Broadband Low Noise RF Amplifier (LNA)

10MHz-43.5GHz, 25 dB gain

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This LNAM broadband Low Noise RF Amplifier provides output power up to 13 dBm with a gain of 25 dB across a frequency range of 10MHz to 43.5GHz. It features a noise figure (NF) of 6.5dB within the 1-40GHz range. The amplifier operates on +5V DC at 140mA and is equipped with a 2.92mm female connector.

Features

- Frequency: 10MHz-43.5GHz
- Small signal gain: 23dB
- Noise Figure 4.5dB
- Single Power Supply

Applications

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

Specifications

Parameter	Min	Typical	Max	Unit
Frequency	0.01		43.5	GHz
Gain	23	25		dB
Gain Flatness(0.1-40GHz)	-2		+2	dB
NF(1-40GHz)		4.5	6.5	dB
P1dB		+13		dBm
Psat		+15		dBm
Drain Supply		+5	+8	V
Current		140	210	mA
Input Return Loss	-5	-10		dB
Output Return Loss	-15	-10		dB
Spec Temp		25		°C
Drain Supply		+13		V
RF Input Power		+15		dBm
Operating Temperature(note)	-40		+85	°C
Storage Temperature	-55		+125	°C
Input Port		2.92mm Female		
Output Port		2.92mm Female		
Case Material		Copper		
Package Sealing		Epoxy Sealed		
Finish		Gold Plated		
Weight		50		g
Size		See outline		

Rev 10/24/24

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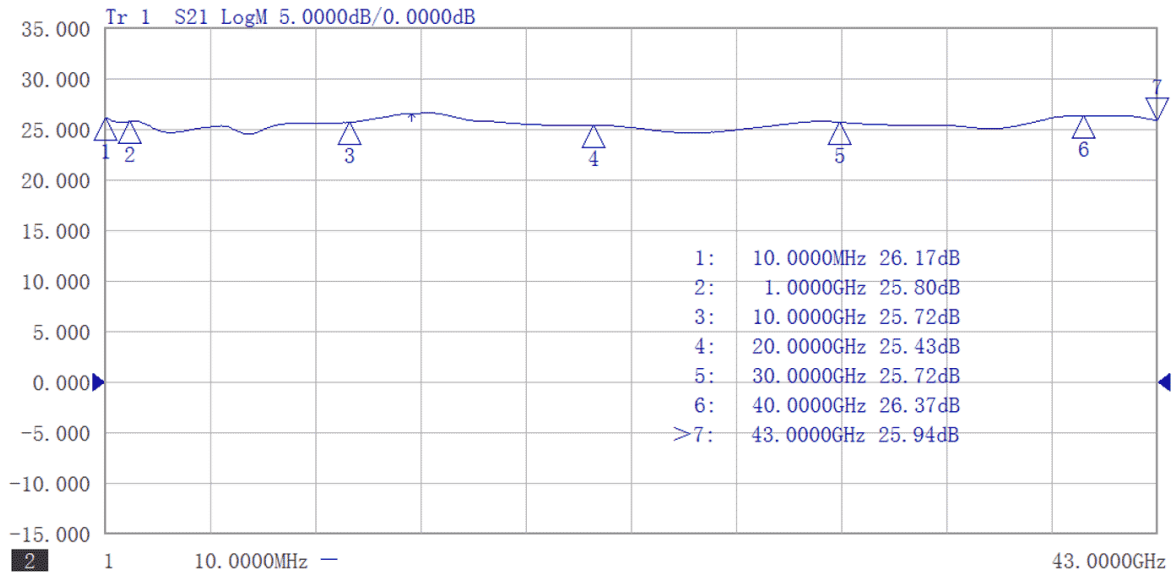
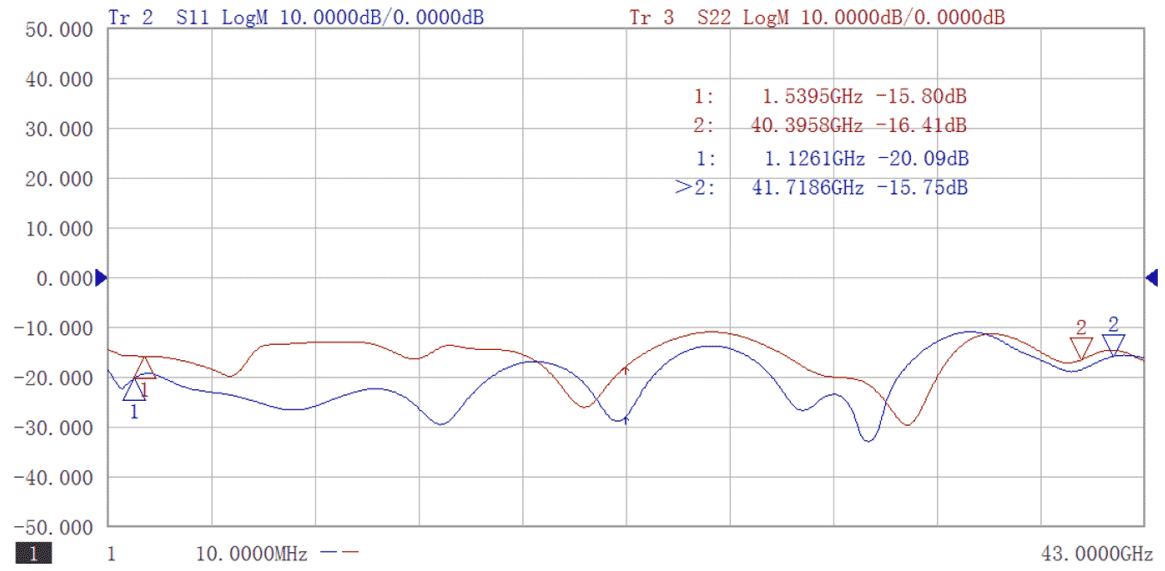
Test Data (25°C)

