Broadband Low Noise RF Amplifier (LNA)

100MHz-8GHz, 33dB Gain

DATASHEET

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The LNAM is a high-gain, low-noise amplifier offering 33 dB gain over a frequency range of 100 MHz to 8 GHz. It operates with a DC power requirement of +5V/160mA and is equipped with an SMA connector. We offer a wide range of coaxial low-noise amplifiers, with frequency coverage from 0.01 to 67 GHz, gain options from 20 to 60 dB, output power (Pout) from +5 to +27 dBm, and connector options ranging from SMA to 1.85mm.

Features

- Frequency: **100MHz-8GHz**
- Small signal gain: 33dB
- NF=2dB
- Single Power Supply

Applications

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

Specifications

Parameter	Min	Typical	Max	Unit
Frequency	0.10		8	GHz
Gain （0.1-6GHz）	30	33		dB
NF		2	4	dB
P1dB		+16		dBm
Psat		+18		dBm
Drain Supply		+5	+8	V
Current		160	200	mA
Input Return Loss		-8		dB
Output Return Loss		-10		dB
Spec Temp		25		°C
Drain Supply		+13		V
RF Input Power		+10		dBm
Operating Temperature	-40		+85	°C
Storage Temperature	-55		+125	°C
Input Port		SMA Female		
Output Port		SMA Female		
Case Material		Copper		
Finish		Gold Plated		
Weight		55		g
Size		SEE OUTLINE		

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 10/24/24

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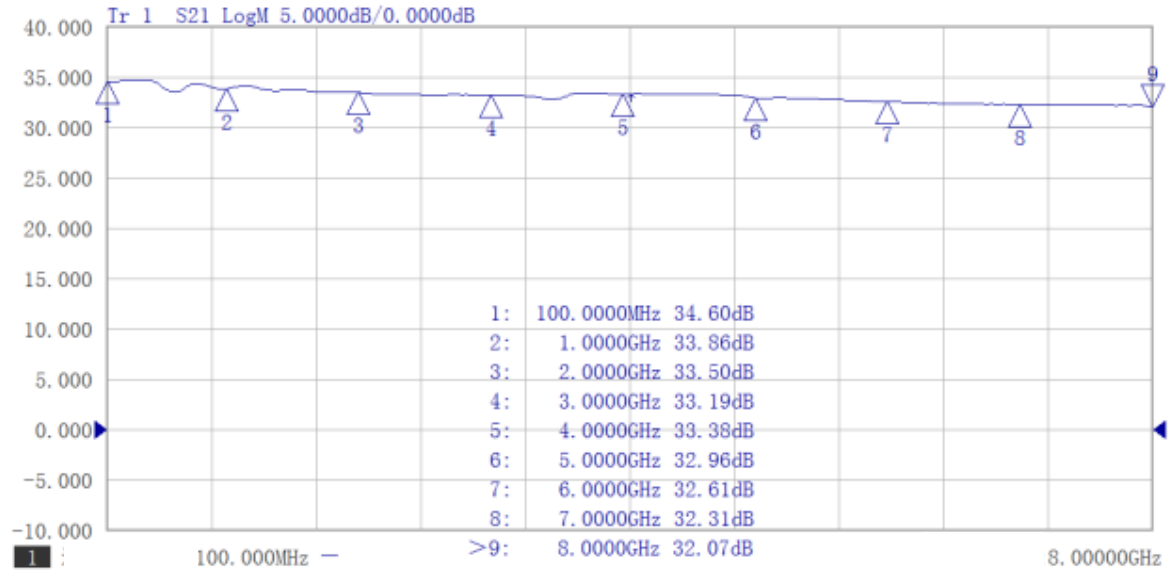
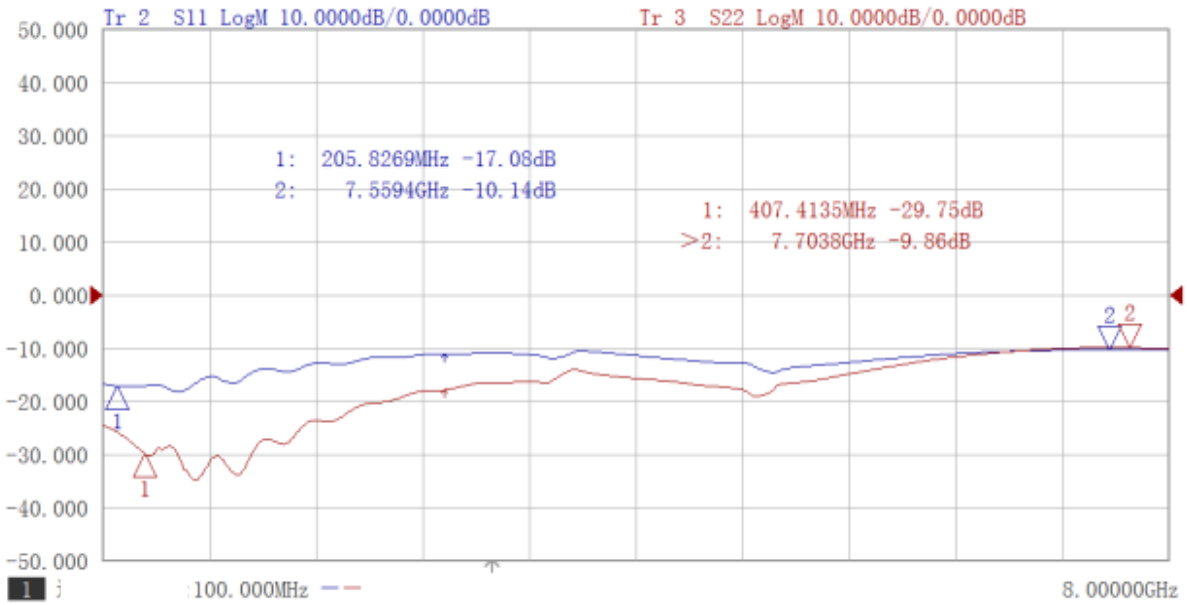
Test Data (25°C) Please note that test curves will vary slightly from unit to unit

