

Model:TLA4G8G-20-11
Low Noise Amplifier
4-8GHz, NF:1.1dB, Gain:20dB,P1dB:17dBm
Feature:

- Ultra Wide Band: 4-8GHz
- Gain: 20dB Typ
- Noise Figure: 0.9dB Typ
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

Electrical Specifications:

Parameter	Min	Typ	Max	Units
Frequency range	4-8			GHz
Gain		20		dB
Gain Flatness		±1		dB
Noise Figure		1.1		dB
Output P1dB	16	17		dBm
Output Psat	17	18		dBm
Input VSWR		2.5		:1
Output VSWR		2		:1
DC Voltage		12		V DC
DC Supply Current		60		mA
Impedance	50			Ohms

Mechanical Specifications:

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

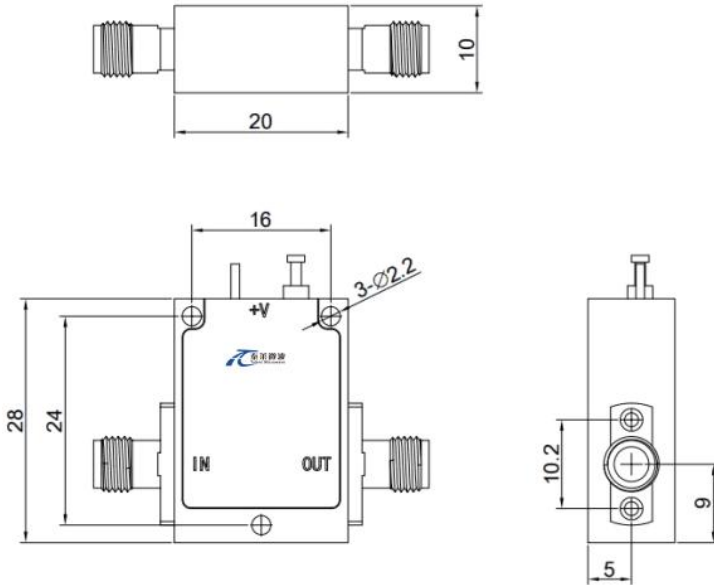
Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+15V
RF Input Power	10 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:

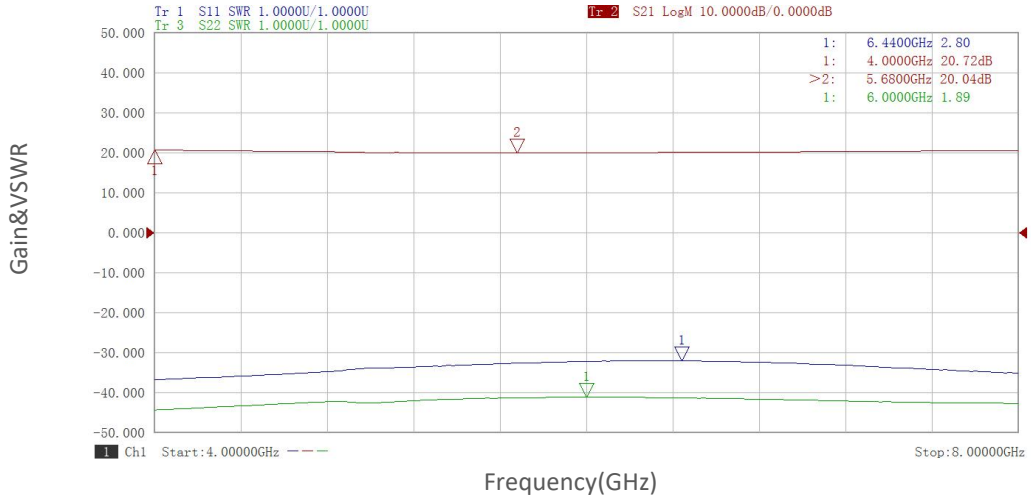
Parameter	Min	Typ	Max	Units
Operating Temperature	-45		+85	°C
Non-operating Temperature	-55		+125	°C
Relative humidity		95		%
Altitude	50,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

