

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

电气特性 Electrical Specifications:

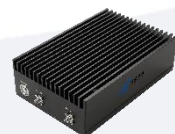
参数 Parameter	Min	Typ	Max	单位 Units
频率范围 Frequency range	3-8			GHz
增益 Gain	20	21		dB
增益平坦度 Gain Flatness		±1.0		dB
噪声系数 Noise Figure		0.9		dB
线性输出功率 Output P1dB	16	17		dBm
饱和输出功率 Output Psat	17	18		dBm
输入驻波 Input VSWR		2.5		:1
输出驻波 Output VSWR		2		:1
直流电压 DC Voltage	5.5	8	12	V DC
直流电流 DC Supply Current		50		mA
阻抗 Impedance	50			Ohms

机械特性 Mechanical Specifications:

参数 Parameter	指标 Value	单位 Units
输入/输出接口 Input /Output Connector	SMA Female/SMA Female	
直流偏置 DC Bias	Solder Pin	
尺寸 Size	24*16*10	mm
重量 Weight	/	g

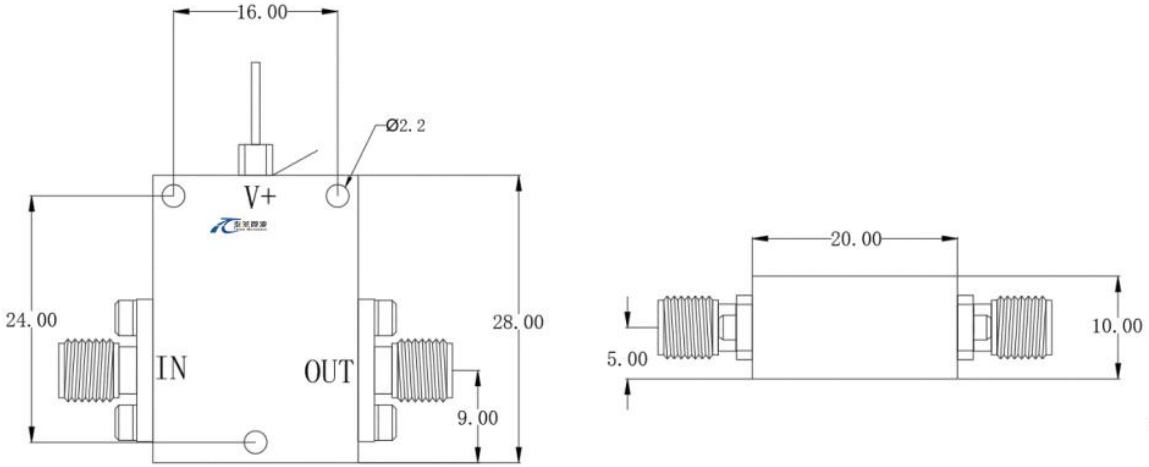
绝对最大值 Absolute Maximum Ratings:

参数 Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	+12V
输入功率 RF Input Power	10 dBm
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V


**Available 220V System
Benchtop Amplifier**

外形尺寸 Outline Drawing:

Unit: mm(inches)



*****Heat Sink Required During Operation**



OBSERVE PRECAUTIONS
ELECTROSTATIC SENSITIVE
DEVICES

温度环境 Environmental Conditions:

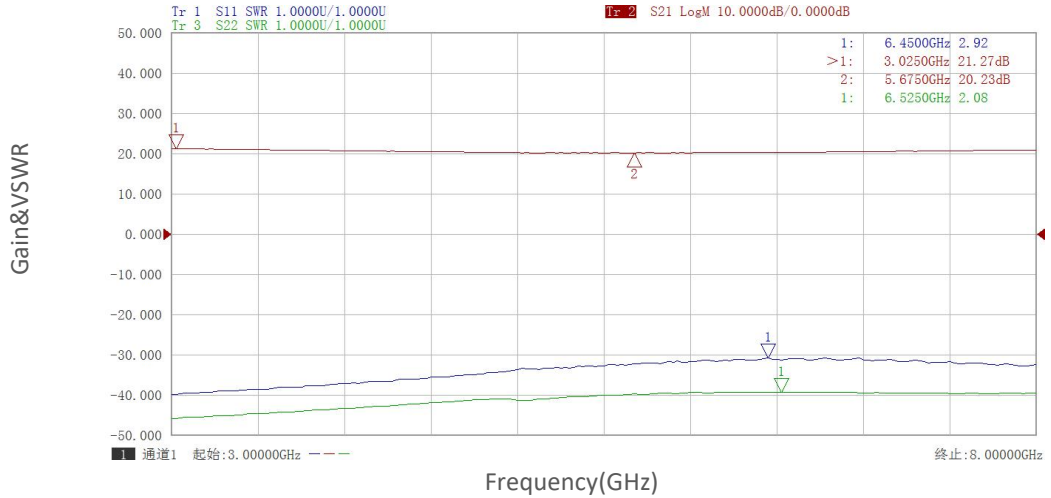
参数 Parameter	Min	Typ	Max	单位 Units
操作温度 Operating Temperature	-45		+85	°C
存储温度 Non-operating Temperature	-55		+125	°C
相对湿度 Relative humidity		95		%
海拔 Altitude	50,000			feet
震动 Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
冲击 Shock(non operating)	20G for 11msc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

