

Broadband Low Noise RF Amplifier (LNA)

0.5-18GHz, 12dB Gain



DATASHEET

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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



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 .

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		°C
Drain Supply		+13		V
RF Input Power		+13		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

- 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.

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P +1 781-935-1200

E sales@photonwares.com

W www.agiltron.com

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Broadband Low Noise RF Amplifier (LNA)

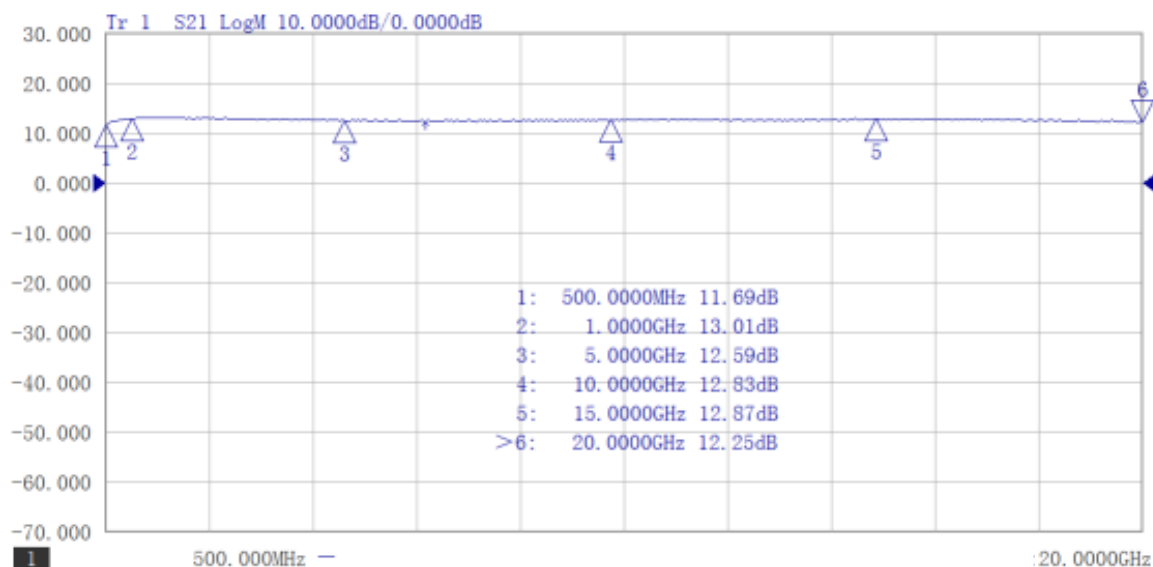
0.5-18GHz, 12dB Gain



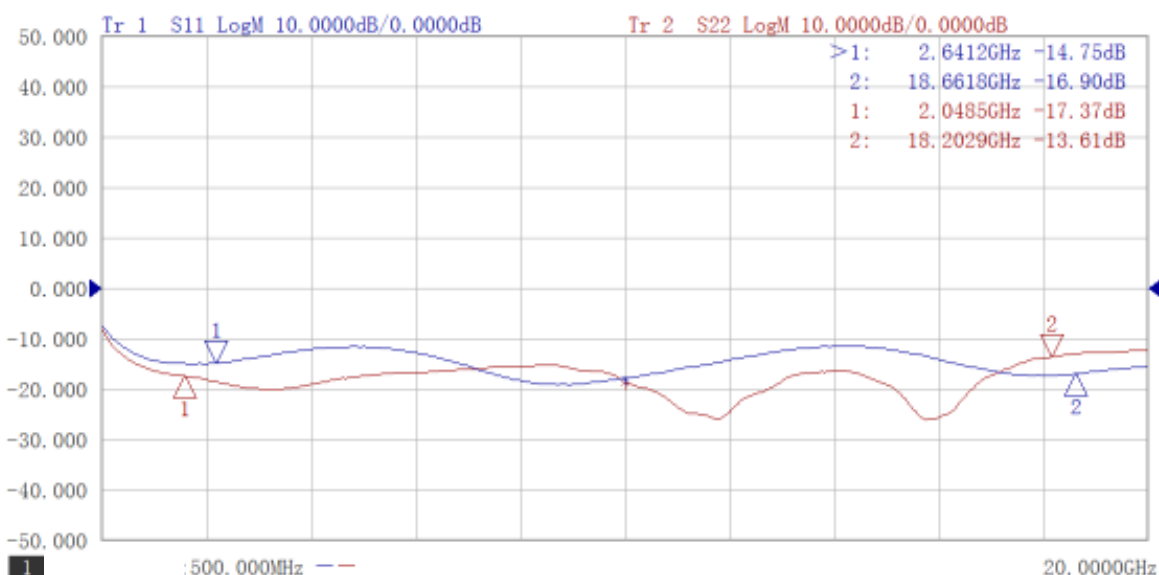
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Test Data (25°C) Please note that test curves will vary slightly from unit to unit

