

**Model: TLLA18G50G-22-50**
**Low Noise Amplifier**
**18-50GHz, NF:5.0dB, Gain:23dB, P1dB:13dBm**
**Feature:**

- Ultra Wide Band: 18-50GHz
- Gain: 23dB Typ
- Noise Figure: 5.0dB Typ
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

**Electrical Specifications:**

Parameter	Min	Typ	Max	Units
Frequency range	18-50			GHz
Gain	20	23		dB
Gain Flatness		±2.5		dB
Noise Figure		5		dB
Output P1dB	13	14		dBm
Output Psat		15		dBm
Input VSWR		2		:1
Output VSWR		2		:1
DC Voltage		5	8	V DC
DC Supply Current		180		mA
Impedance	50			Ohms

**Mechanical Specifications:**

Parameter	Value	Units
Input /Output Connector	2.4mm Female/2.4mm Female	
DC Bias	Solder Pin	
Size	44.8*29.2*11	mm
Weight	/	g

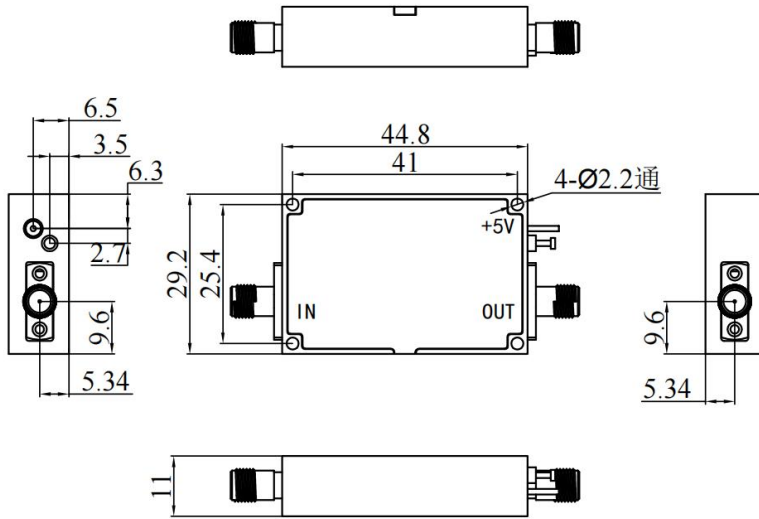
**Absolute Maximum Ratings:**

Parameter	Value
Supply Bias Voltage	+8V
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	-45		+85	°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
TLLA18G50G-22-50	Low Noise Amplifier, 18-50GHz, Noise Figure:5.0dB, Gain:23 dB,P1dB:13dBm,+5V DC,Without Heatsink	Rev.1.1
TLLA18G50G-22-50-HS	Low Noise Amplifier, 18-50GHz, Noise Figure:5.0dB, Gain:23 dB,P1dB:13dBm,+5V DC,With Heatsink	Rev.1.1