

Broadband Low Noise RF Amplifier (LNA)

1-18GHz, 27dB Gain



DATASHEET

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This is high gain low noise amplifier with 27dB gain in the frequency of 1-18GHz. The DC power requirement is +5V/100mA. 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: **1-18GHz**
- Small signal gain: 27dB
- NF=2.3dB
- Single Power Supply

Applications

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

Specifications

Parameter	Min	Typical	Max	Unit
Frequency	1		18	GHz
Gain		27		dB
Gain Flatness		+/-1.5	+/-2.5	dB
Input Power		-20	0	dB
NF		2.0	2.5	dBm
P1dB		+16		dBm
Psat		+18		dBm
Drain Supply		+5	+8	V
Current		100		mA
Input Return Loss		-10		dB
Output Return Loss		-10		dB
Spec Temp		25		°C
Drain Supply		+13		V
RF Input Power		+15		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		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



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Rev 10/24/24

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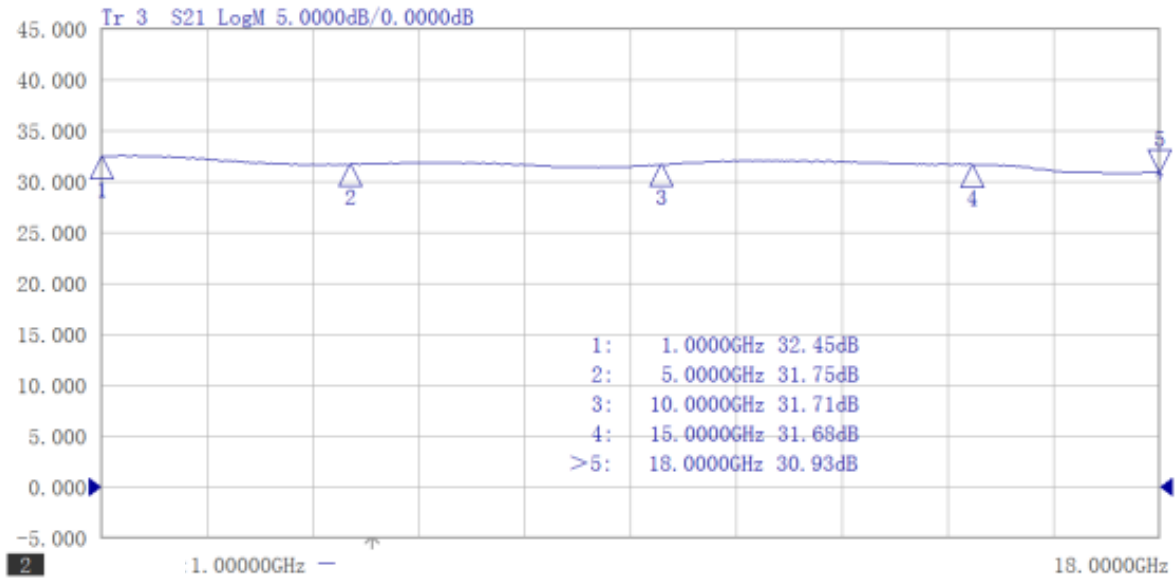
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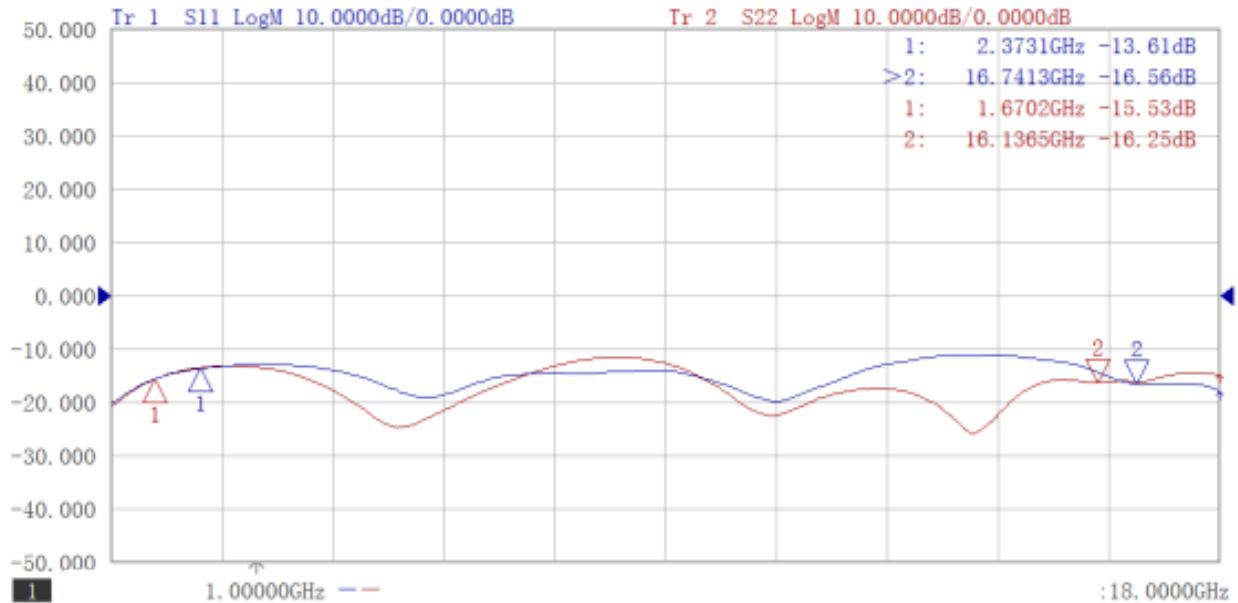
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Test Data (25°C) Please note that test curves will vary slightly from unit to unit