Gain vs Frequency



Return Loss vs Frequency



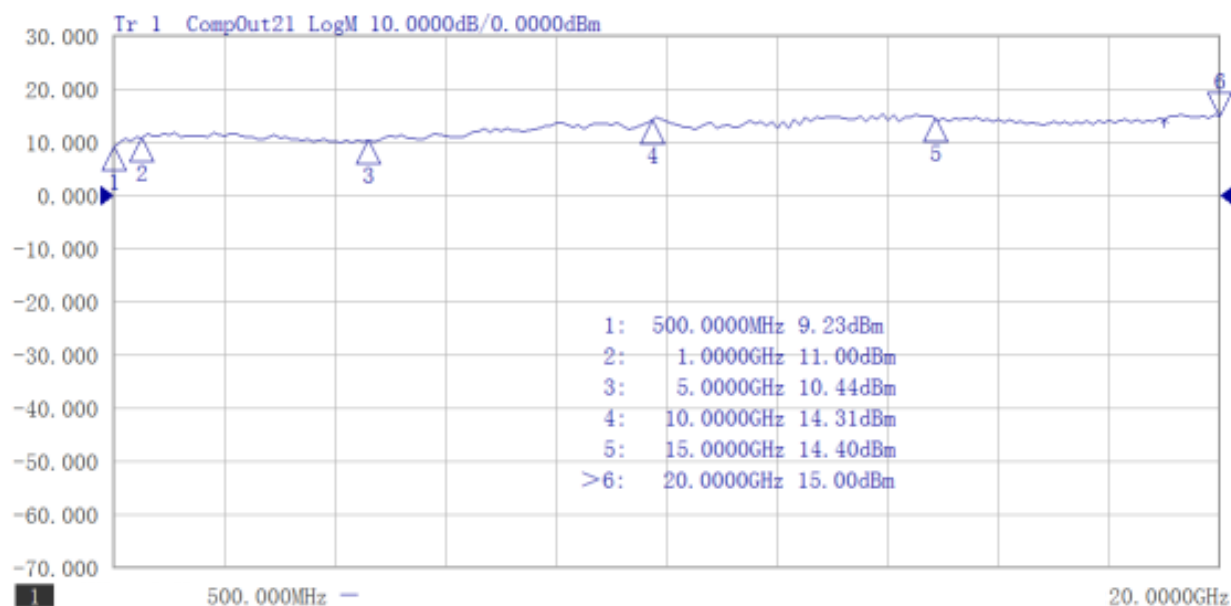
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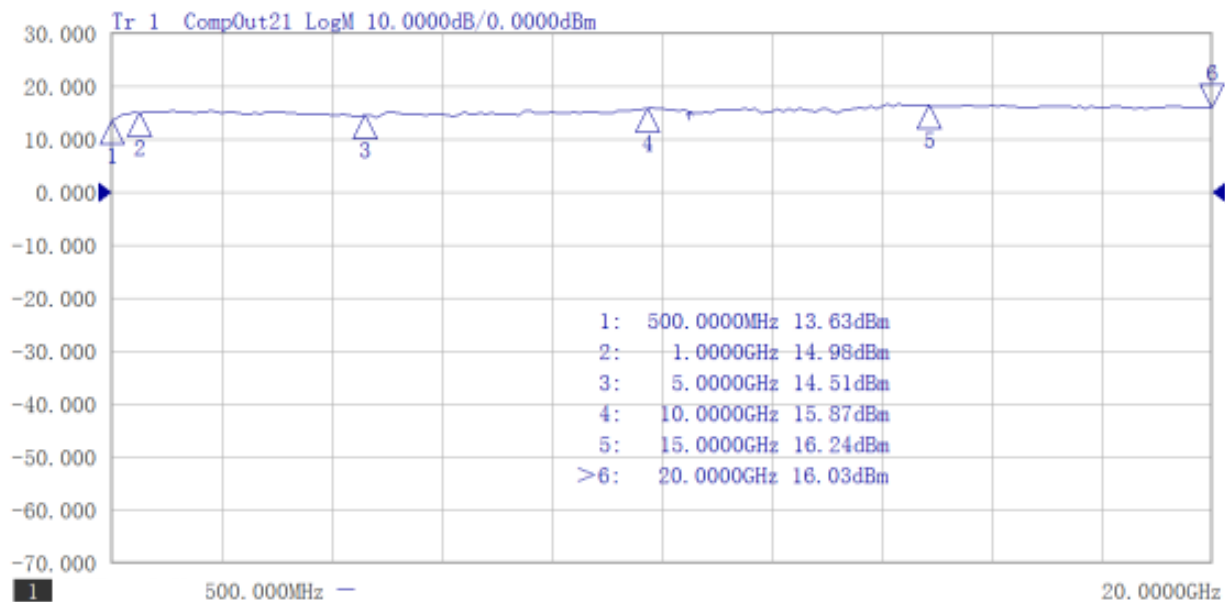