.

Gain vs Frequency



Return Loss vs Frequency



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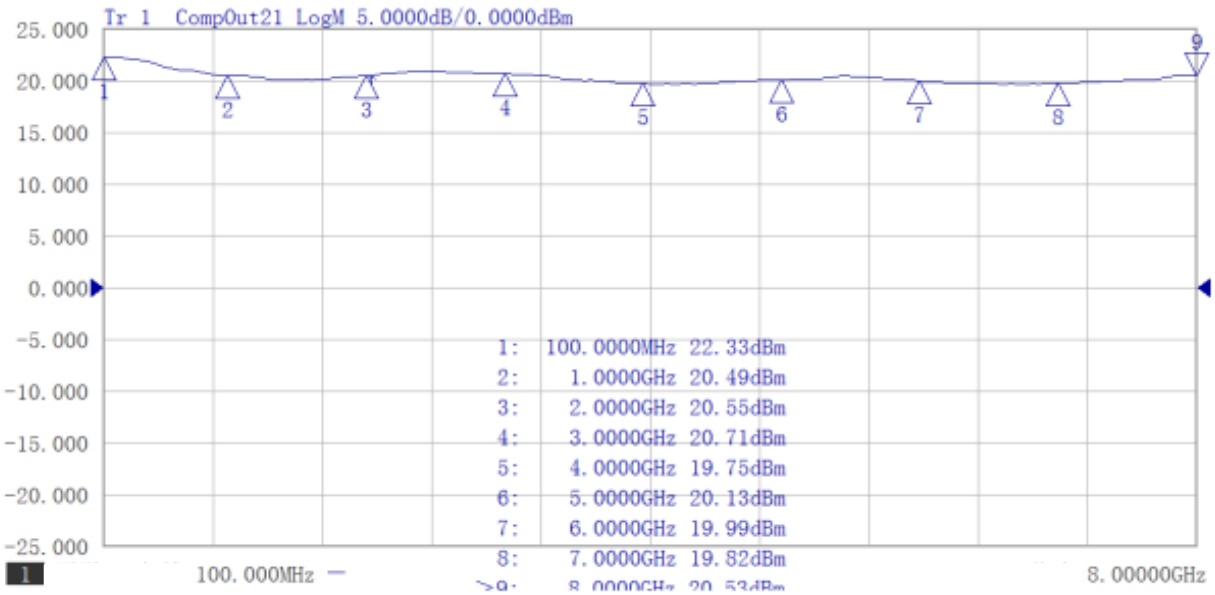
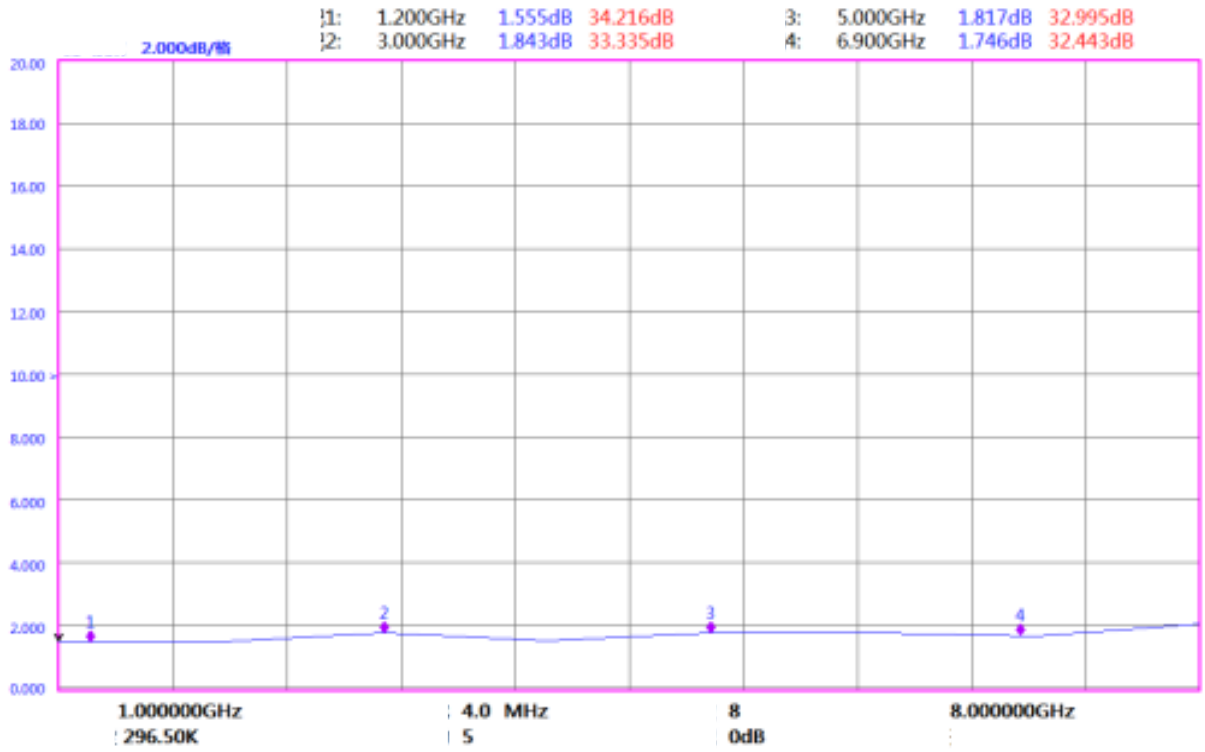
P3db vs Frequency