Gain vs Frequency



Return Loss vs Frequency



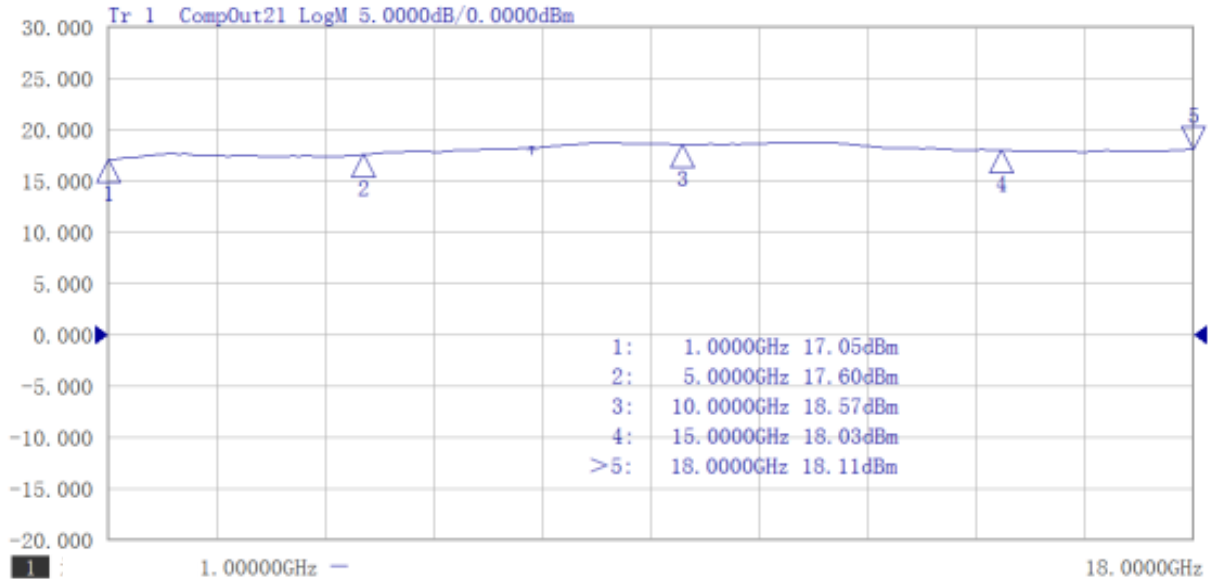
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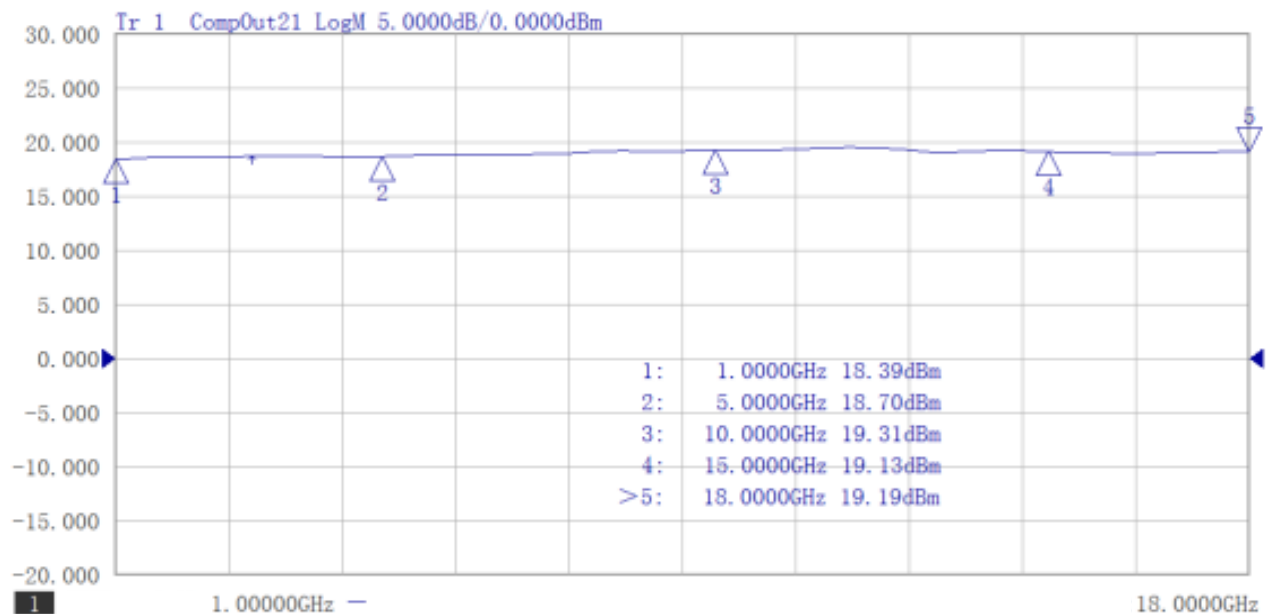


