

Model: TLLA1G18G-35-25
Low Noise Amplifier
1-18GHz, NF:2.5dB, Gain:35dB, P1dB:15dBm
Feature:

- Ultra Wide Band: 1-18GHz
- Gain: 35dB Min
- Noise Figure: 2.5dB Typ
- Good Power and Gain Flatness
- 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	35			dB
增益平坦度 Gain Flatness		±2.0		dB
噪声系数 Noise Figure		2.5	3.0	dB
线性输出功率P1dB	15	19		dBm
输出三阶交调 Output IP3		25		dBm
输入驻波 Input VSWR		2.0	2.2	:1
输出驻波 Output VSWR		2.0	2.2	:1
直流电压 DC Voltage		+5	+12	V DC
直流电流 DC Supply Current		160		mA
阻抗 Impedance	50			Ohms

机械特性 Mechanical :

参数Parameter	指标 Value	单位Units
输入输出接口 Input /Output Connector	SMA Female	
直流偏置 Bias	Solder Pin	
尺寸 Size	44.8*29.2*11	mm
重量 Weight	55	g

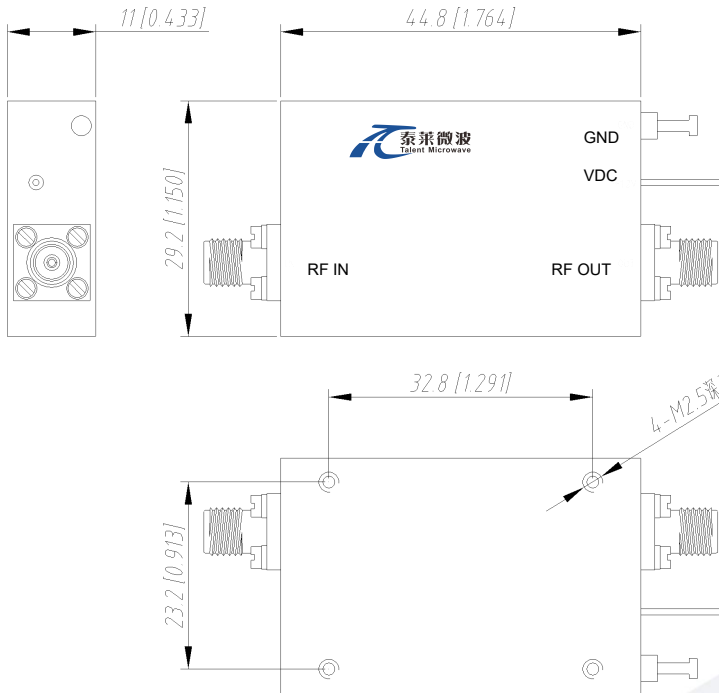

 Available 220V System
 Benchtop Amplifier

绝对最大值 Absolute Maximum Ratings:

参数Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	+12V max
输入功率 RF INPUT POWER	10 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**

温度环境 Environmental Conditions:

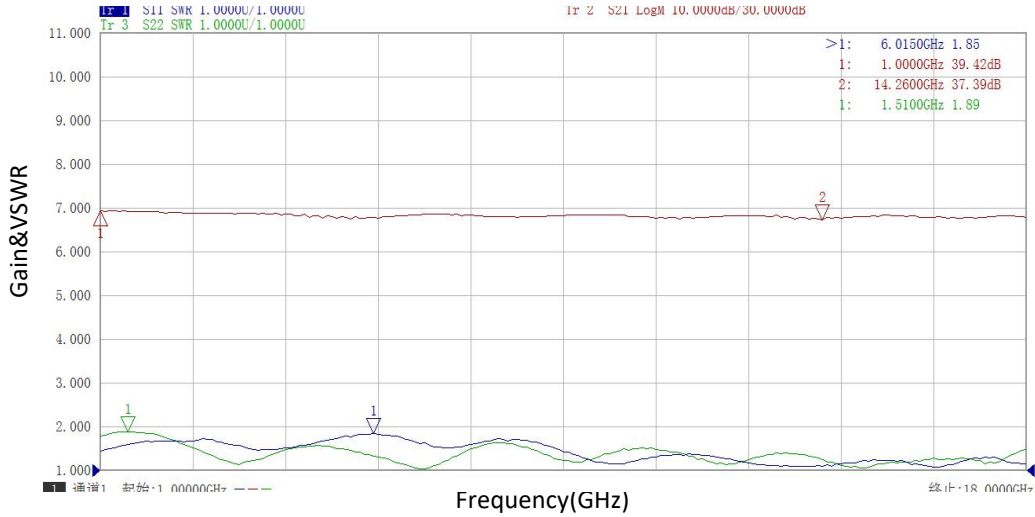
参数Parameter	Min.	Typ.	Max.	单位Units
操作温度 Operating Temperature	-44		+85	°C
存储温度 Non-operating Temperature	-55		+125	°C
相对湿度 Relative humidity		95		%
海拔 Altitude	50,000			feet
震动 Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
冲击 Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

