



Low Noise Amplifier

Model: LNA75G110G-2545

75-110GHz 25dB, Gain 4.5dB, NF

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

Features:

- Frequency range: 75-110GHz
- Small Signal Gain: 25dB typ.
- Output Psat: 15dBm typ.
- Noise Figure: 4.5dB typ.
- Operating voltage/current: +12 VDC.
- 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 LNA75G110G-2545 is a coaxial low noise operating in the 75 to 110 GHz frequency range. The amplifier offers a typical noise figure of 4.5 dB, 15 dBm typical of Output Psat and a typical small signal gain of 25 dB. The DC power requirement for the amplifier is +12 VDC. The input and output port configuration offers coax adapter structure with 1.0mm female.



Electrical Specifications at 25°C:

Parameter	Min	Typ	Max	Units
Frequency range	75		110	GHz
Small Signal Gain		25		dB
Noise Figure		4.5		dB
Output Psat		15		dBm
DC Voltage		+12		V DC
Impedance		50		Ohms

Mechanical Specifications:

Parameter	Value	Notes
Operating Temperature	-10°C to +65°C	
Non-operating Temperature	-45°C to +85°C	
Relative humidity	95	%
RF Input/Output Connector	1.0mm Female/1.0mm 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	51.8 x 41.8 x 12	mm

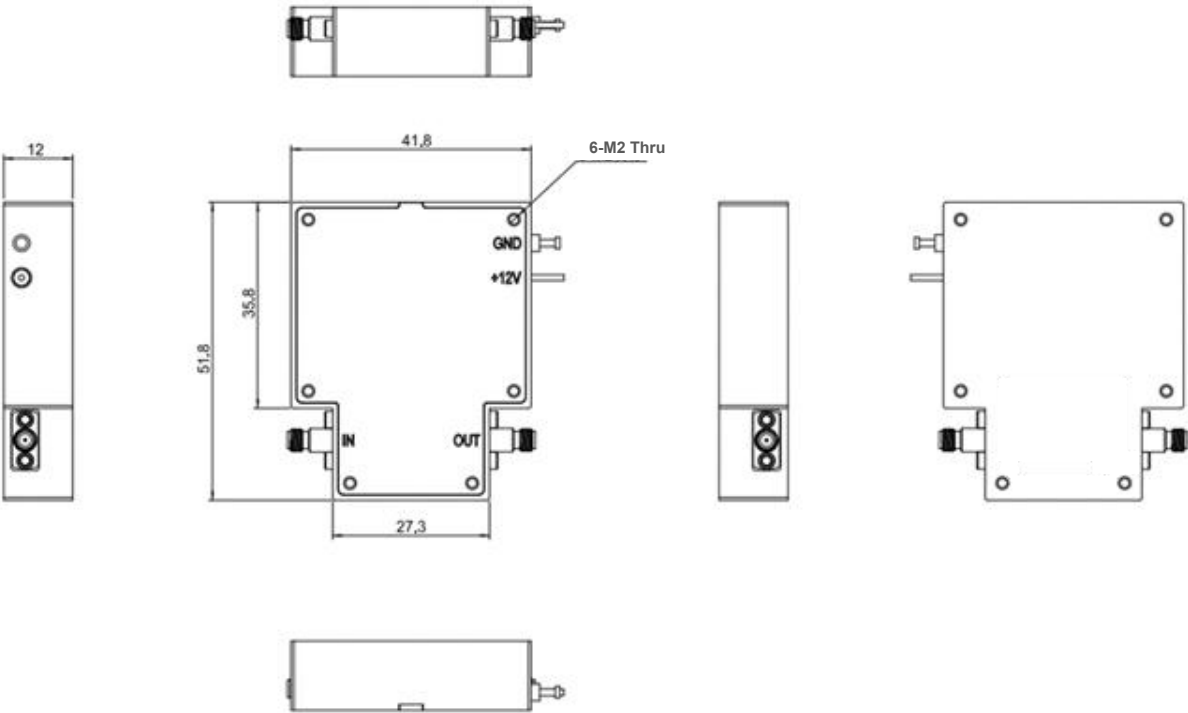
Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+15 V
RF Input Power	0dBm
ESD sensitivity (HBm)	Class 0, passed 150V



Outline Drawing:

Unit:mm; Tolerance:±0.1mm



Ordering Information:

Base Number	Description	Optional
LNA75G110G-2545	Low Noise Amplifier, 75-110GHz, Gain:25dB,Noise Figure:4.5dB,Past:15dBm,+12V DC	Without Heatsink
LNA75G110G-2545-HS	Low Noise Amplifier, 75-110GHz, Gain:25dB,Noise Figure:4.5dB,Past:15dBm,+12V DC	With Heatsink