



Low Noise Amplifier

Model: LNA33G67G-4750

33-67GHz 47dB, Gain 5.0dB, NF

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

Features:

- Frequency range: 33-67GHz
- Small Signal Gain: 47dB typ.
- Output P1dB: 20dBm typ.
- Noise Figure: 5.0dB typ.
- Operating voltage/current: +5 VDC/750mA.
- 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 LNA33G67G-4750 is a coaxial low noise operating in the 33 to 67 GHz frequency range. The amplifier offers a typical noise figure of 5.0 dB@33-50GHz, 20 dBm@33-50GHz typical of output P1dB and a typical small signal gain of 47 dB. The DC power requirement for the amplifier is +5 VDC/750 mA. The input and output port configuration offers coax adapter structure with 1.85mm female.



Electrical Specifications at 25°C:

Parameter		Min	Typ	Max	Units
Frequency range		33		67	GHz
Small Signal Gain		45	47		dB
Noise Figure	@33-50GHz		5		dB
	@50-67GHz		7		dB
Output P1dB	@33-50GHz		20		dBm
	@50-67GHz		18		dBm
Input VSWR			1.8		:1
Output VSWR			1.8		:1
DC Voltage			+5	+8	V DC
DC Supply Current			750		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	1.85mm Female/1.85mm 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

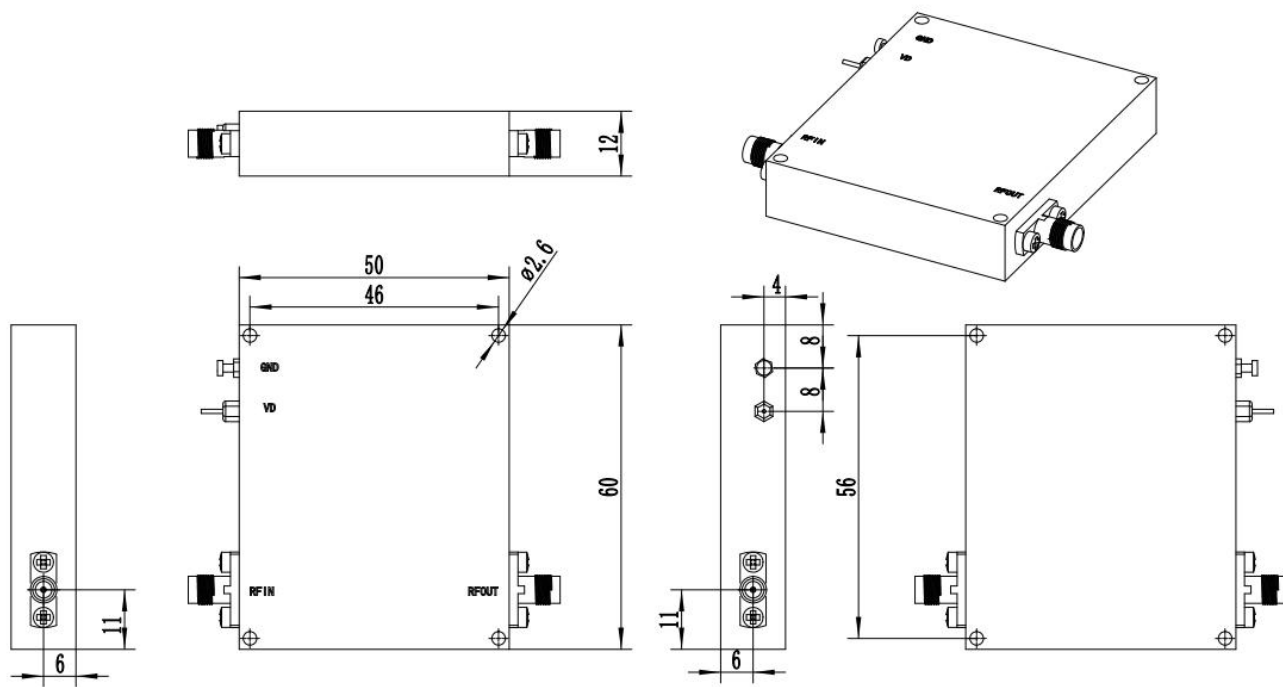
Absolute Maximum Ratings:

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
LNA33G67G-4750	Low Noise Amplifier, 33-67GHz, Gain:47dB,Noise Figure:5.0dB@33- 50GHz, P1dB:20dBm@33-50GHz,+5V DC	Without Heatsink
LNA33G67G-4750-HS	Low Noise Amplifier, 33-67GHz, Gain:47dB,Noise Figure:5.0dB@33- 50GHz, P1dB:20dBm@33-50GHz,+5V DC	With Heatsink