



Low Noise Amplifier

Model: LNA33G35G-3620-WR28-L

33-35GHz 36dB, Gain 2.0dB, NF

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

Features:

- Frequency range: 33-35GHz
- Small Signal Gain: 36dB typ.
- Output P1dB: 13dBm typ.
- Noise Figure: 2.0dB typ.
- Operating voltage/current: +5 VDC/85mA.
- 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 LNA33G35G-3620-WR28-L is a coaxial low noise operating in the 33 to 35 GHz frequency range. The amplifier offers a typical noise figure of 2.0 dB, 13 dBm typical of output P1dB and a typical small signal gain of 36 dB with the excellent gain flatness of ± 0.5 dB nominal. The DC power requirement for the amplifier is +5 VDC/85 mA. The input port configuration offers coax adapter structure with WR-28/UG-599/U and output port configuration offers coax adapter structure with 2.92mm Female.



Electrical Specifications at 25°C:

Parameter	Min	Typ	Max	Units
Frequency range	33		35	GHz
Small Signal Gain		36		dB
Small Signal Gain Flatness	±0.5@Band=1GHz			dB
Noise Figure		2.0		dB
Output P1dB	12	13		dBm
Output Psat		14		dBm
Input VSWR		2		:1
Output VSWR		2		:1
DC Voltage		+5	+8	V DC
DC Supply Current		85		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	WR-28 or UG-599 or U/2.92mmFemale	
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	30 x 30 x 19	mm

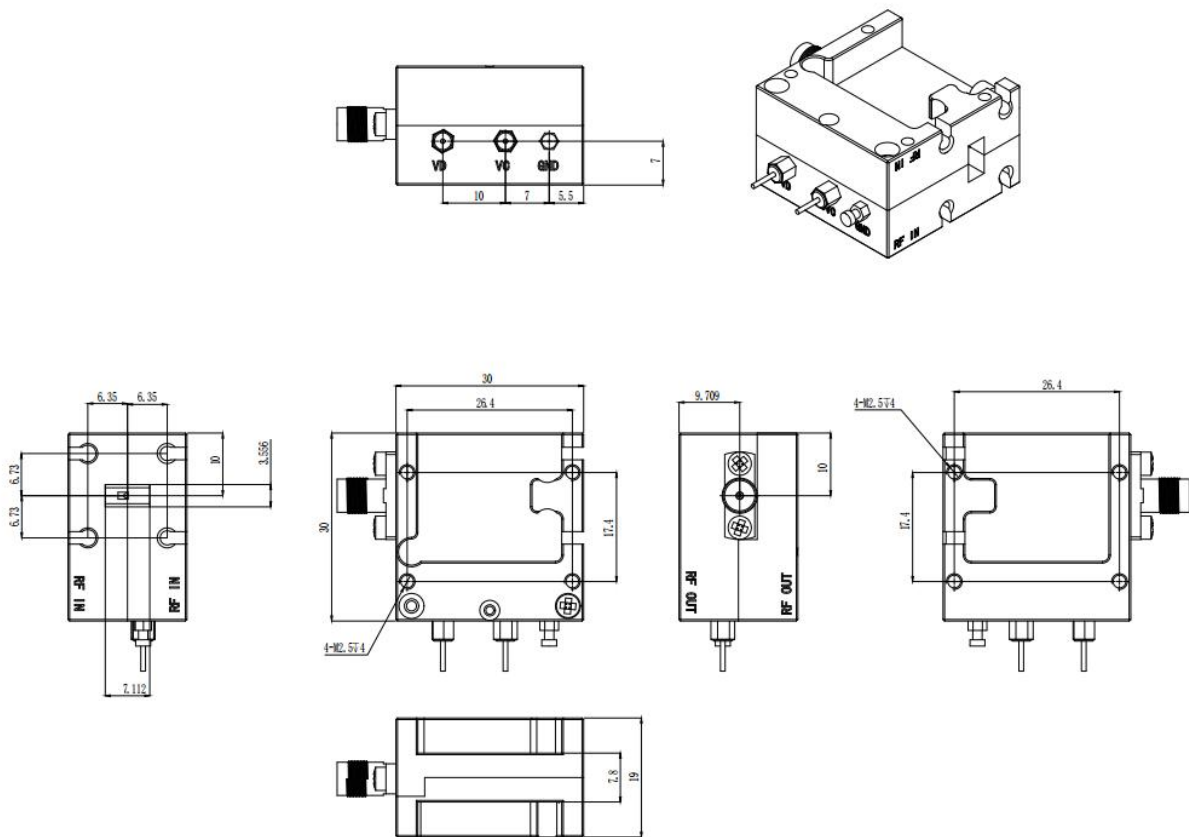
Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	TBD
RF Input Power	+20 dBm
ESD sensitivity (HBm)	Class 0, passed 150V



Outline Drawing:

Unit:mm; Tolerance:±0.1mm



Ordering Information:

Base Number	Description	Optional
LNA33G35G-3620-WR28-L	Low Noise Amplifier, 33-35GHz, Gain:36dB,Noise Figure:2.0dB,P1dB:13dBm,+5V DC	Without Heatsink
LNA33G35G-3620-WR28-L-HS	Low Noise Amplifier, 33-35GHz, Gain:36dB,Noise Figure:2.0dB,P1dB:13dBm,+5V DC	With Heatsink