

**Model: TLLA1G1.6G-32-13**
**Low Noise Amplifier**
**1-1.6GHz, NF:0.5dB, Gain:32dB, P1dB:13dBm**
**Feature:**

- Ultra Wide Band: 0.8-1.6GHz
- Gain: 32dB Typ
- Noise Figure: 0.5dB Max
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

**Electrical Specifications:**

Parameter	Min	Typ	Max	Units
Frequency range	1-1.6			GHz
Gain	27	32		dB
Gain Flatness		±1.0	±1.75	dB
Noise Figure			0.5	dB
Output P1dB	12	13		dBm
Input VSWR		1.4	1.8	:1
Output VSWR		1.4	1.8	:1
DC Voltage	4.85	5	6	V DC
DC Supply Current		50	60	mA
Impedance	50			Ohms

**Mechanical Specifications:**

Parameter	Value	Units
Input /Output Connector	SMA Female/SMA Female	
DC Bias	Solder Pin	
Size	17.8*20*8.35	mm
Weight	11	g

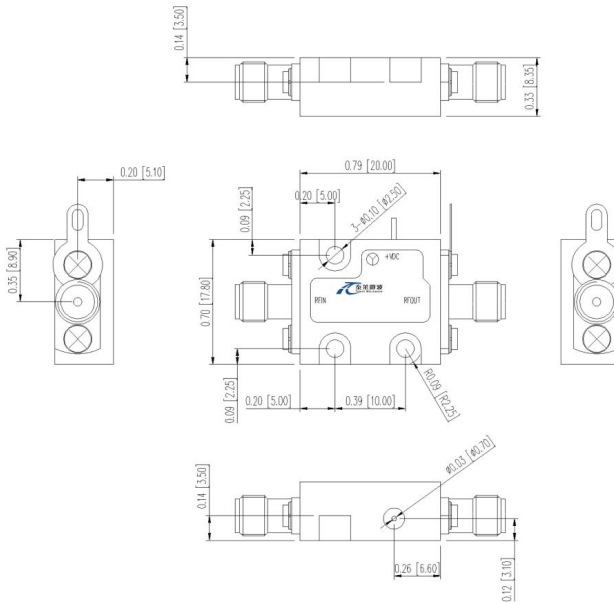
**Absolute Maximum Ratings:**

Parameter	Value
Supply Bias Voltage	TBD
RF Input Power	15 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		+70	°C
Non-operating Temperature	-65		+150	°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
TLLA1G1.6G-32-13	Low Noise Amplifier, 1-1.6GHz, Noise Figure:0.5dB, Gain:32 dB,P1dB:13dBm,5V DC,Without Heatsink	Rev.1.1
TLLA1G1.6G-32-13-HS	Low Noise Amplifier, 1-1.6GHz, Noise Figure:0.5dB, Gain:32 dB,P1dB:13dBm,5V DC,With Heatsink	Rev.1.1