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P1db vs Frequency



P3db vs Frequency



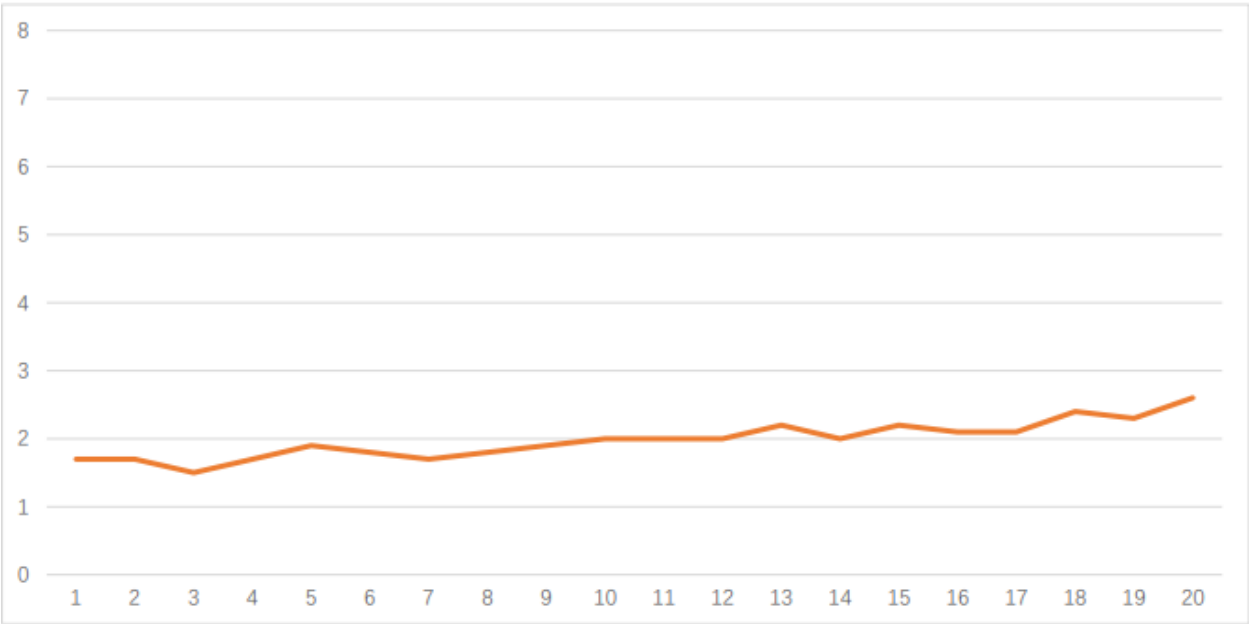
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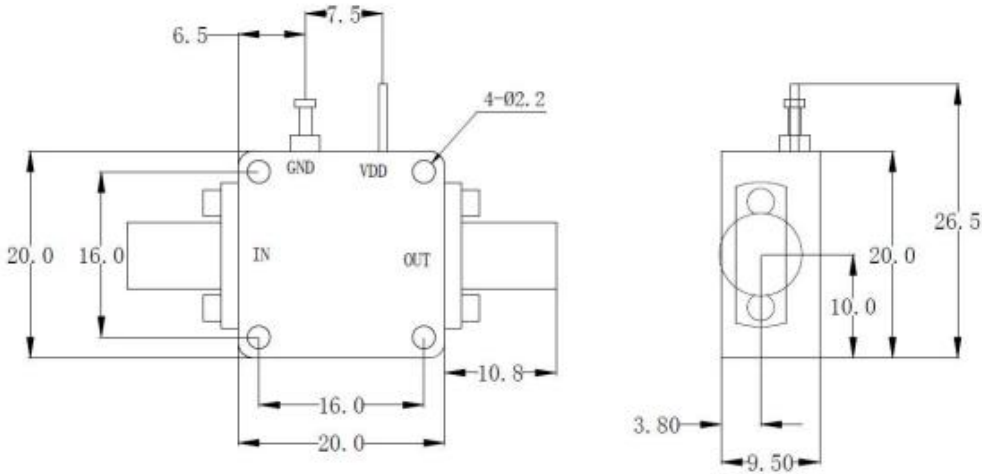


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NF vs Frequency/GHz



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