Please note that test curves will vary slightly from unit to unit.

Gain vs Frequency from 10MHz-43GHz



Return Loss vs Frequency



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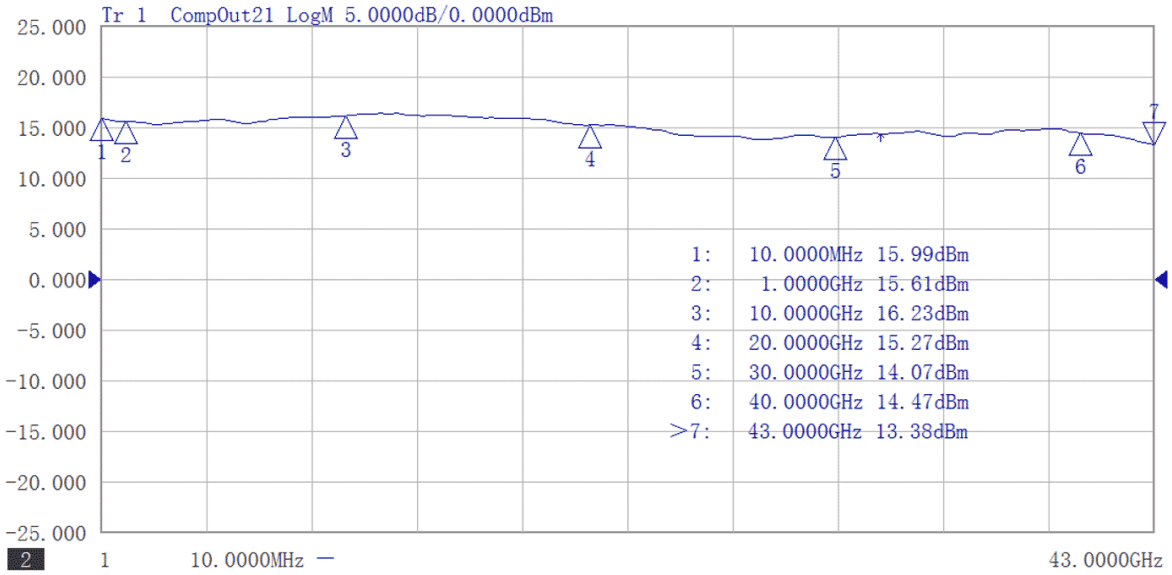
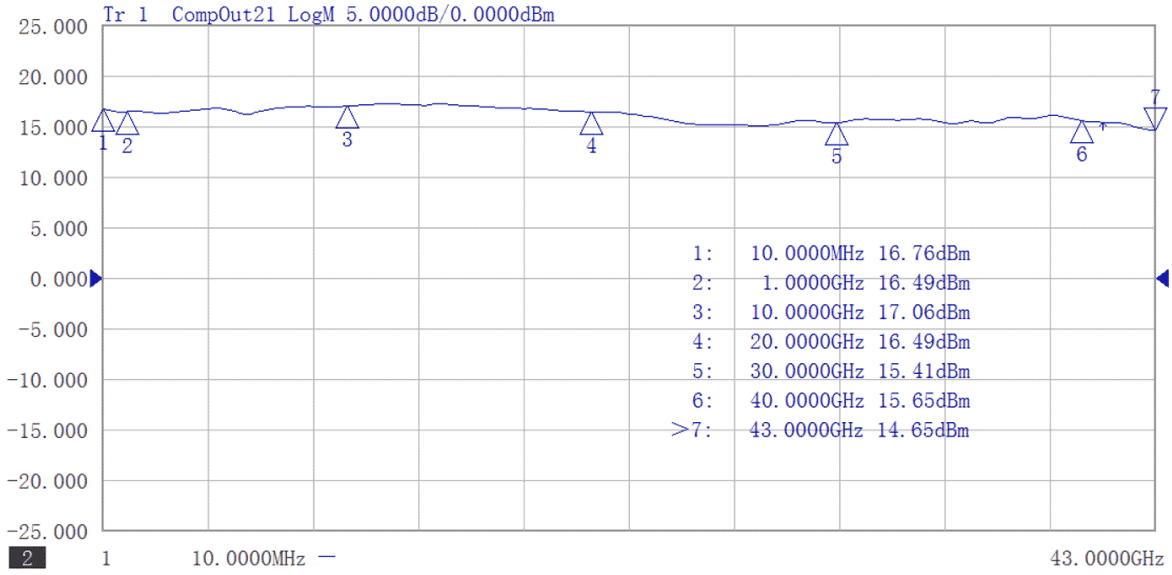
P1db Test vs Frequency