订货信息 Ordering Information:

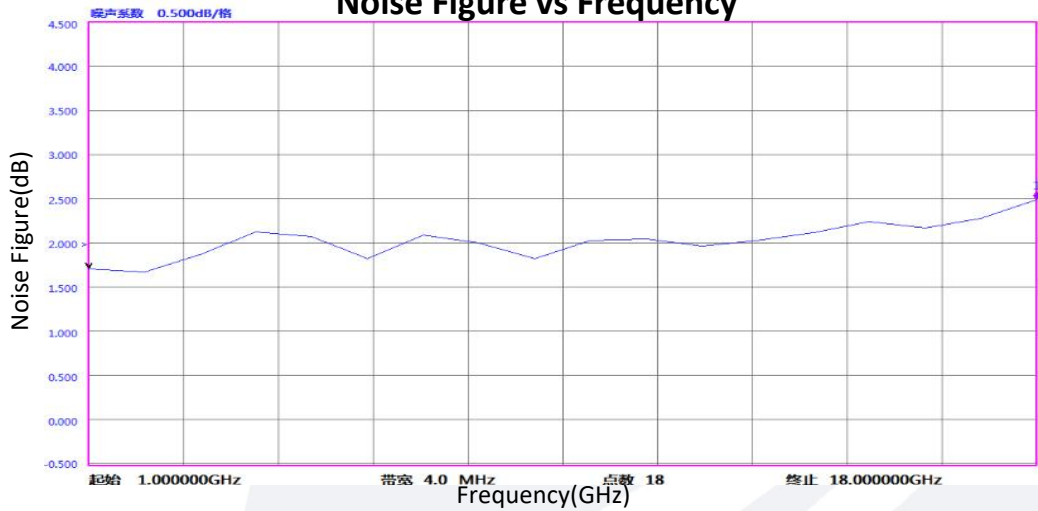
标准型号 Part Number	描述 Description	版本号Revision
TLLA1G18G-35-25	Low Noise Amplifier, 1-18GHz, Noise Figure:2.5dB, Gain:35 dB,P1dB:15dBm,5V DC,Without Heatsink	Rev.1.1
TLLA1G18G-35-25-HS	Low Noise Amplifier, 1-18GHz, Noise Figure:2.5dB, Gain:35 dB,P1dB:15dBm,5V DC,With Heatsink	Rev.1.1

典型曲线 Typical Performance Data:

