



Low Noise Amplifier

Model: LNA35G50G-4325-GA

35-50GHz 43dB, Gain 2.5dB, NF

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

Features:

- Frequency range: 35-50GHz
- Small Signal Gain: 43dB typ.
- Output P1dB: 15dBm typ.
- Noise Figure: 2.5dB typ.
- Operating voltage/current: +6 VDC/320mA.
- 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 LNA35G50G-4325-GA is a coaxial low noise operating in the 35 to 50 GHz frequency range. The amplifier offers a typical noise figure of 2.5 dB, 15 dBm typical of output P1dB and a typical small signal gain of 43 dB with the excellent gain flatness of ± 3.0 dB nominal. The DC power requirement for the amplifier is +6 VDC/320 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	35		50	GHz
Small Signal Gain	40	43		dB
Small Signal Gain Flatness		±3.0		dB
Noise Figure		2.5	3.0	dB
Output P1dB	13	15		dBm
Output Psat		16		dBm
Gain Adjustment Range	40	42		dB
Input VSWR		4		:1
Output VSWR		2		:1
Attenuator Control Voltage	-5		0	V DC
DC Voltage	+5.5	+6	+8	V DC
DC Supply Current		320		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	50 x 60 x 12	mm

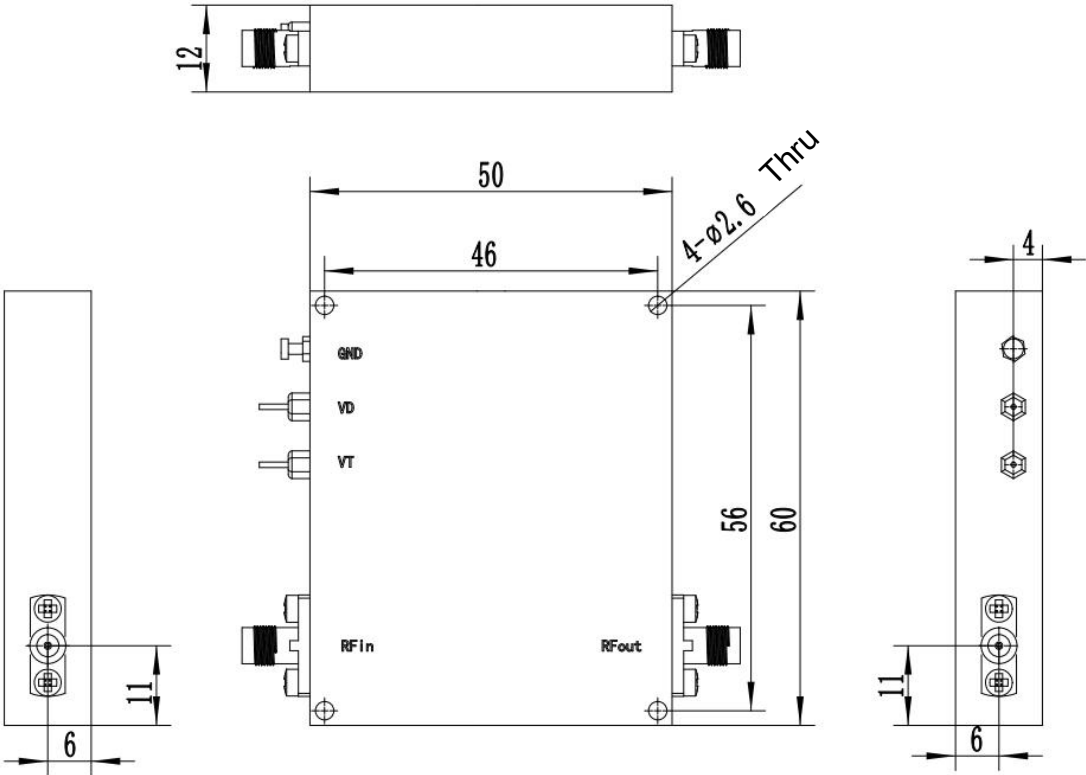


Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+8 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
LNA35G50G-4325-GA	Low Noise Amplifier, 35-50GHz, Gain:43dB,Noise Figure:2.5dB,P1dB:15dBm,+6V DC	Without Heatsink
LNA35G50G-4325-GA-HS	Low Noise Amplifier, 35-50GHz, Gain:43dB,Noise Figure:2.5dB,P1dB:15dBm,+6V DC	With Heatsink