

**Model: TLLA1G2G-40-13**
**Low Noise Amplifier**
**1-2GHz, NF:1.3dB, Gain:40dB, P1dB:20dBm**
**Feature:**

- Ultra Wide Band: 1-2GHz
- Gain: 40dB Min
- Noise Figure: 1.3dB Max
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

**Electrical Specifications:**

Parameter	Min	Typ	Max	Units
Frequency range	1-2			GHz
Gain	40	45		dB
Noise Figure		0.9	1.3	dB
Output P1dB	20			dBm
Output Psat		21		dBm
Input VSWR		1.6		:1
Output VSWR		1.8		:1
DC Voltage	5	8	12	V DC
DC Supply Current		160		mA
Impedance	50			Ohms

**Mechanical Specifications:**

Parameter	Value	Units
Input /Output Connector	SMA Female/SMA Female	
DC Bias	Solder Pin	
Size	30*28*10	mm
Weight	/	g

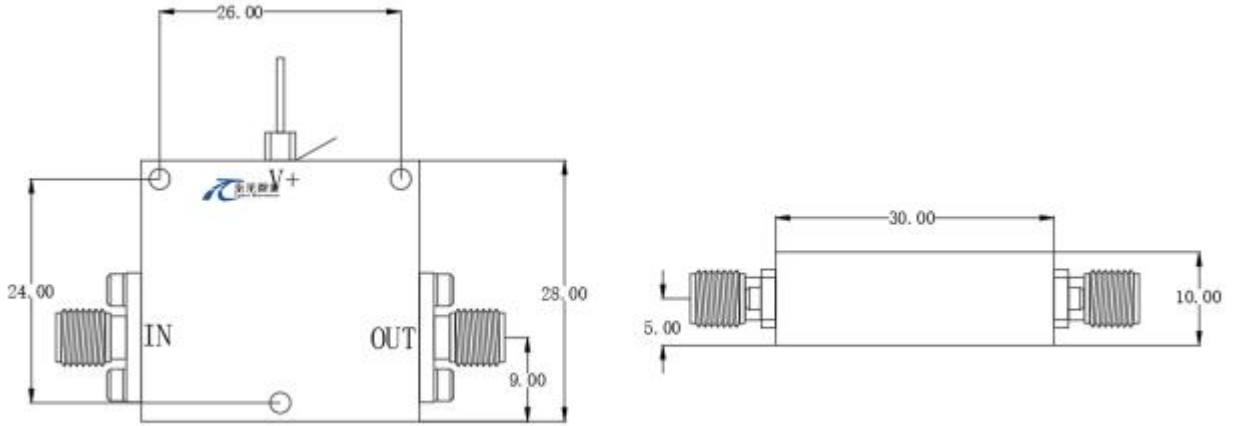
**Absolute Maximum Ratings:**

Parameter	Value
Supply Bias Voltage	12 V
RF Input Power	5 dBm
ESD sensitivity (HBm)	Class 0, passed 150V


**Available 220V System  
Benchtop Amplifier**

**Outline Drawing:**

Unit: mm(inches)



**\*\*\*Heat Sink Required During Operation**



OBSERVE PRECAUTIONS  
ELECTROSTATIC SENSITIVE  
DEVICES

**Environmental Conditions:**

Parameter	Min	Typ	Max	Units
Operating Temperature	-40		+60	°C
Non-operating Temperature	-55		+125	°C
Relative humidity		95		%
Altitude	50,000			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			

**Ordering Information:**

Part Number	Description	Revision
TLLA1G2G-40-13	Low Noise Amplifier, 1-2GHz, Noise Figure:1.3dB, Gain:40 dB,P1dB:20dBm,+8V DC,Without Heatsink	Rev.1.1
TLLA1G2G-40-13-HS	Low Noise Amplifier, 1-2GHz, Noise Figure:1.3dB, Gain:40 dB,P1dB:20dBm,+8V DC,With Heatsink	Rev.1.1