

Model: TLLA1G18G-13-20
Low Noise Amplifier
1-18GHz, NF:2.0dB, Gain:13dB, P1dB:14dBm
Feature:

- Ultra Wide Band: 1-18GHz
- Gain: 13dB Min
- Noise Figure: 2.0dB Typ
- Unconditional stability
- 50 Ohm Matched Input / Output

电气特性 Electrical:

参数Parameter	Min.	Typ.	Max.	单位Units
频率范围 Frequency range	1-18			GHz
增益 Gain	13	14		dB
增益平坦度 Gain Flatness		±1.0		dB
噪声系数 Noise Figure		2.0	2.5	dB
线性输出功率P1dB	13	14		dBm
输入驻波 Input VSWR		1.9		: 1
输出驻波 Output VSWR		2.0		: 1
直流电压 DC Voltage		+12		V DC
直流供电 DC power supply		50		mA
阻抗 Impedance	50			Ohms

机械特性 Mechanical :

参数Parameter	指标 Value
输入输出接口 Input /Output Connector	SMA Female
直流偏置 Bias	Solder Pin
尺寸 Size	44.8mm*29.2mm*11mm
重量 Weight	/

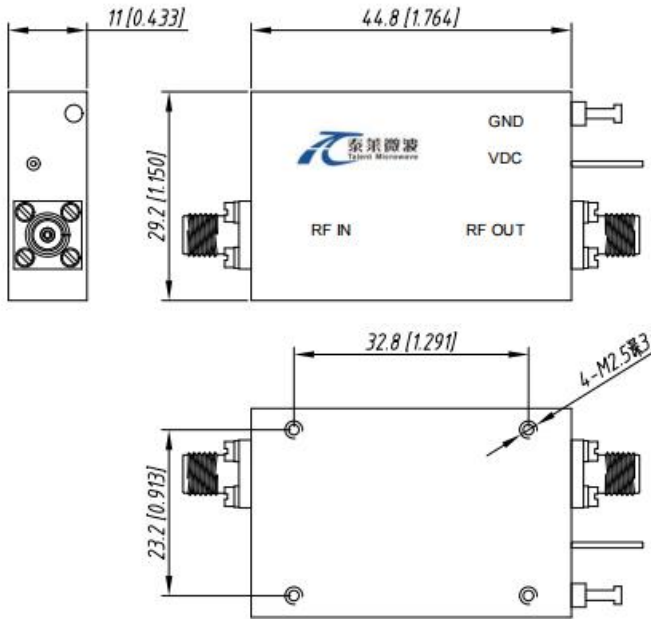

 Available 220V System
 Benchtop Amplifier

绝对最大值 Absolute Maximum Ratings:

参数Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	TBD
输入功率 RF INPUT POWER	20 dBm
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V

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:

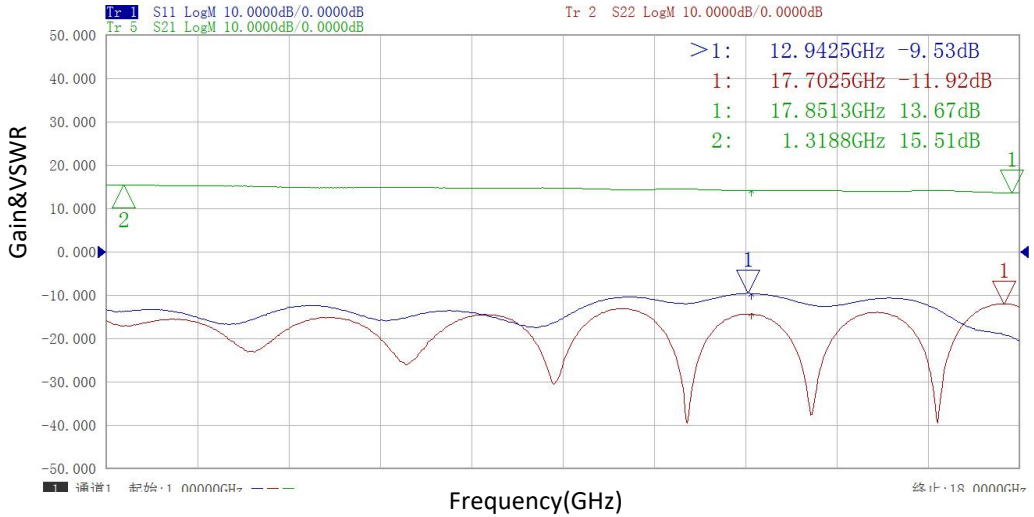
参数Parameter	Min.	Typ.	Max.	单位Units
操作温度 Operating Temperature	-40		+85	°C
存储温度 Non-operating Temperature	-55		+125	°C
相对湿度 Relative humidity	95			
海拔 Altitude	50000			feet
震动 Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
冲击 Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

订货信息 Ordering Information:

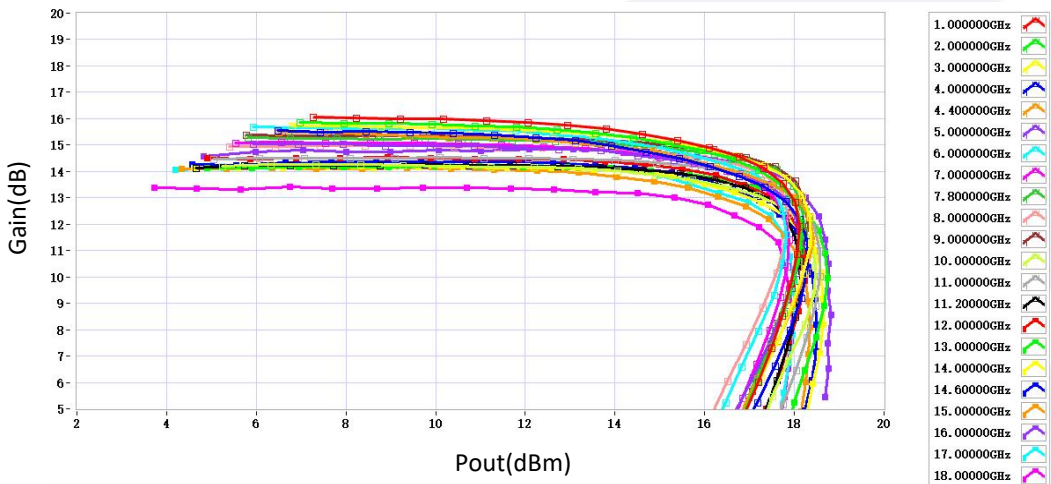
标准型号 Part Number	描述 Description	版本号Revision
TLLA1G18G-13-20	Low Noise Amplifier, 1-18GHz, Noise Figure:2.0 dB, Gain:13 dB,P1dB:14dBm,12V DC,Without Heatsink	Rev.1.1
TLLA1G18G-13-20-HS	Low Noise Amplifier, 1-18GHz, Noise Figure:2.0 dB, Gain:13 dB,P1dB:14dBm,12V DC,With Heatsink	Rev.1.1

典型曲线 Typical Performance Data:

