



Low Noise Amplifier

Model: LNA1G40G-3060

1-40GHz 30dB, Gain 6.0dB, NF

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

Features:

- Frequency range: 1-40GHz
- Small Signal Gain: 30dB typ.
- Output P1dB: 22dBm typ.
- Noise Figure: 6.0dB typ.
- Operating voltage/current: +9 VDC/360mA.
- 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 LNA1G40G-3060 is a coaxial low noise operating in the 1 to 40 GHz frequency range. The amplifier offers a typical noise figure of 6.0 dB, 22 dBm typical of output P1dB and a typical small signal gain of 30 dB. The DC power requirement for the amplifier is +9 VDC/360 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	1		40	GHz
Small Signal Gain	29	30		dB
Noise Figure		6		dB
Output P1dB		22		dBm
Output Psat		23		dBm
Input VSWR		1.6		:1
Output VSWR		1.8		:1
DC Voltage		+9	+12	V DC
DC Supply Current		360		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 x 40 x 12	mm

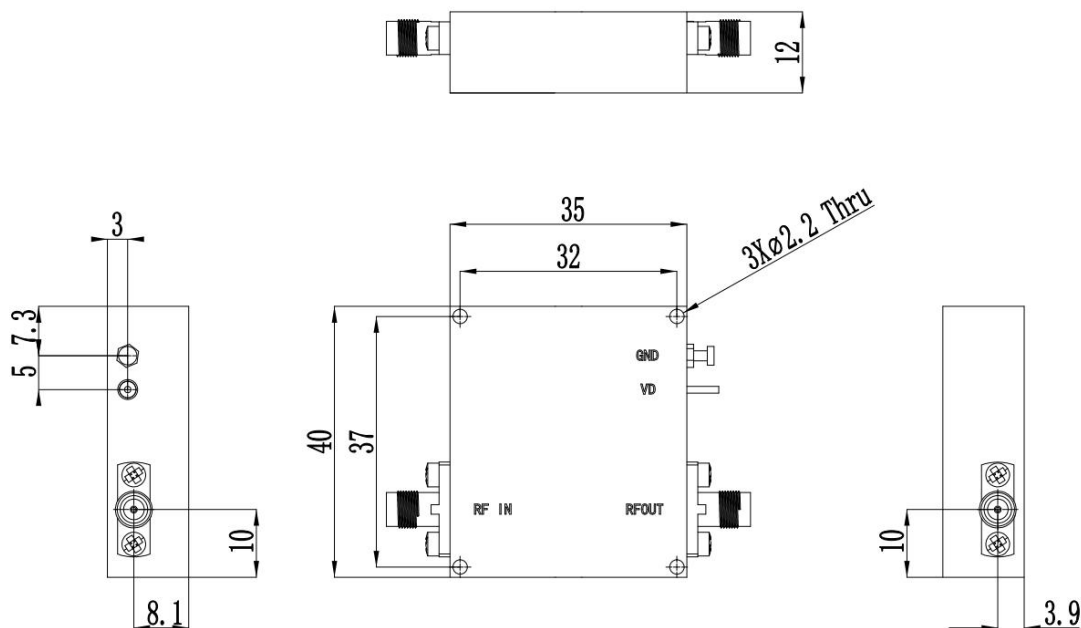
Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+12 V
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
LNA1G40G-3060	Low Noise Amplifier, 1-40GHz, Gain:30dB,Noise Figure:6.0dB,P1dB:22dBm,+9V DC	Without Heatsink
LNA1G40G-3060-HS	Low Noise Amplifier, 1-40GHz, Gain:30dB,Noise Figure:6.0dB,P1dB:22dBm,+9V DC	With Heatsink