

Broadband Low Noise RF Amplifier (LNA)

100MHz-8GHz, 33dB Gain



DATASHEET

[Return to the Webpage](#)



Features

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

Applications

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



The LNA 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.

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

- Datasheet may be changed according to update of MMIC, Raw materials, process, and so on.
- This data is only for reference, not for guaranteed specifications.
- Please contact our team to make sure you have the most current data.

Legal notices: All product information is believed to be accurate and is subject to change without notice. Information contained herein shall legally bind Agiltron only if it is specifically incorporated into the terms and conditions of a sales agreement. Some specific combinations of options may not be available. The user assumes all risks and liability whatsoever in connection with the use of a product or its application.

Rev 10/24/24

© Photonwares Corporation

P +1 781-935-1200

E sales@photonwares.com

W www.agiltron.com

Information contained herein is deemed to be reliable and accurate as of the issue date. Photonwares reserves the right to change the design or specifications at any time without notice. Agiltron is a registered trademark of Photonwares Corporation in the U.S. and other countries.

Broadband Low Noise RF Amplifier (LNA)

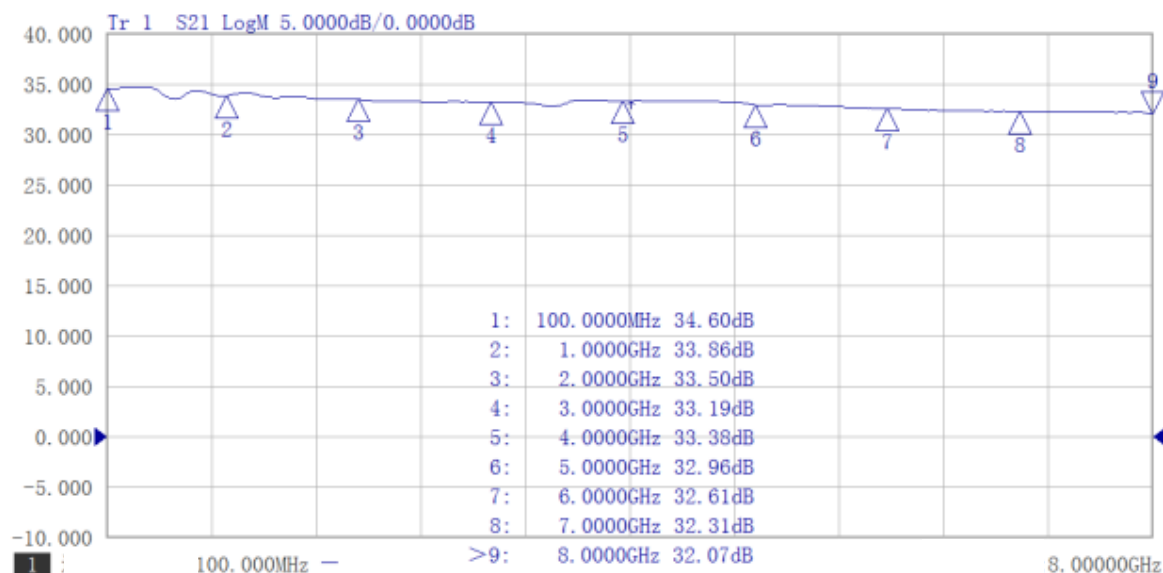
100MHz-8GHz, 33dB Gain



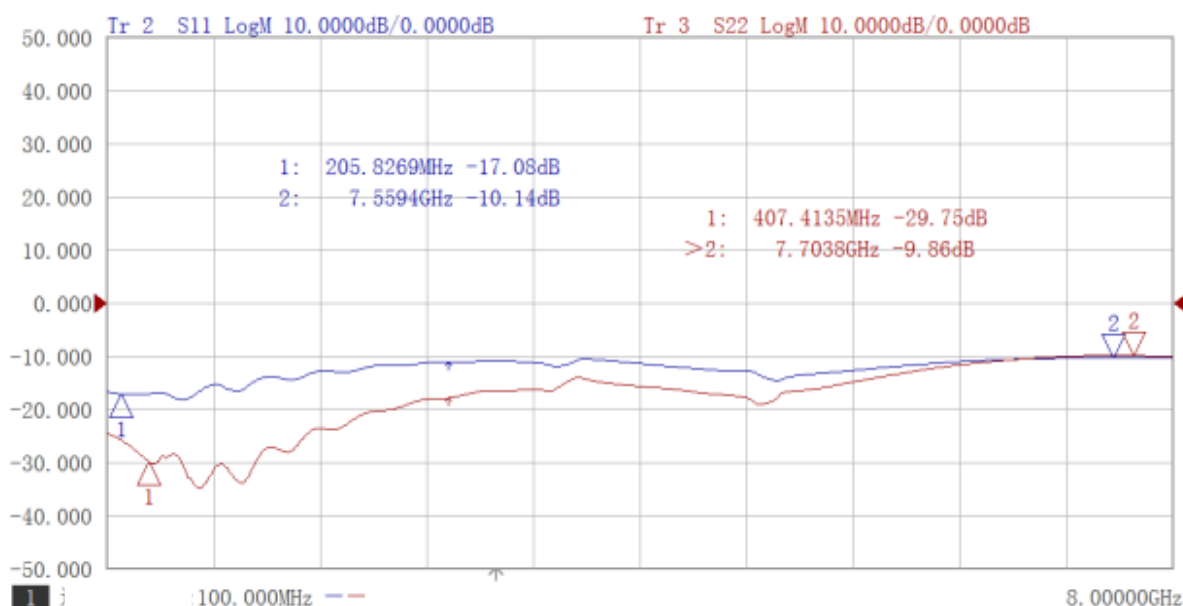
DATASHEET

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

Gain vs Frequency



Return Loss vs Frequency



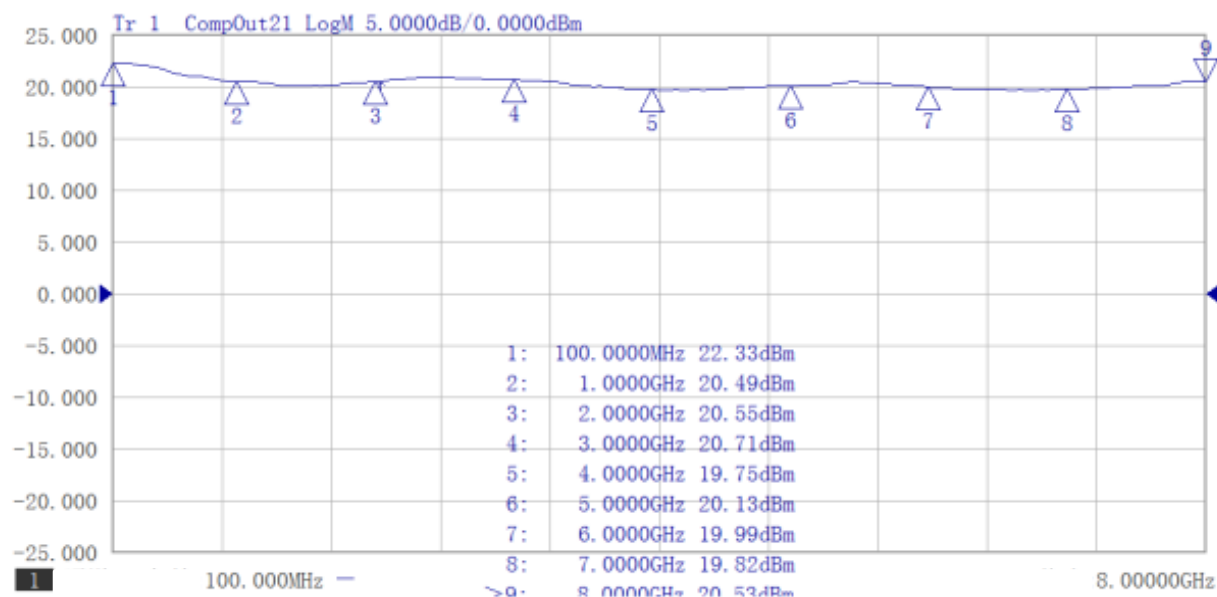
Broadband Low Noise RF Amplifier (LNA)