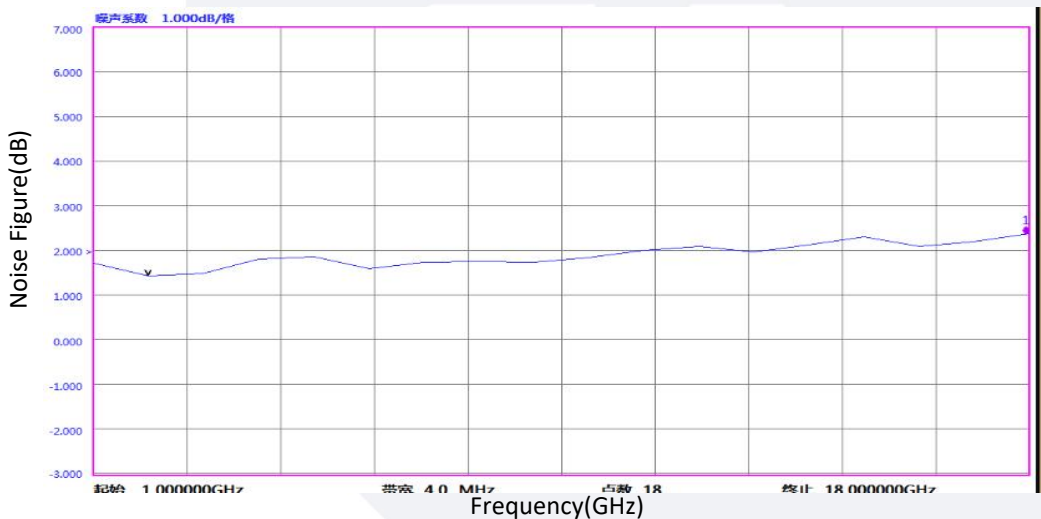
Gain&VSWR vs Frequency



Gain vs Output Power

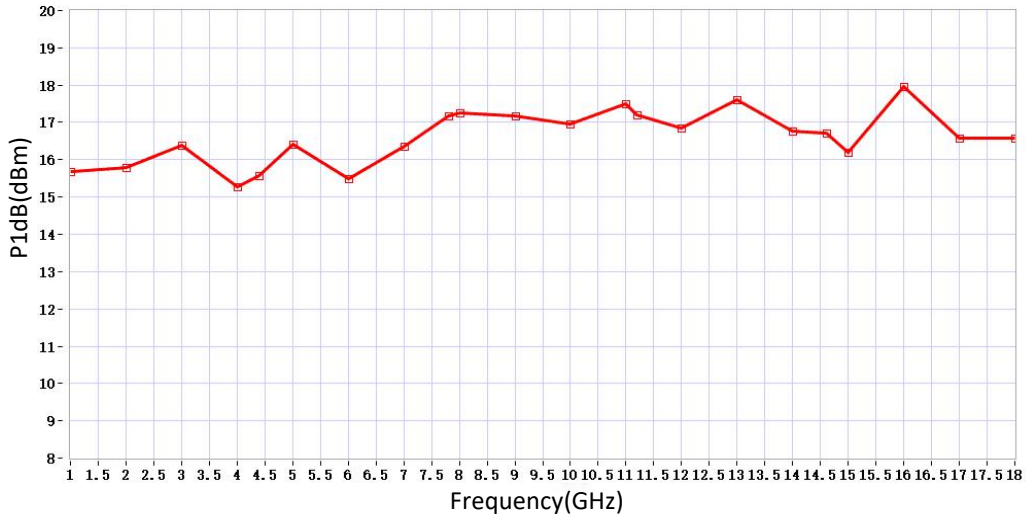


Noise Figure vs Frequency

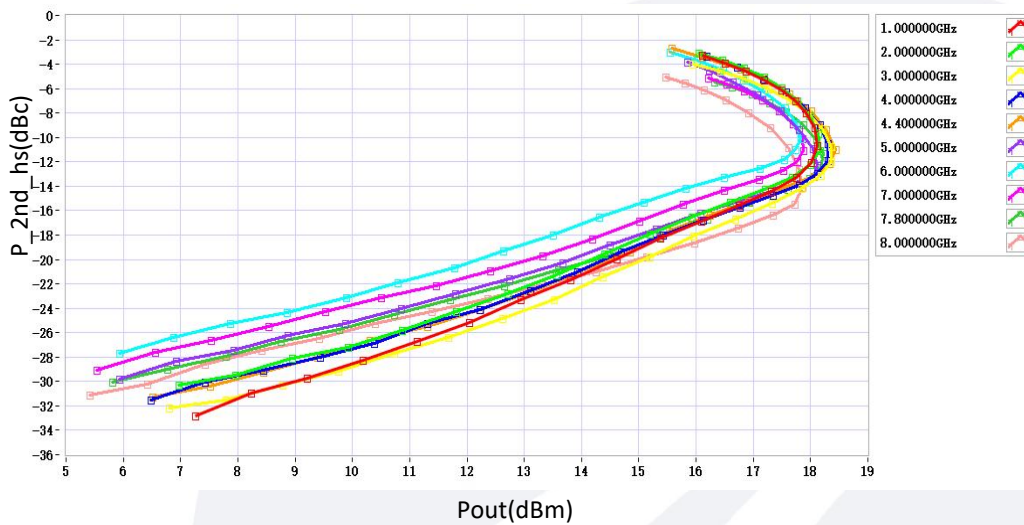


典型曲线 Typical Performance Data:

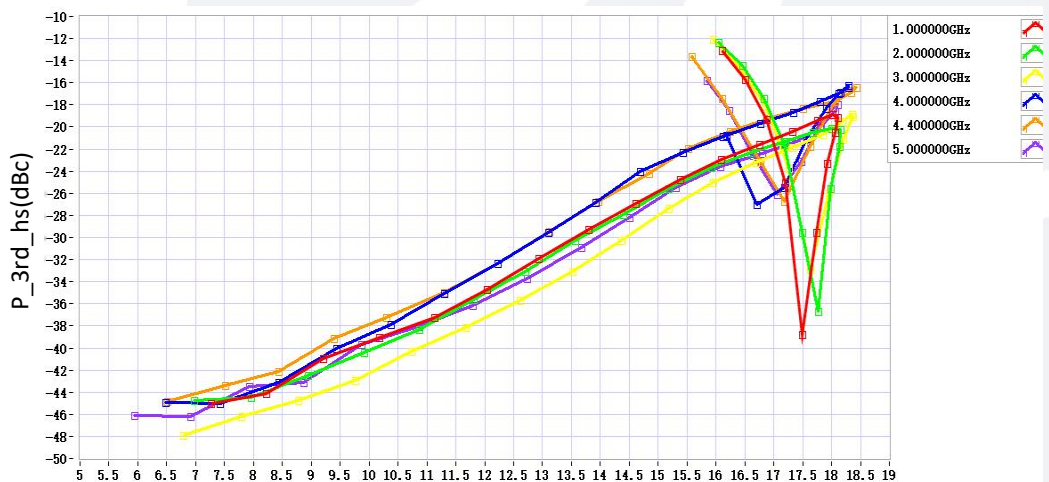
P1dB vs Frequency



2nd Harmonic vs Output Power



3rd Harmonic vs Output Power



典型曲线 Typical Performance Data:

Current vs Output Power