P3db Test vs Frequency



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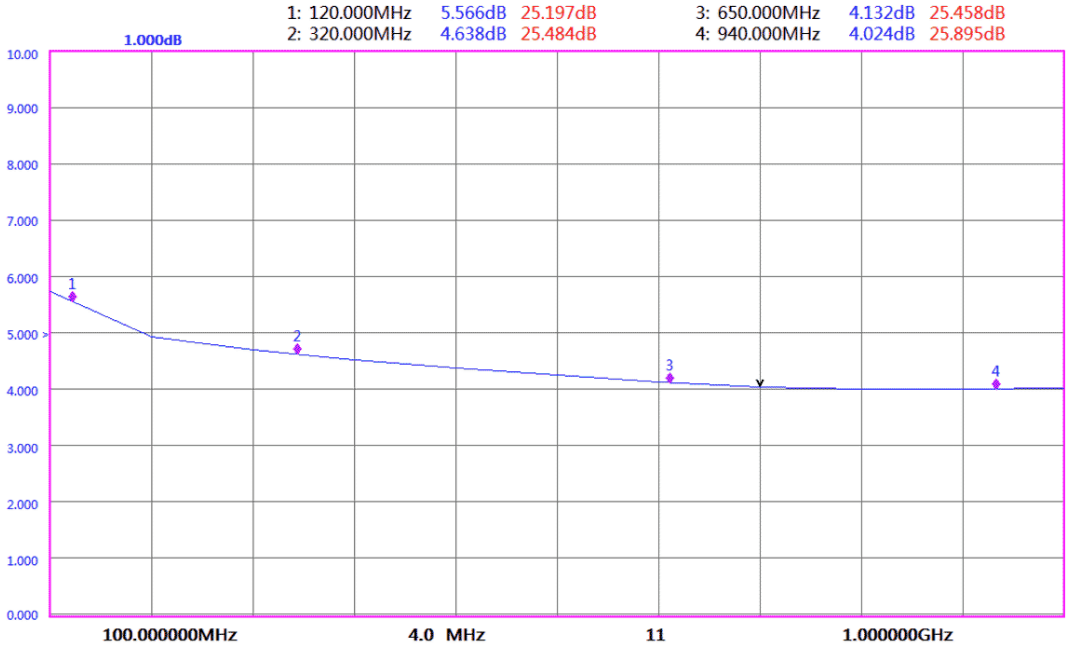
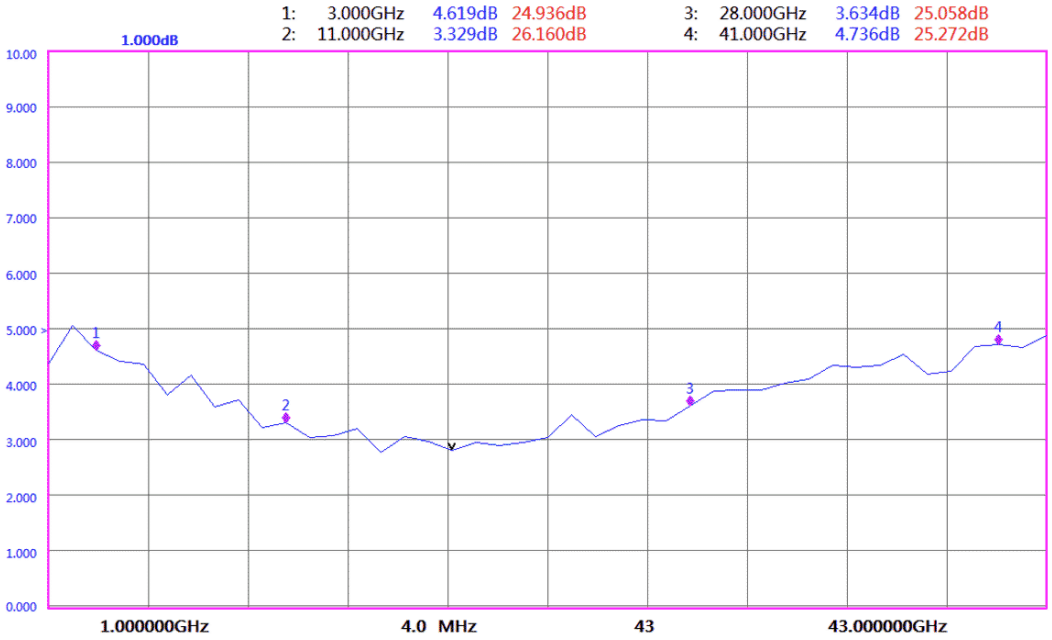
NF test 100MHz to 1GHz