Ordering Information:

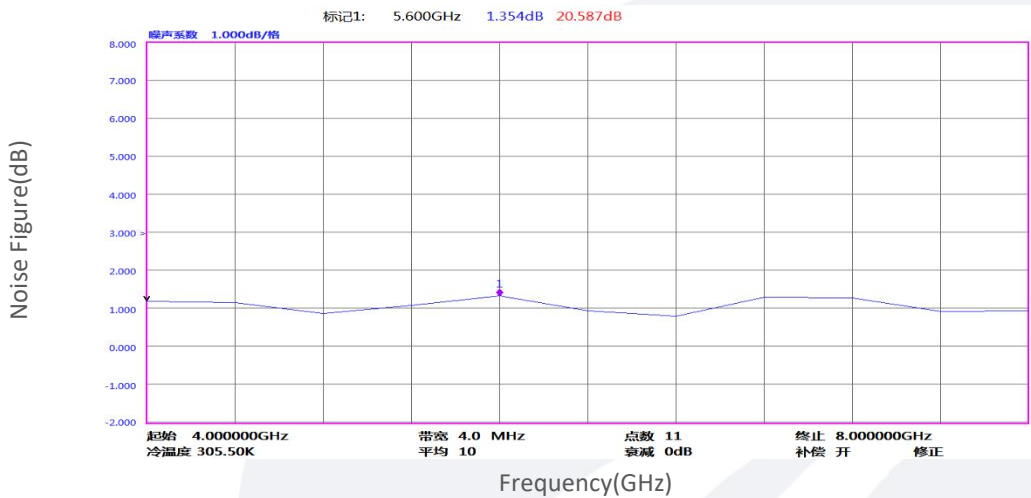
Part Number	Description	Revision
TLLA4G8G-20-11	Low Noise Amplifier, 4-8GHz, Noise Figure:1.1dB, Gain:20 dB,P1dB:17dBm,+12V DC,Without Heatsink	Rev.1.1
TLLA4G8G-20-11-HS	Low Noise Amplifier, 4-8GHz, Noise Figure:1.1dB, Gain:20 dB,P1dB:17dBm,+12V DC,With Heatsink	Rev.1.1

Typical Performance Data:

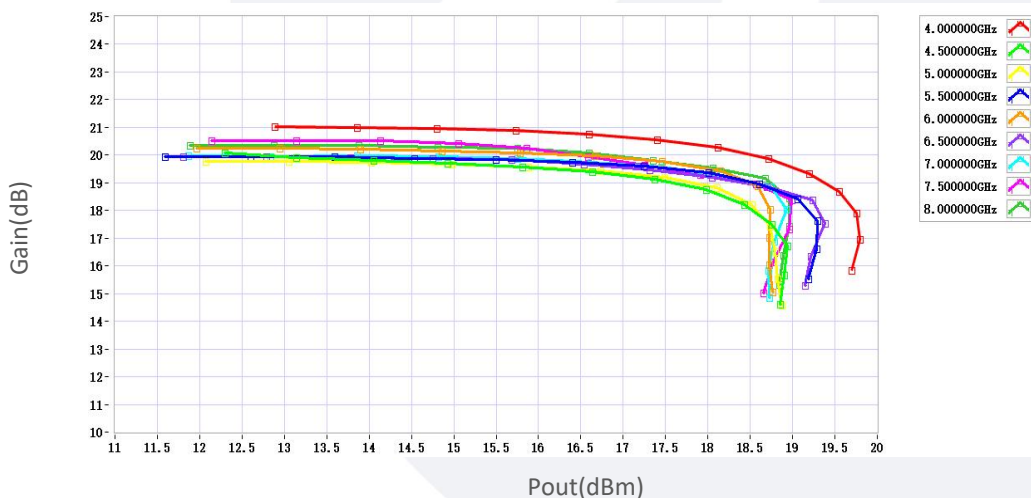
Gain&VSWR vs Frequency



Noise Figure vs Frequency



Gain vs Output Power



Typical Performance Data:

P1dB vs Frequency