100MHz-8GHz, 33dB Gain

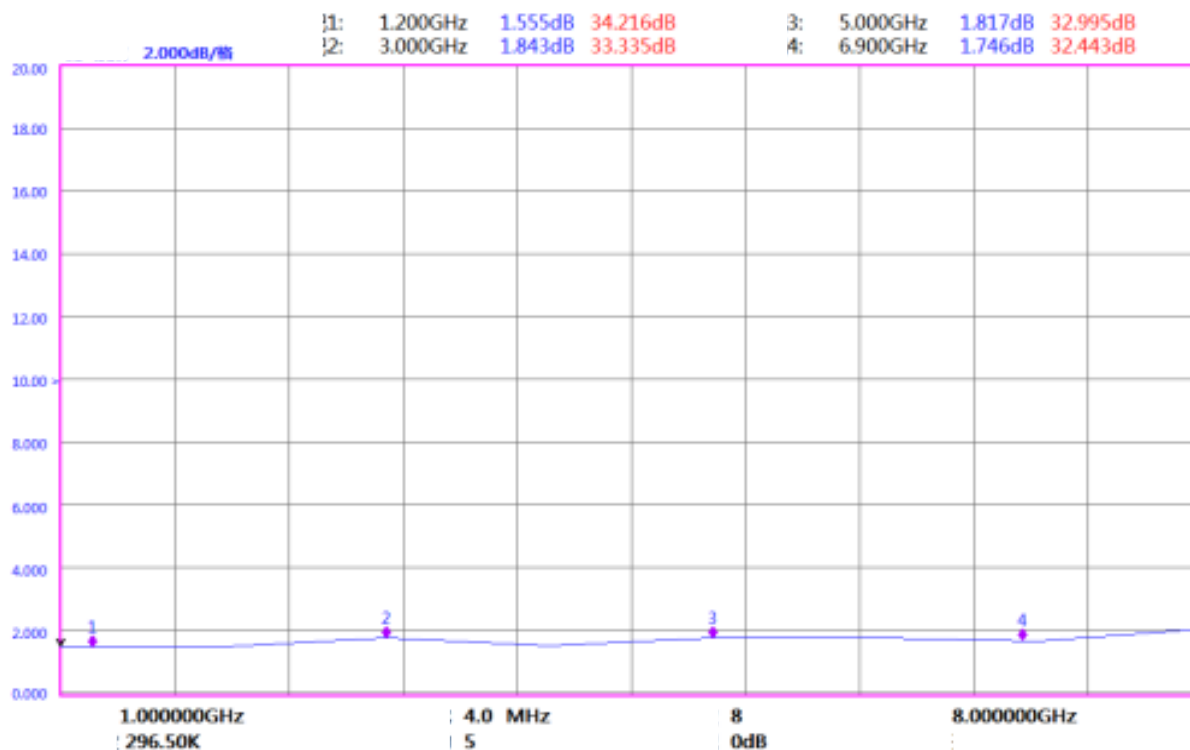


DATASHEET

P3db vs Frequency



NF vs Frequency



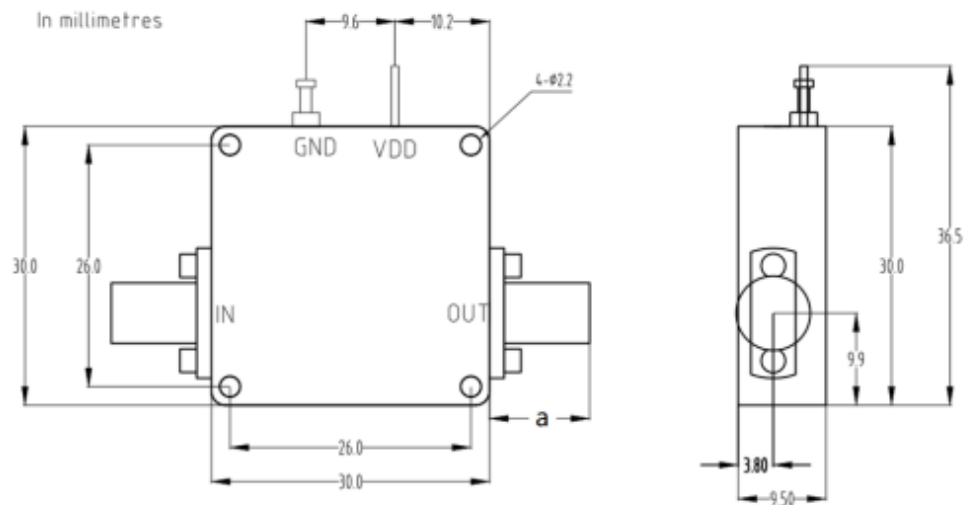
Broadband Low Noise RF Amplifier (LNA)

100MHz-8GHz, 33dB Gain



DATASHEET

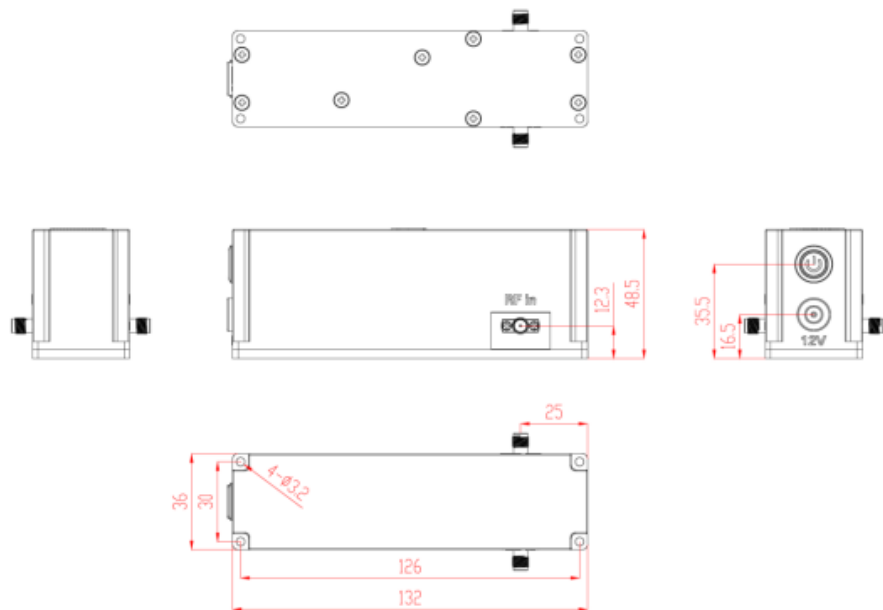
Dimensions (mm)



	<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)



Broadband Low Noise RF Amplifier (LNA)

100MHz-8GHz, 33dB Gain



 DATASHEET |

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