



Low Noise Amplifier

Model: LNA4G10G-3419

4-10GHz 34dB, Gain 1.9dB, NF

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

Features:

- Frequency range: 4-10GHz
- Small Signal Gain: 34dB typ.
- Output P1dB: 10dBm typ.
- Noise Figure: 1.9dB typ.
- Operating voltage/current: +12 VDC/70mA.
- 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 LNA4G10G-3419 is a coaxial low noise operating in the 4 to 10 GHz frequency range. The amplifier offers a typical noise figure of 1.9 dB, 10 dBm typical of output P1dB and a typical small signal gain of 34 dB with the excellent gain flatness of ± 1.5 dB nominal. The DC power requirement for the amplifier is +12 VDC/70 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		10	GHz
Small Signal Gain		34		dB
Small Signal Gain Flatness		±1.5		dB
Noise Figure		1.9		dB
Output P1dB		10		dBm
Input VSWR		2.0		:1
Output VSWR		2.0		:1
DC Voltage		+12	+15	V DC
DC Supply Current		70		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	33 x 33 x 9	mm

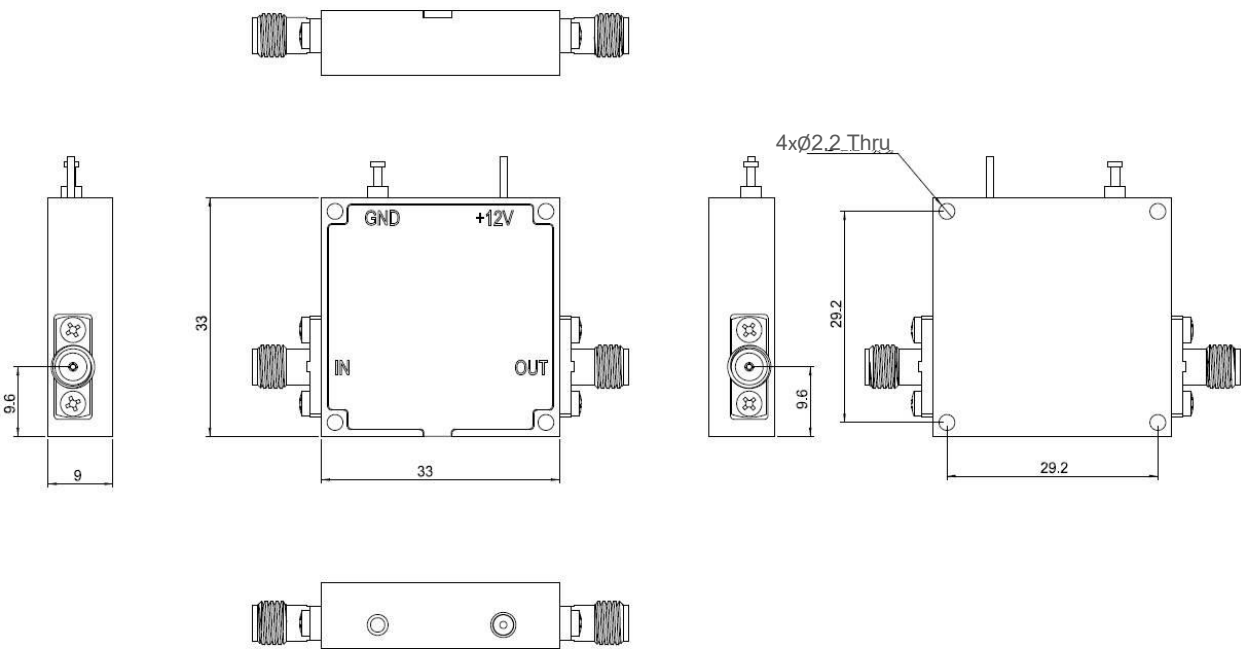
Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+15 V
RF Input Power	+17 dBm
ESD sensitivity (HBm)	Class 0, passed 150V



Outline Drawing:

Unit:mm; Tolerance:±0.1mm



Ordering Information:

Base Number	Description	Optional
LNA4G10G-3419	Low Noise Amplifier, 4-10GHz, Gain:34dB,Noise Figure:1.9dB,P1dB:10dBm,+12V DC	Without Heatsink
LNA4G10G-3419-HS	Low Noise Amplifier, 4-10GHz, Gain:34dB,Noise Figure:1.9dB,P1dB:10dBm,+12V DC	With Heatsink