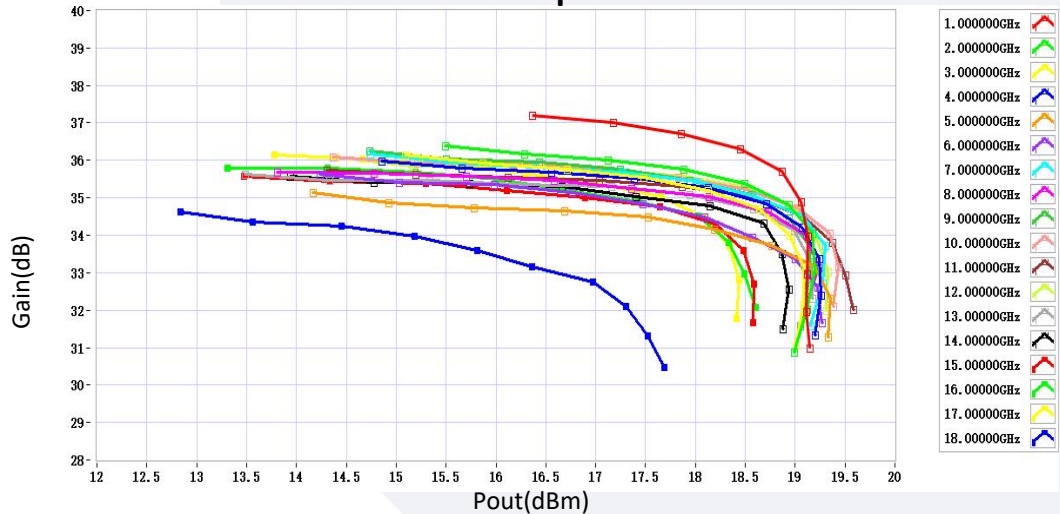
Gain&VSWR vs Frequency



Noise Figure vs Frequency

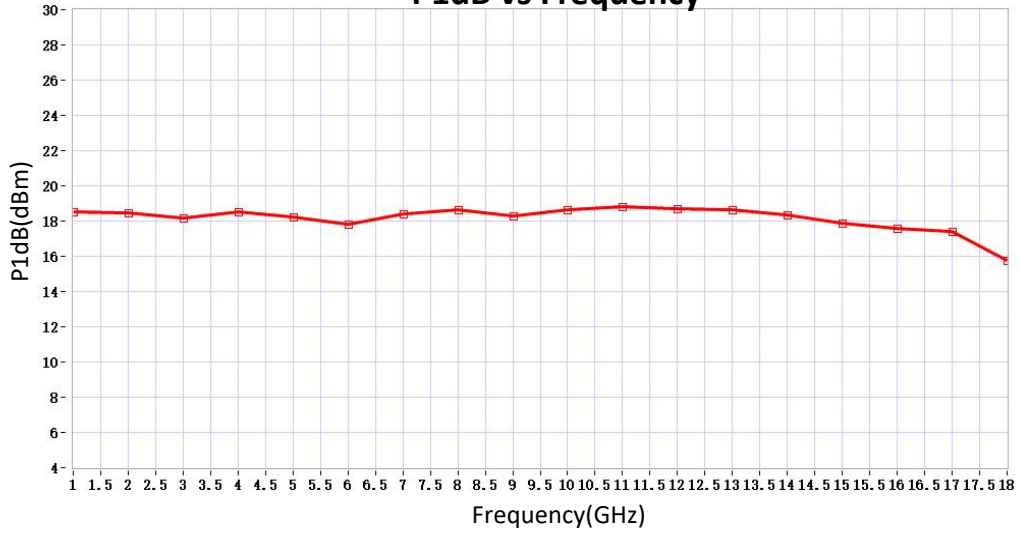


Gain vs Output Power

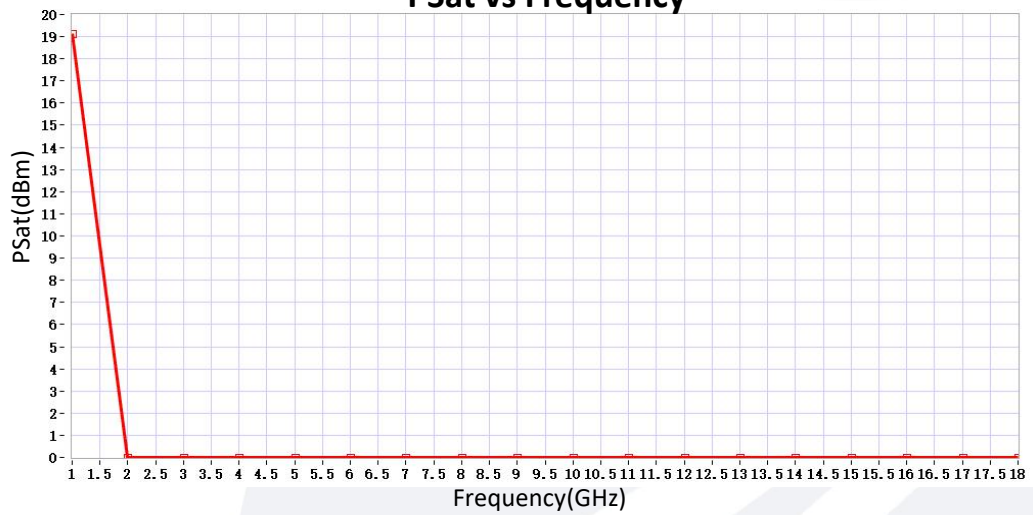


典型曲线 Typical Performance Data:

