

* The module is a small metal box integrated with a power supply.

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