



Low Noise Amplifier

Model: LNA4G50G-2560

4-50GHz 25dB, Gain 6.0dB, NF

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

Features:

- Frequency range: 4-50GHz
- Small Signal Gain: 25dB typ.
- Output P1dB: 12dBm typ.
- Noise Figure: 6.0dB typ.
- Operating voltage/current: +12 VDC/300mA.
- 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 LNA4G50G-2560 is a coaxial low noise operating in the 4 to 50 GHz frequency range. The amplifier offers a typical noise figure of 6.0 dB, 12 dBm typical of output P1dB and a typical small signal gain of 25 dB with the excellent gain flatness of ± 2.0 dB maximum. The DC power requirement for the amplifier is +12 VDC/300 mA. The input and output port configuration offers coax adapter structure with 2.4mm female.



Electrical Specifications at 25°C:

Parameter	Min	Typ	Max	Units
Frequency range	4		50	GHz
Small Signal Gain	23	25		dB
Small Signal Gain Flatness			±2.0	dB
Noise Figure		6	8.5	dB
Output P1dB	10	12		dBm
Output IP3		22		dBm
Input VSWR		2	2.5	:1
Output VSWR		2	2.5	:1
DC Voltage	+7	+12		V DC
DC Supply Current		300		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	2.4mm Female/2.4mm 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	35.3 x 40.3 x 12	mm
Weight	48	g

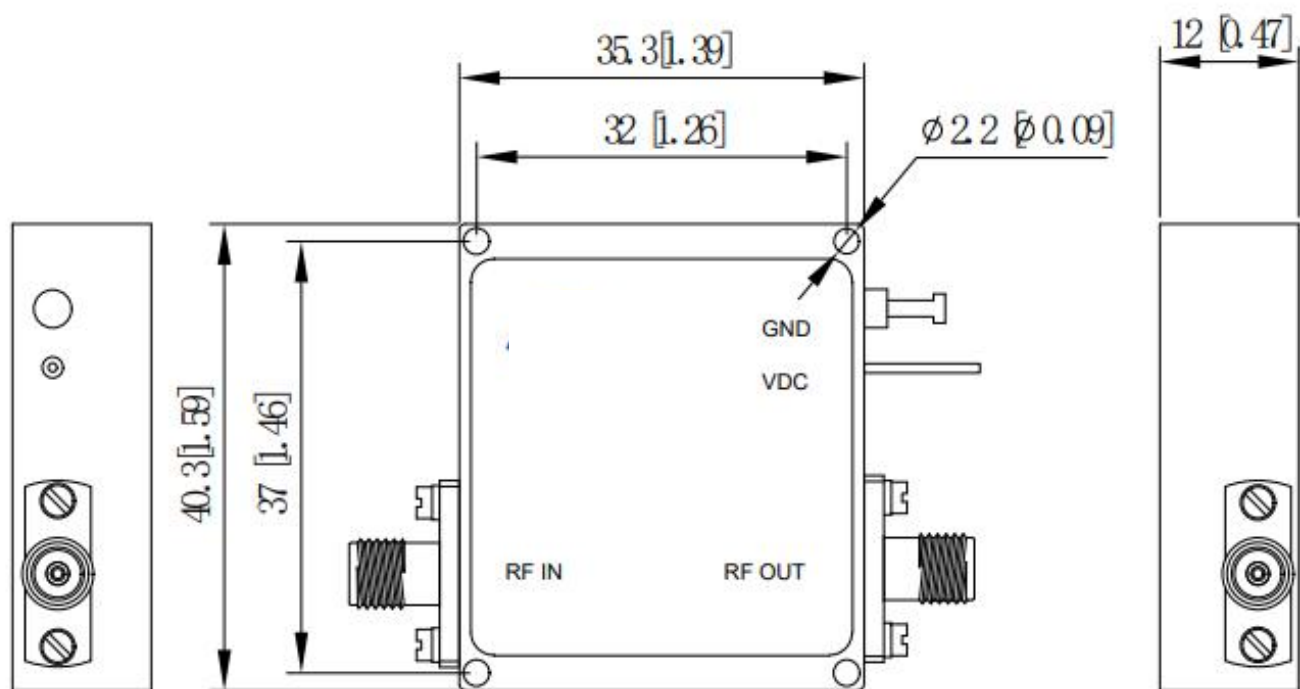
Absolute Maximum Ratings:

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



Outline Drawing:

Unit:mm; Tolerance:±0.1mm



Ordering Information:

Base Number	Description	Optional
LNA4G50G-2560	Low Noise Amplifier, 4-50GHz, Gain:25dB,Noise Figure:6.0dB,P1dB:12dBm,+12V DC	Without Heatsink
LNA4G50G-2560-HS	Low Noise Amplifier, 4-50GHz, Gain:25dB,Noise Figure:6.0dB,P1dB:12dBm,+12V DC	With Heatsink