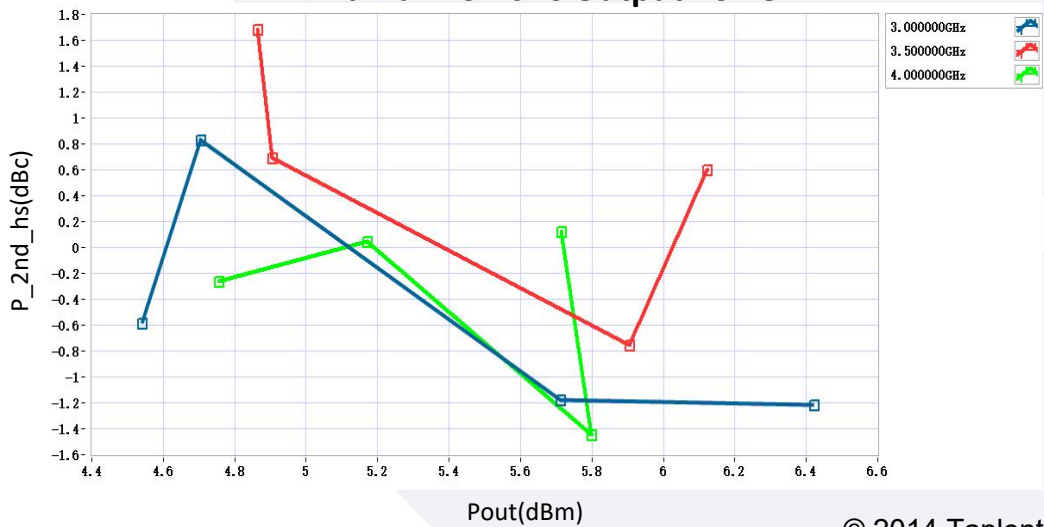
P1dB vs Frequency



PSat vs Frequency

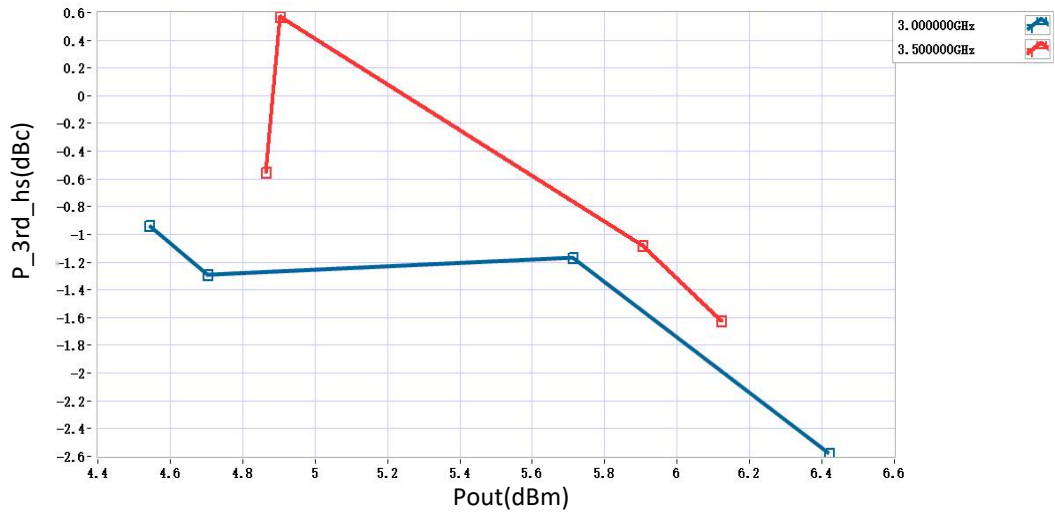


2nd Harmonic vs Output Power



典型曲线 Typical Performance Data:

3rd Harmonic vs Output Power



Current vs Output Power

