

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
- 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	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	2.5	dB
线性输出功率 Output P1dB	13	14		dBm
输入驻波 Input VSWR		1.9		:1
输出驻波 Output VSWR		2		:1
直流电压 DC Voltage		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	44.8*29.2*11	mm
重量 Weight	55	g

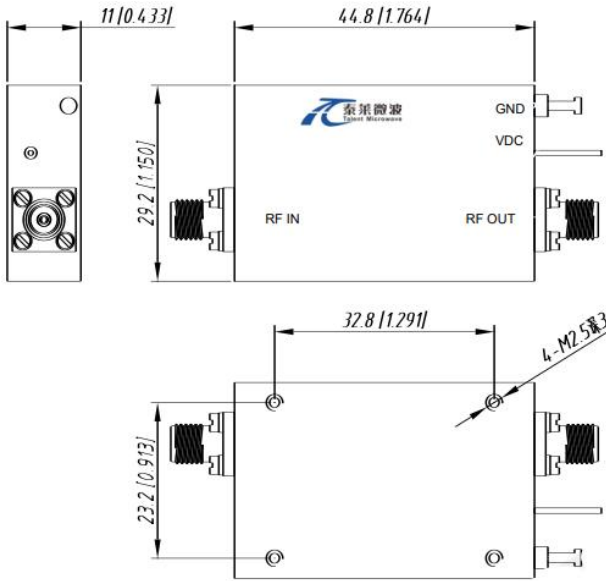
绝对最大值 Absolute Maximum Ratings:

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


**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:

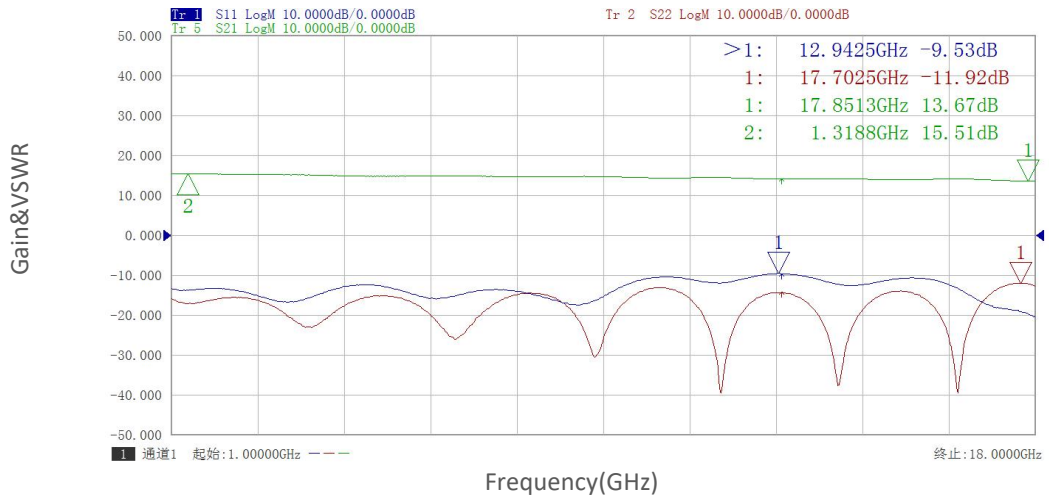
参数 Parameter	Min	Typ	Max	单位 Units
操作温度 Operating Temperature	-40		+85	°C
存储温度 Non-operating Temperature	-55		+125	°C
相对湿度 Relative humidity		95		%
海拔 Altitude	50,000			feet
震动 Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
冲击 Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

订货信息 Ordering Information:

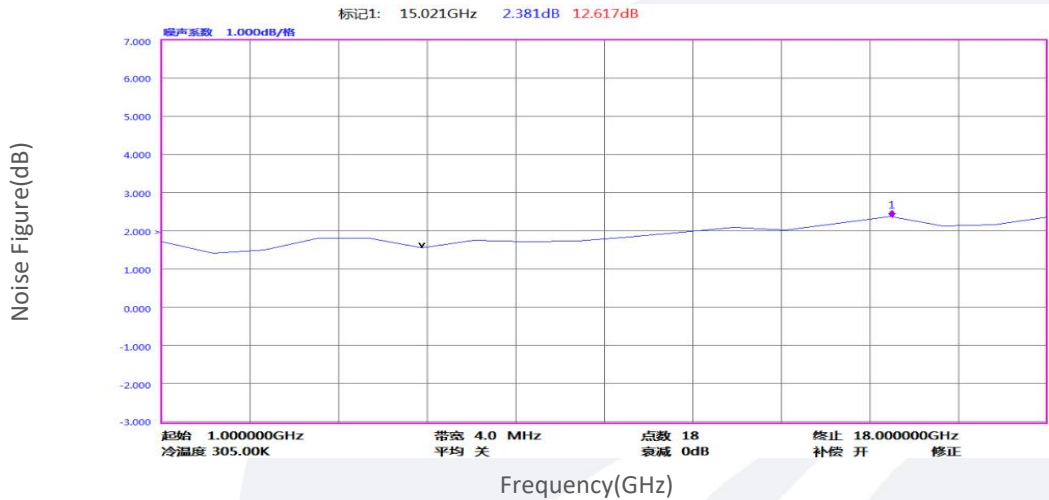
标准型号 Part Number	描述 Description	版本号 Revision
TLLA1G18G-13-20	Low Noise Amplifier, 1-18GHz, Noise Figure:2.0dB, Gain:13 dB,P1dB:14dBm,+12V DC,Without Heatsink	Rev.1.1
TLLA1G18G-13-20-HS	Low Noise Amplifier, 1-18GHz, Noise Figure:2.0dB, Gain:13 dB,P1dB:14dBm,+12V DC,With Heatsink	Rev.1.1

