



Low Noise Amplifier

Model: LNA2G40G-4340

2-40GHz 43dB, Gain 4.0dB, NF

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

Features:

- Frequency range: 2-40GHz
- Small Signal Gain: 43dB typ.
- Output P1dB: 15dBm min.
- Noise Figure: 4.0dB typ.
- Operating voltage/current: +12 VDC/350mA.
- 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 LNA2G40G-4340 is a coaxial low noise operating in the 2 to 40 GHz frequency range. The amplifier offers a typical noise figure of 4.0 dB, 15dBm minimum of output P1dB and a typical small signal gain of 43 dB with the excellent gain flatness of ± 1.5 dB nominal. The DC power requirement for the amplifier is +12 VDC/350 mA. The input and output port configuration offers coax adapter structure with 2.92mm female.



Electrical Specifications at 25°C:

Parameter	Min	Typ	Max	Units
Frequency range	2		40	GHz
Small Signal Gain	38	43		dB
Small Signal Gain Flatness		±1.5	±2	dB
Noise Figure		4	6.5	dB
Output P1dB	15	18		dBm
Output Psat	20	21		dBm
Spurious		-60		dBc
Input VSWR		1.8	2	:1
Output VSWR		1.8	2	:1
DC Voltage	8	12		V DC
DC Supply Current		350		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	2.92mm Female/2.92mm 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	30	g

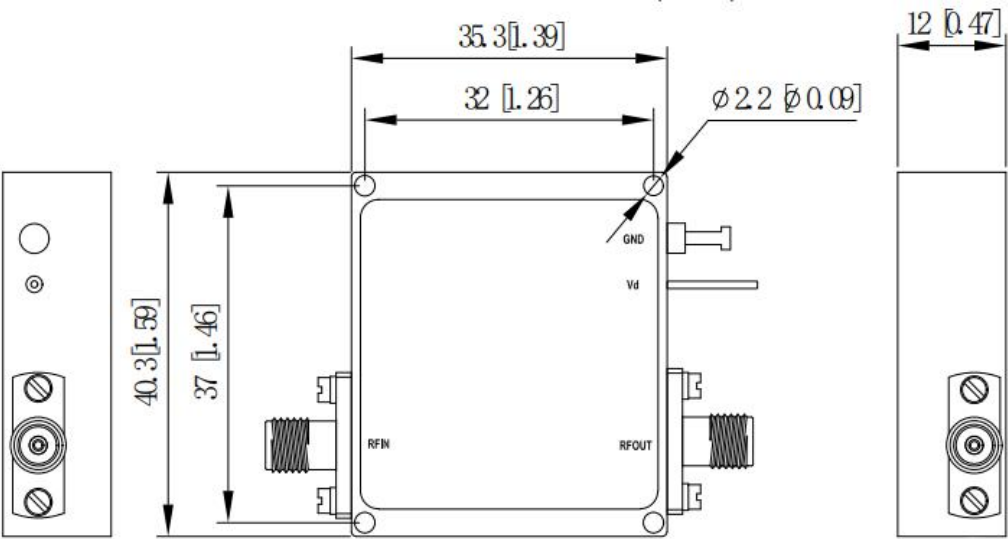
Absolute Maximum Ratings:

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



Outline Drawing:

Unit:mm; Tolerance:±0.1mm



Ordering Information:

Base Number	Description	Optional
LNA2G40G-4340	Low Noise Amplifier, 2-40GHz, Gain:43dB,Noise Figure:4.0dB,P1dB:15dBm,+12V DC	Without Heatsink
LNA2G40G-4340-HS	Low Noise Amplifier, 2-40GHz, Gain:43dB,Noise Figure:4.0dB,P1dB:15dBm,+12V DC	With Heatsink