



Low Noise Amplifier

Model: LNA4G8G-4015

4-8GHz 40dB, Gain 1.5dB, NF

Ultrabroad frequency range, high small signal gain, low noise figure and good gain flatness

Features:

- Frequency range: 4-8GHz
- Small Signal Gain: 40dB min.
- Output P1dB: 16dBm typ.
- Noise Figure: 1.5dB max.
- Operating voltage/current: +12 VDC/100mA.
- Simple 220V system available SAC option.
- 50 Ohm Matched Input / Output.

Applications:

- Laboratory Applications
- R&D Labs
- Radar Systems
- ISM
- Test Instrumentation

Product Overview:

The LNA4G8G-4015 is a coaxial low noise operating in the 4 to 8 GHz frequency range. The amplifier offers a maximum noise figure of 1.5 dB, 16 dBm typical of output P1dB and a minimum small signal gain of 40 dB. The DC power requirement for the amplifier is +12 VDC/100 mA. The input and output port configuration offers coax adapter structure with SMA female.



Electrical Specifications at 25°C:

Parameter	Min	Typ	Max	Units
Frequency range	4		8	GHz
Small Signal Gain	40	43		dB
Noise Figure		1	1.5	dB
Output P1dB	14	16		dBm
Output Psat		17		dBm
Input VSWR		1.6		:1
Output VSWR		1.8		:1
DC Voltage	+8	+12	+16	V DC
DC Supply Current		100		mA
Impedance		50		Ohms

Mechanical Specifications:

Parameter	Value	Notes
Operating Temperature	-40°C to +70°C	
Non-operating Temperature	-55°C to +85°C	
Relative humidity	95	%
RF Input/Output Connector	SMA Female/SMA Female	
DC Bias	Solder Pin	
Altitude	10,000	feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis	
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions	
Dimensions W x H x D	30 x 28 x 10	mm

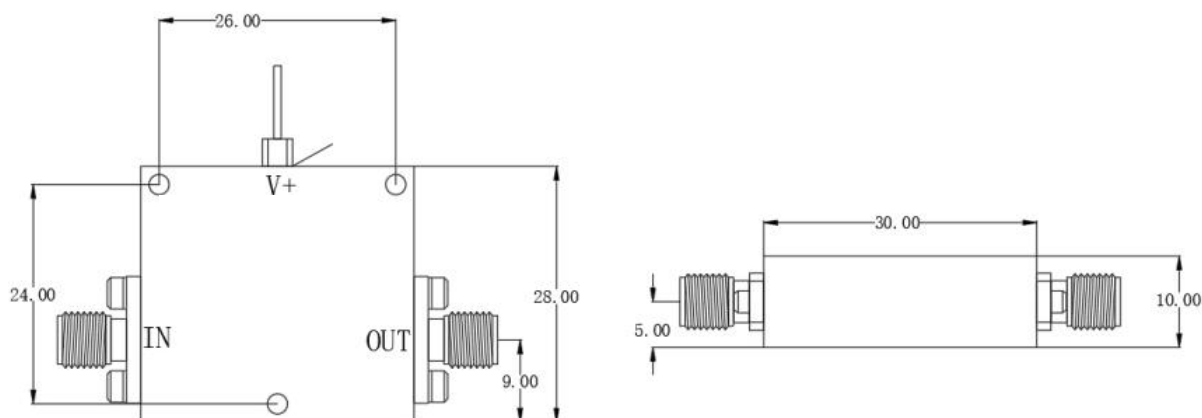
Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+16 V
RF Input Power	+5 dBm
ESD sensitivity (HBm)	Class 0, passed 150V



Outline Drawing:

Unit:mm; Tolerance:±0.1mm



Ordering Information:

Base Number	Description	Optional
LNA4G8G-4015	Low Noise Amplifier, 4-8GHz, Gain:40dB,Noise Figure:1.5dB,P1dB:16dBm,+12V DC	Without Heatsink
LNA4G8G-4015-HS	Low Noise Amplifier, 4-8GHz, Gain:40dB,Noise Figure:1.5dB,P1dB:16dBm,+12V DC	With Heatsink