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P1 vs Frequency



P3 vs Frequency



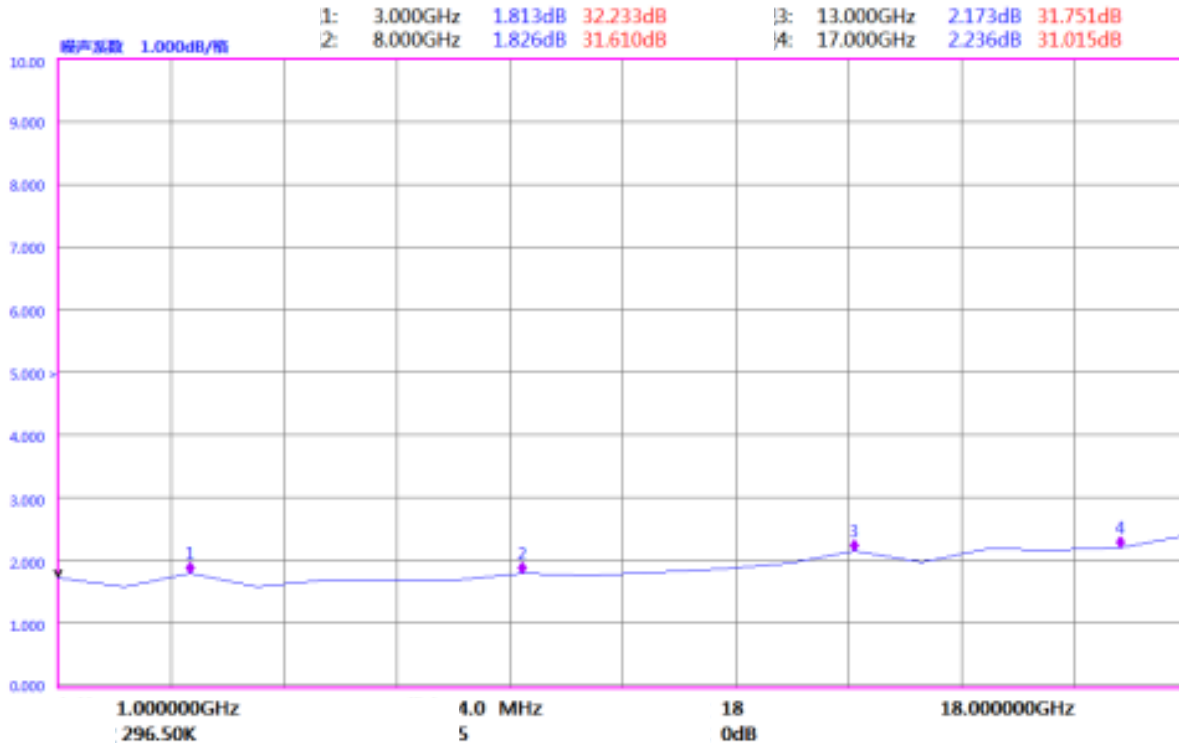
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NF vs Frequency



