



Low Noise Amplifier

Model: LNA8G28G-2525

8-28GHz 25dB, Gain 2.5dB, NF

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

Features:

- Frequency range: 8-28GHz
- small Signal Gain: 25dB min.
- Output P1dB: 10dBm typ.
- Noise Figure: 2.5dB typ.
- Operating voltage/current: +12 VDC/200mA.
- 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 LNA8G28G-2525 is a coaxial low noise operating in the 8 to 28 GHz frequency range. The amplifier offers a typical noise figure of 2.5 dB, 10 dBm typical of output P1dB and a minimum small signal gain of 25 dB with the excellent gain flatness of ± 2.5 dB nominal. The DC power requirement for the amplifier is +12 VDC/200 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	8		28	GHz
Small Signal Gain	25	27.5	30	dB
Small Signal Gain Flatness		±2.5		dB
Noise Figure		2.5		dB
Output P1dB		10		dBm
Output Psat		11		dBm
Input VSWR		2		:1
Output VSWR		2		:1
DC Voltage		+12		V DC
DC Supply Current		200		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/2.92mmFemale	
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	32.1 x 29.2 x 11	mm

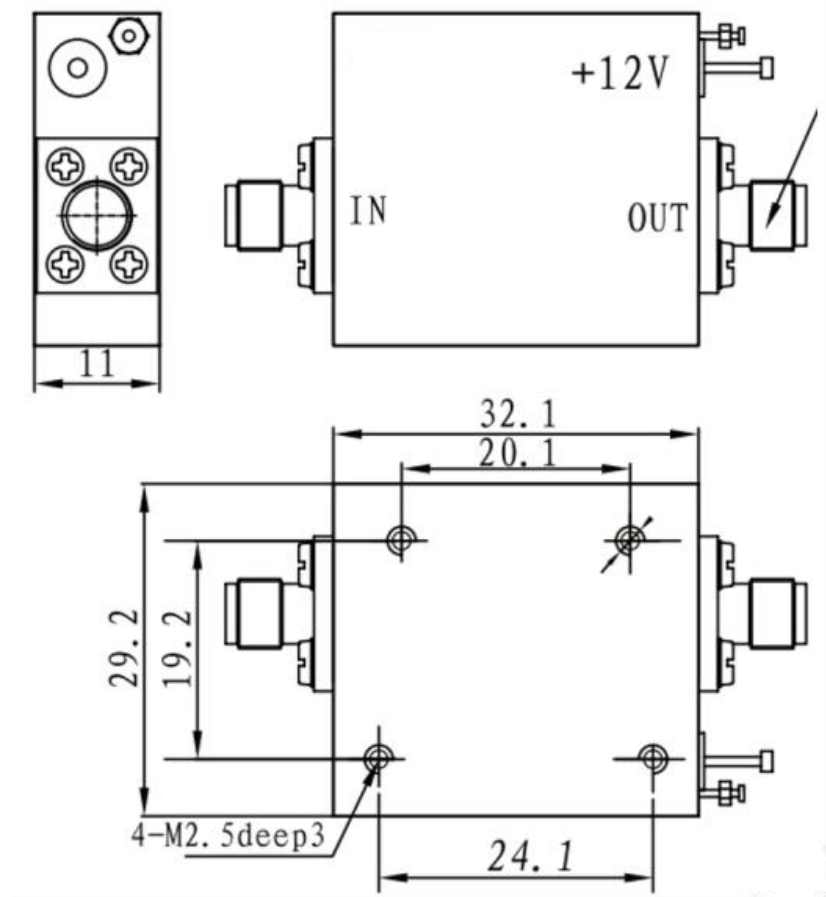
Absolute Maximum Ratings:

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



Outline Drawing:

Unit:mm; Tolerance:±0.1mm



Ordering Information:

Base Number	Description	Optional
LNA8G28G-2525	Low Noise Amplifier, 8-28GHz, Gain:25dB,Noise Figure:2.5dB,P1dB:10dBm,+12V DC	Without Heatsink
LNA8G28G-2525-HS	Low Noise Amplifier, 8-28GHz, Gain:25dB,Noise Figure:2.5dB,P1dB:10dBm,+12V DC	With Heatsink