典型曲线 Typical Performance Data:

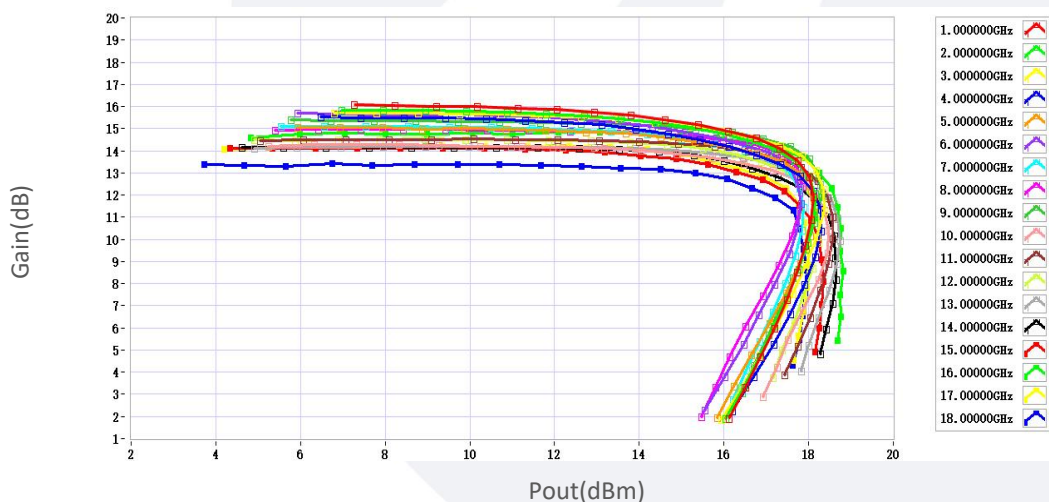
Gain&VSWR vs Frequency



Noise Figure vs Frequency

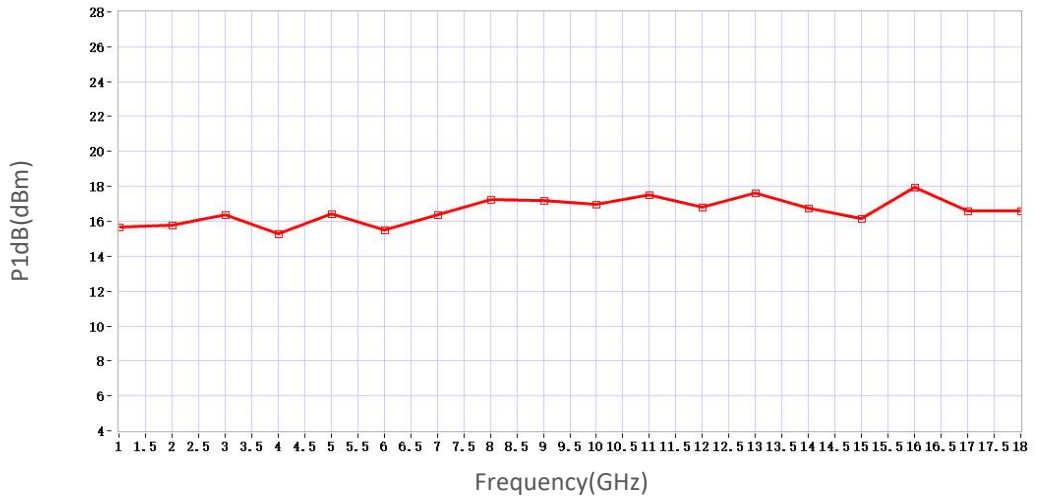


Gain vs Output Power

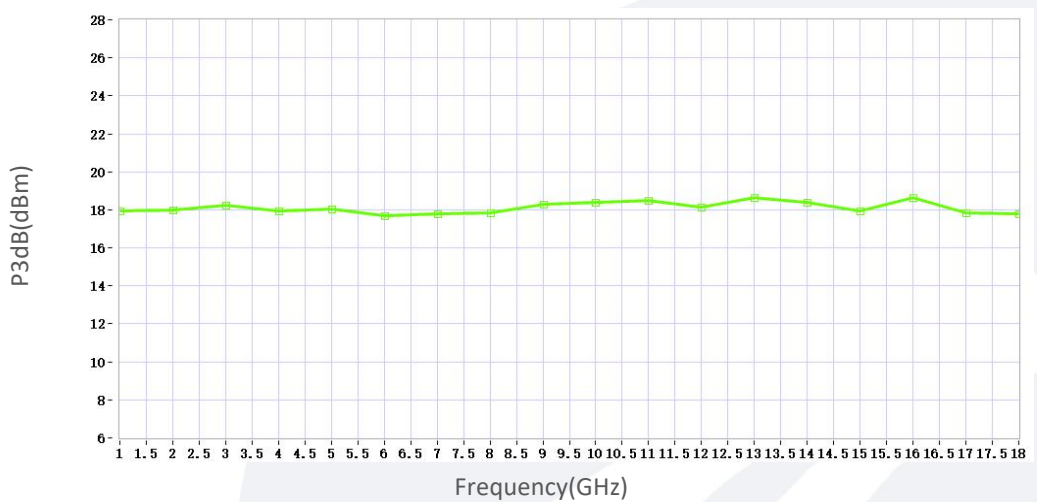


典型曲线 Typical Performance Data:

P1dB vs Frequency



P3dB vs Frequency



Psat vs Frequency

