

Model: TLLA3G8G-21-09
Low Noise Amplifier
3-8GHz, NF:0.9dB, Gain:21dB, P1dB:17dBm
Feature:

- Ultra Wide Band: 3-8GHz
- Gain: 21dB 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	3-8			GHz
Gain	20	21		dB
Gain Flatness		±1.0		dB
Noise Figure		0.9		dB
Output P1dB	16	17		dBm
Output Psat	17	18		dBm
Input VSWR		2.5		:1
Output VSWR		2		:1
DC Voltage	5.5	8	12	V DC
DC Supply Current		50		mA
Impedance	50			Ohms

Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	SMA Female/SMA Female	
DC Bias	Solder Pin	
Size	24*16*10	mm
Weight	/	g

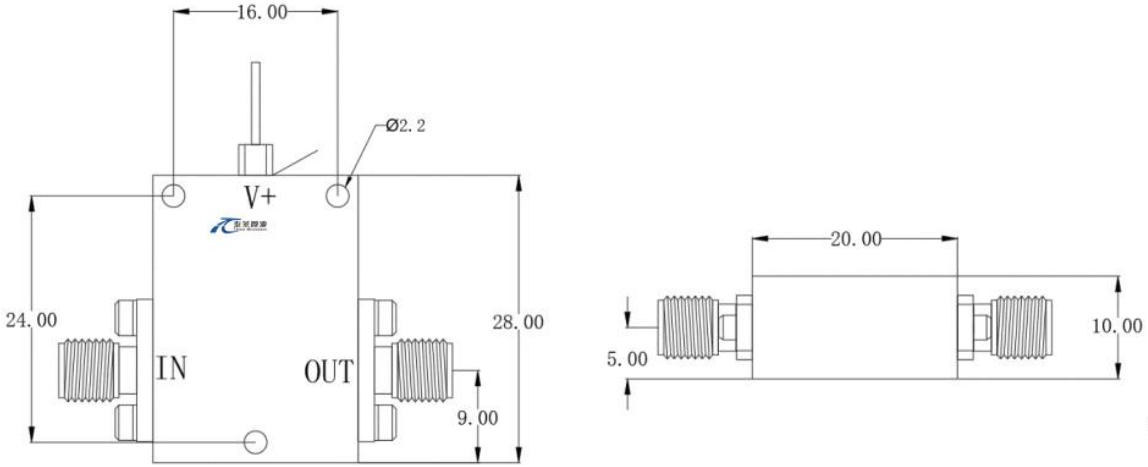
Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+12V
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:

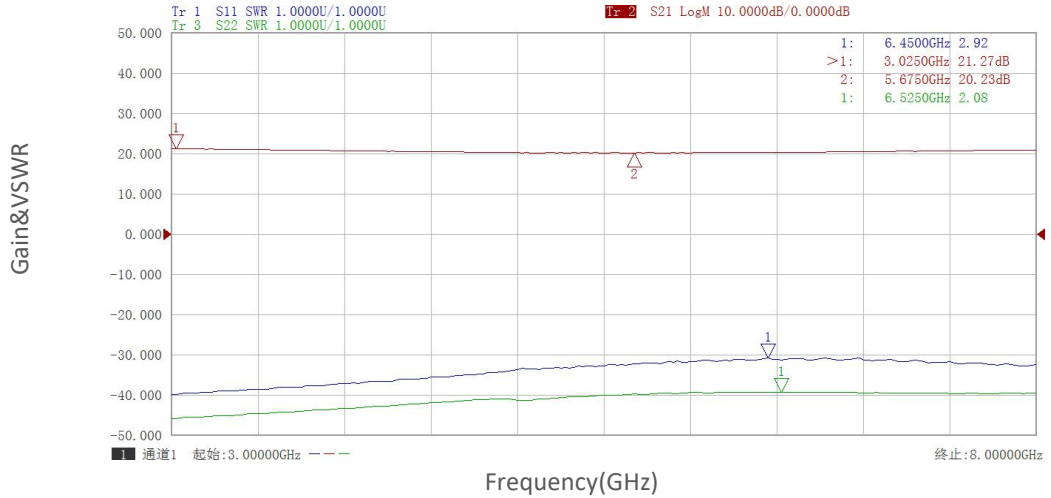
Parameter	Min	Typ	Max	Units
Operating Temperature	-45		+85	°C
Non-operating Temperature	-55		+125	°C
Relative humidity		95		%
Altitude	50,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