NF vs Frequency



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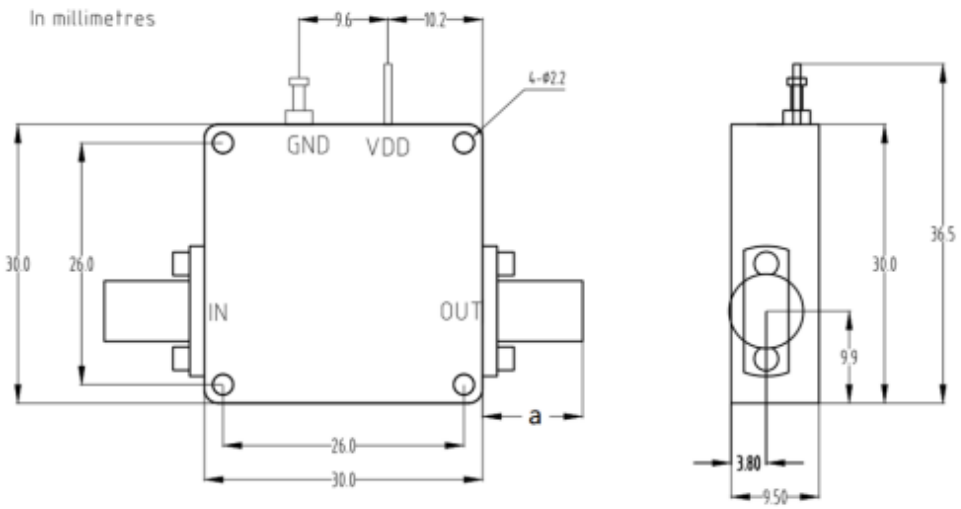
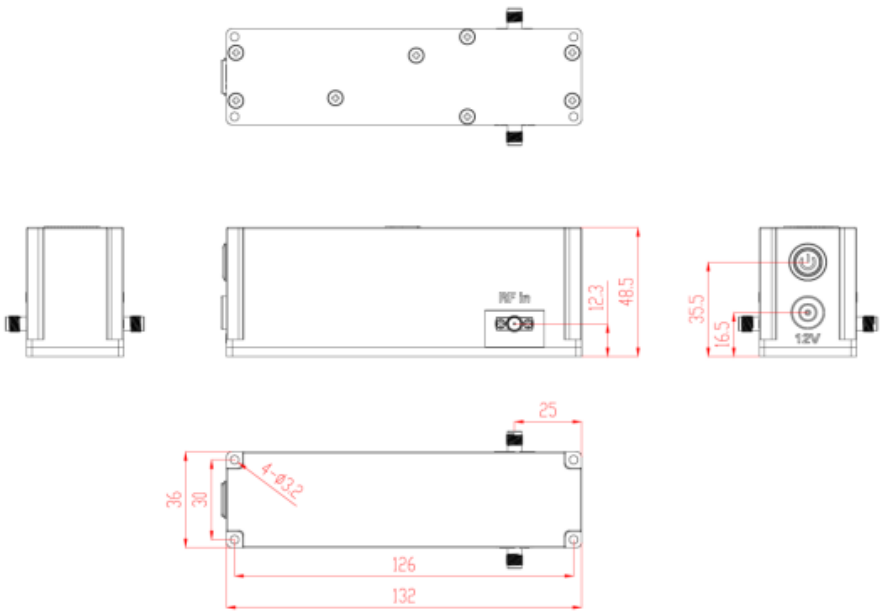
Dimensions (mm)



	<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.

LCBT Option Dimension (mm)



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Ordering Information (Part Number) *

	0010	08	33	2	16	☐
Prefix	**Low Frequency**	**High Frequency**	**Gain**	**NF**	**P1dB**	**Module***
LNAM-	100MHz = 0010	8GHz = 08	33dB = 33	2dB = 2	16dBm = 16	No = 0 Yes = 1

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