NF Test from 1GHz to 43GHz



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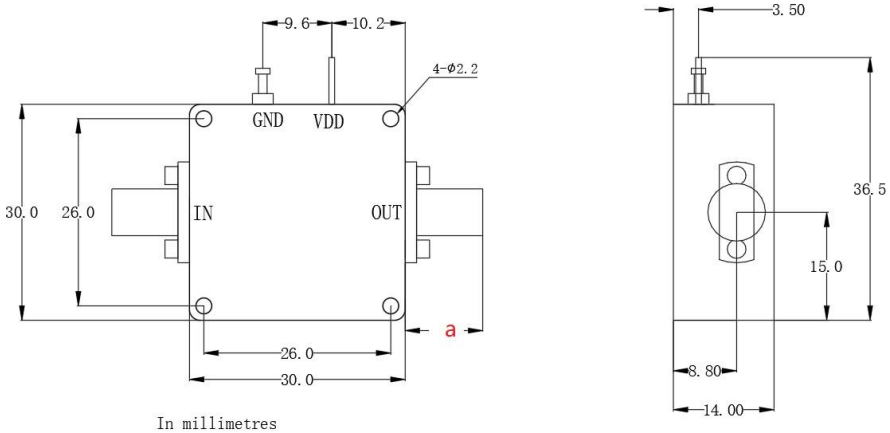
Dimensions (mm)

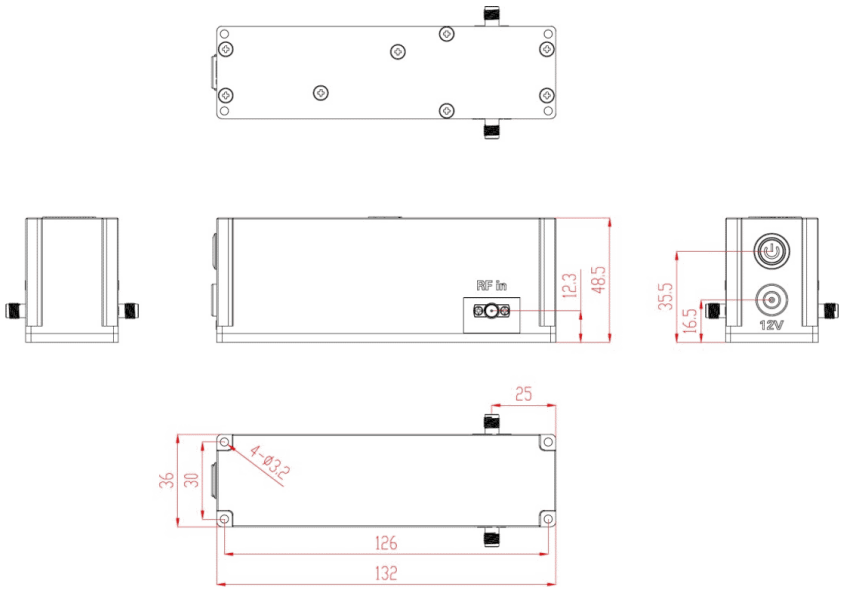


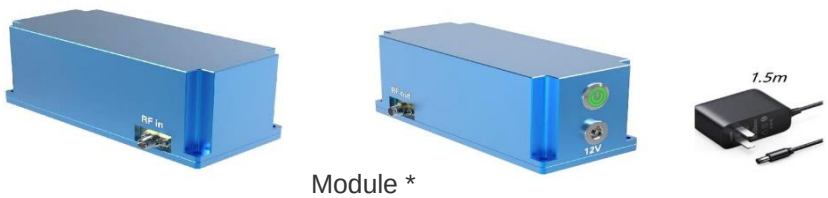
In millimetres

	<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)





Module *

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Ordering Information *

	0010	43	25	4	13	☐
Prefix	**Low Frequency**	**High Frequency**	**Gain**	**NF**	**P1dB**	**Module***
LNAM-	10MHz = 0010	43.5GHz = 43	25dB =25	4.5dB = 4	13dBm = 13	No = 0 Yes = 1

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