Ordering Information:

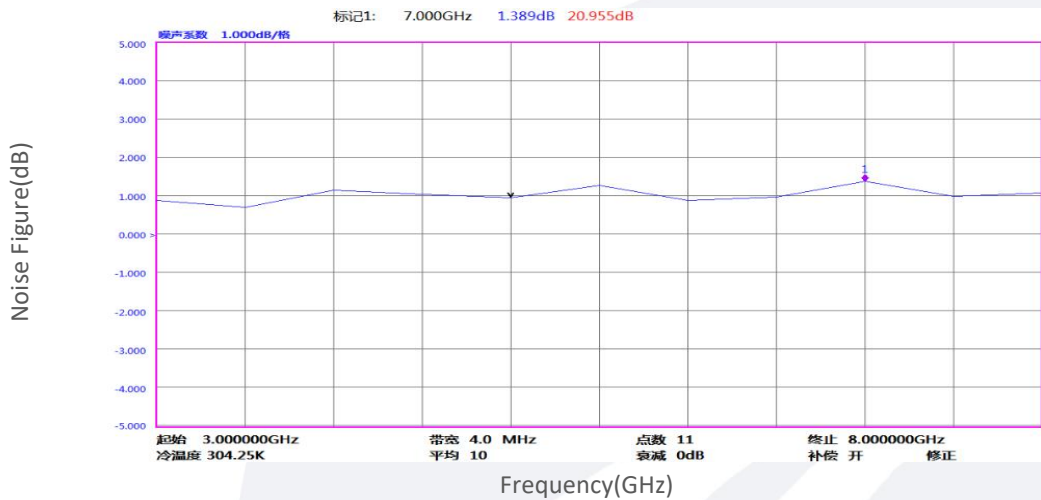
Part Number	Description	Revision
TLLA3G8G-21-09	Low Noise Amplifier, 3-8GHz, Noise Figure:0.9dB, Gain:21 dB,P1dB:17dBm,+8V DC,Without Heatsink	Rev.1.1
TLLA3G8G-21-09-HS	Low Noise Amplifier, 3-8GHz, Noise Figure:0.9dB, Gain:21 dB,P1dB:17dBm,+8V DC,With Heatsink	Rev.1.1

Typical Performance Data:

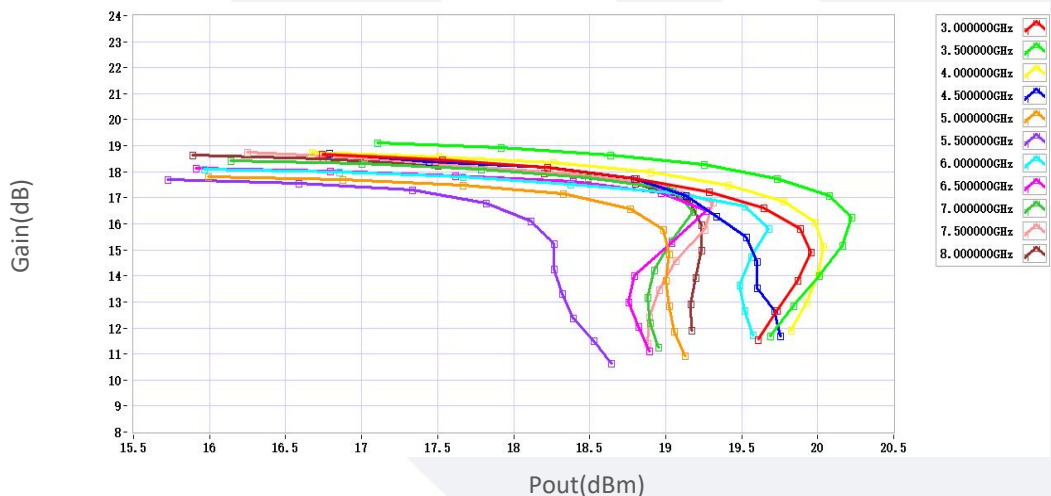
Gain&VSWR vs Frequency



Noise Figure vs Frequency

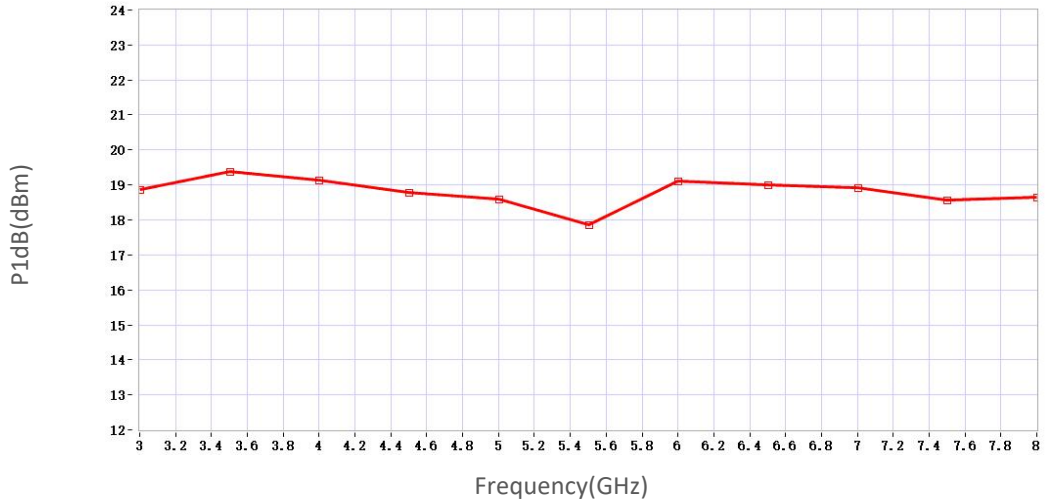


Gain vs Output Power

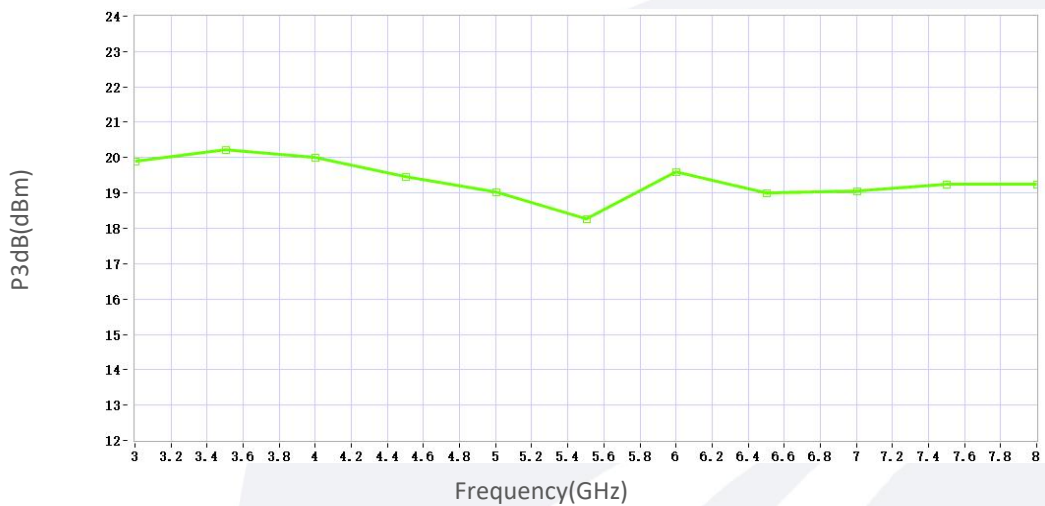


Typical Performance Data:

P1dB vs Frequency



P3dB vs Frequency



Psat vs Frequency

