



Low Noise Amplifier

Model: LNA2.2G2.3G-4807

2.2-2.3GHz 48dB, Gain 0.7dB, NF

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

Features:

- Frequency range: 2.2-2.3GHz
- Small Signal Gain: 48dB typ.
- Output P1dB: 12dBm typ.
- Noise Figure: 0.7dB typ.
- Operating voltage/current: +12 VDC/50mA.
- 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 LNA2.2G2.3G-4807 is a coaxial low noise operating in the 2.2 to 2.3 GHz frequency range. The amplifier offers a typical noise figure of 0.7 dB, 12 dBm typical of output P1dB and a typical small signal gain of 48 dB with the excellent gain flatness of ± 0.5 dB nominal. The DC power requirement for the amplifier is +12 VDC/50 mA. The input and output port configuration offers coax adapter structure with SMA female.



Electrical Specifications at 25°C:

Parameter	Min	Typ	Max	Units
Frequency range	2.2		2.3	GHz
Small Signal Gain		48		dB
Small Signal Gain flatness		±0.5		dB
Noise Figure		0.7		dB
Output P1dB		12		dBm
Input VSWR		1.4		:1
Output VSWR		1.4		:1
DC Voltage		+12		V DC
DC Supply Current		50		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	SMA Female/SMA 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	44.8 x 29.2 x 11	mm

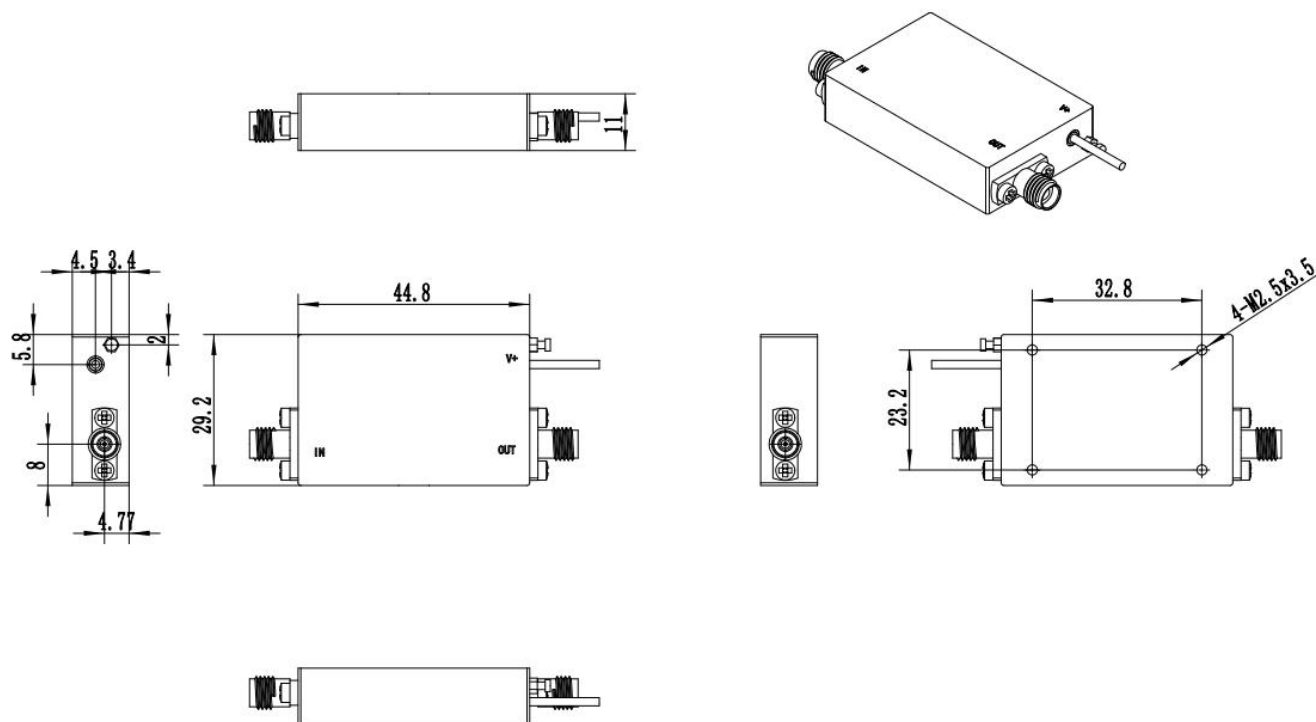
Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	TBD
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
LNA2.2G2.3G-4807	Low Noise Amplifier, 2.2-2.3GHz, Gain:48dB,Noise Figure:0.7dB,P1dB:12dBm,+12V DC	Without Heatsink
LNA2.2G2.3G-4807-HS	Low Noise Amplifier, 2.2-2.3GHz, Gain:48dB,Noise Figure:0.7dB,P1dB:12dBm,+12V DC	With Heatsink