订货信息 Ordering Information:

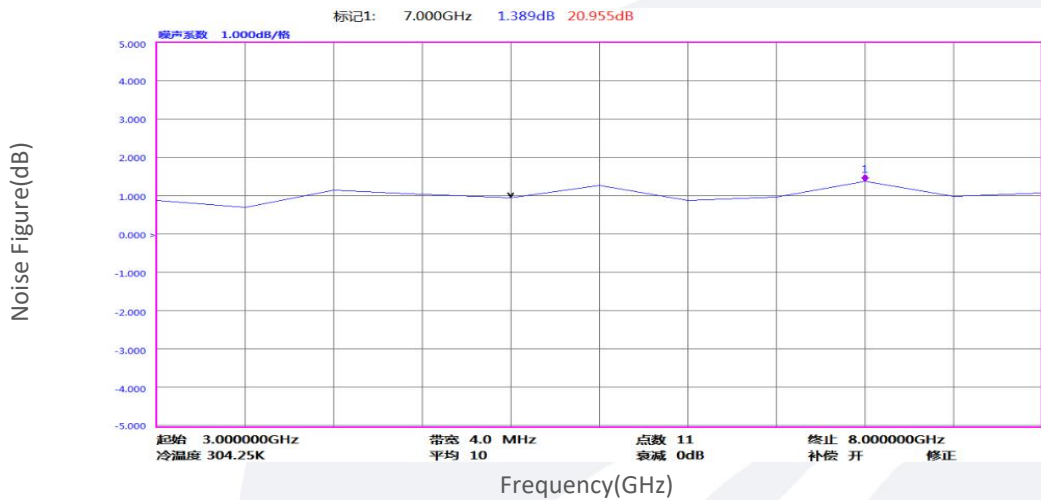
标准型号 Part Number	描述 Description	版本号 Revision
TLLA3G8G-21-09	Low Noise Amplifier, 3-8GHz, Noise Figure:0.9dB, Gain:21 dB,P1dB:17dBm,+8V DC,Without Heatsink	Rev.1.1
TLLA3G8G-21-09-HS	Low Noise Amplifier, 3-8GHz, Noise Figure:0.9dB, Gain:21 dB,P1dB:17dBm,+8V DC,With Heatsink	Rev.1.1

典型曲线 Typical Performance Data:

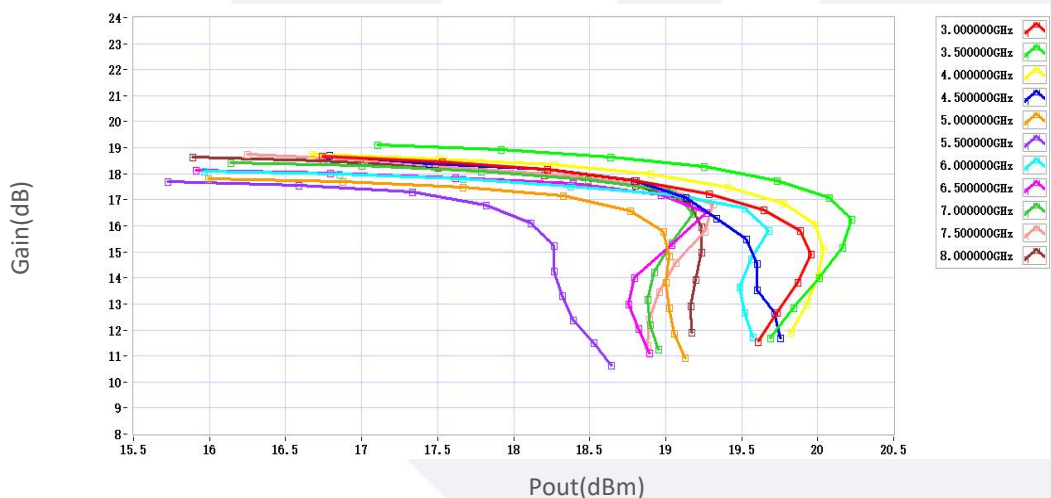
Gain&VSWR vs Frequency



Noise Figure vs Frequency

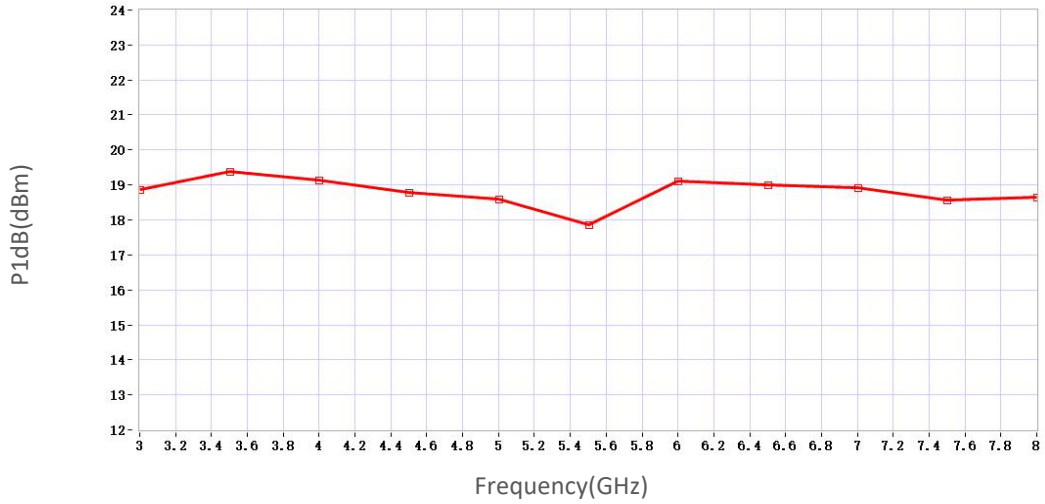


Gain vs Output Power

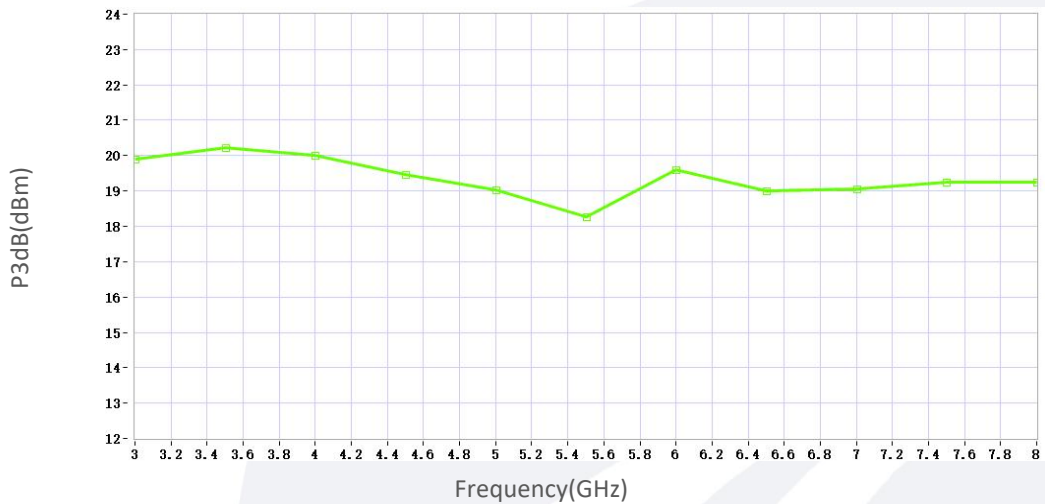


典型曲线 Typical Performance Data:

P1dB vs Frequency



P3dB vs Frequency



Psat vs Frequency

