

Model: TLLA4G20G-12-65
Low Noise Amplifier
4-20GHz, NF:6.5dB, Gain:12dB, P1dB:21dBm
Feature:

- Ultra Wide Band: 4-20GHz
- Gain: 12dB Typ
- Noise Figure: 6.5dB Typ
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

Electrical Specifications:

Parameter	Min	Typ	Max	Units
Frequency range	4-20			GHz
Gain	11	12		dB
Phase Noise	-162@10kHz			dBc/Hz
Noise Figure		6.5		dB
Output P1dB		21		dBm
Output Psat		22		dBm
Input VSWR		1.8		:1
Output VSWR		1.8		:1
DC Voltage	7	8	9	V DC
DC Supply Current		135		mA
Impedance	50			Ohms

Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	SMA Female/SMA Female	
DC Bias	Solder Pin	
Size	20*28*10	mm
Weight	/	g

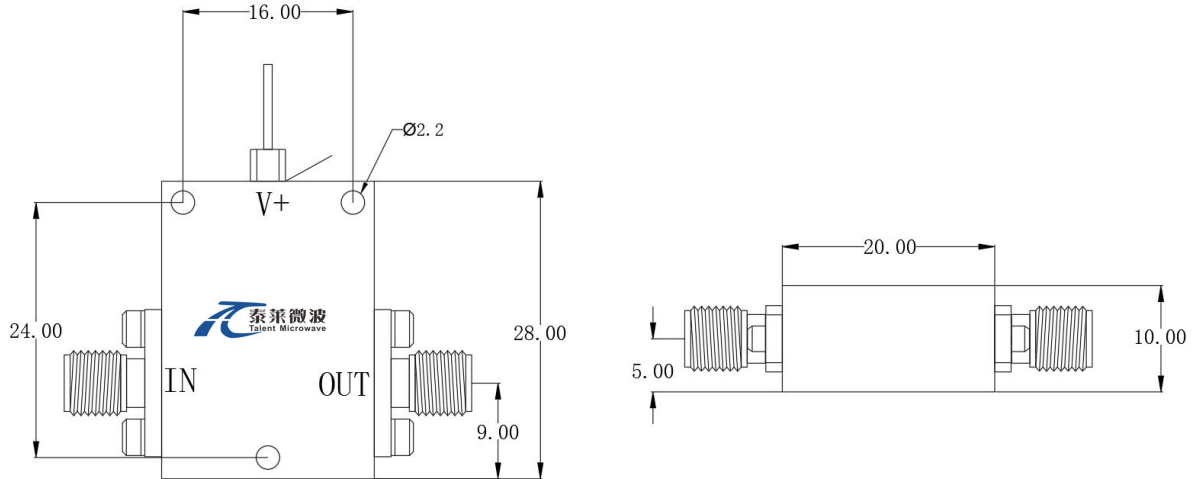
Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+9 V
RF Input Power	5 dBm
ESD sensitivity (HBm)	Class 0, passed 150V


**Available 220V System
Benchtop Amplifier**

Outline Drawing:

Unit: mm



*****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		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			

Ordering Information:

Part Number	Description	Revision
TLLA4G20G-12-65	Low Noise Amplifier, 4-20GHz, Noise Figure:6.5dB, Gain:21 dB,P1dB:22dBm,+8V DC,Without Heatsink	Rev.1.1
TLLA4G20G-12-65-HS	Low Noise Amplifier, 4-20GHz, Noise Figure:6.5dB, Gain:21 dB,P1dB:22dBm,+8V DC,With Heatsink	Rev.1.1