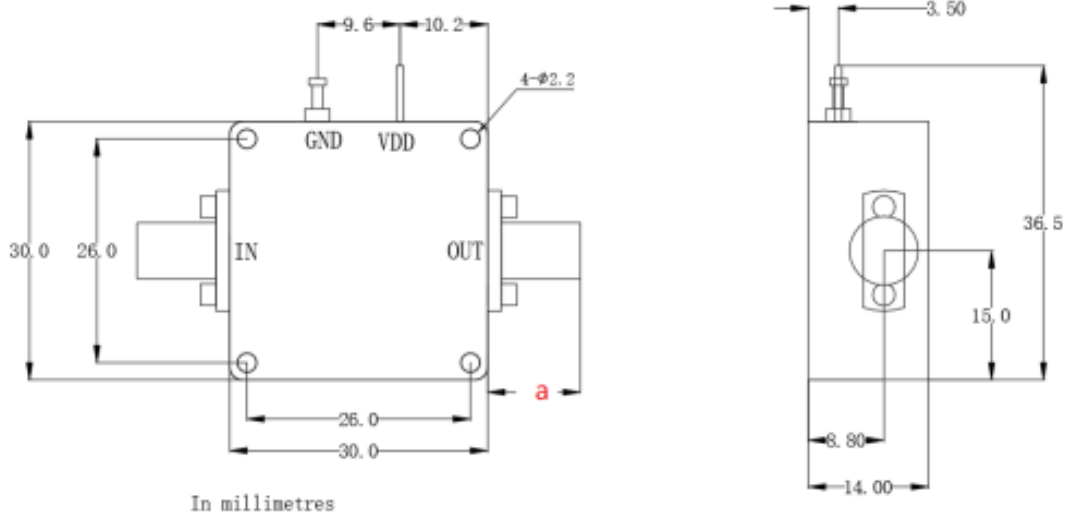
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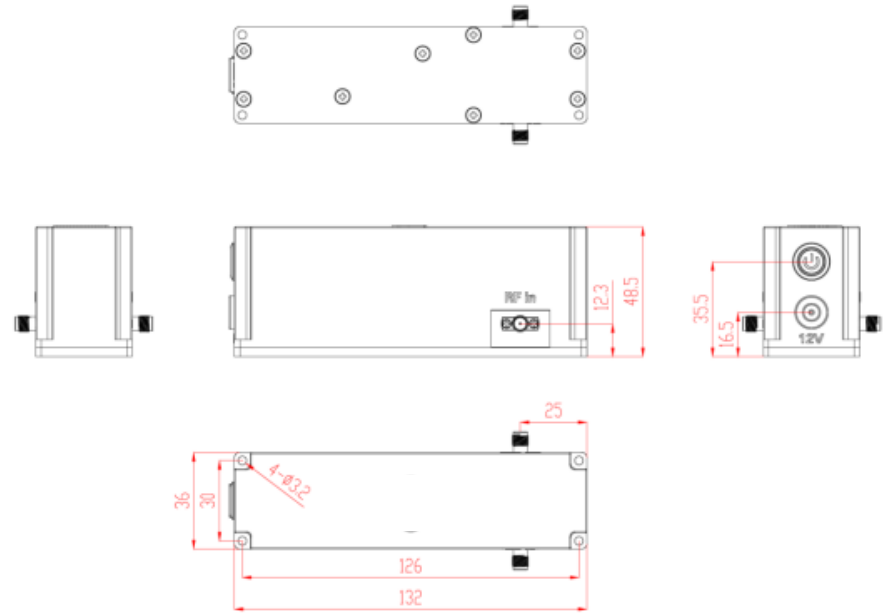
Dimensions (mm)



	<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.

LCBT Option Dimension: (unit in mm)



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Ordering Information (Part Number) *

	0100	18	27	2	16	<input type="checkbox"/>
Prefix	Low Frequency	High Frequency	Gain	NF	P1dB	Module*
LNAM-	1GHz = 0100	18GHz = 18	27dB = 27	2.3dB = 2	16dBm = 16	No = 0 Yes = 1