

Model:TLLA2G40G-30-45

Low Noise Amplifier 2-40GHz, NF:5.5dB, Gain:30dB,P1dB:19dBm

Feature:

- Ultra Wide Band: 2-40GHz
- Gain: 30dB Min
- Noise Figure: 5.5dB 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	2-40			GHz
增益 Gain	30	33		dB
增益平坦度 Gain Flantness		±2.5	±3.5	dB
噪声系数 Noise Figure		5.5	6.0	dB
线性输出功率P1dB	15	19		dBm
饱和输出功率 Saturated Output Power(Psat)		20		dBm
杂散 Spurious		60		dBc
输入驻波 Input VSWR		1.8	2.2	: 1
输出驻波 Output VSWR		1.8	2.5	: 1
直流电压 DC Voltage		+12		V DC
直流供电 DC power supply		450		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	2.92mm-Female/2.92mm-Female
直流偏置 Bias	Solder Pin
尺寸 Size	35mm×40mm×12mm
重量 Weight	/



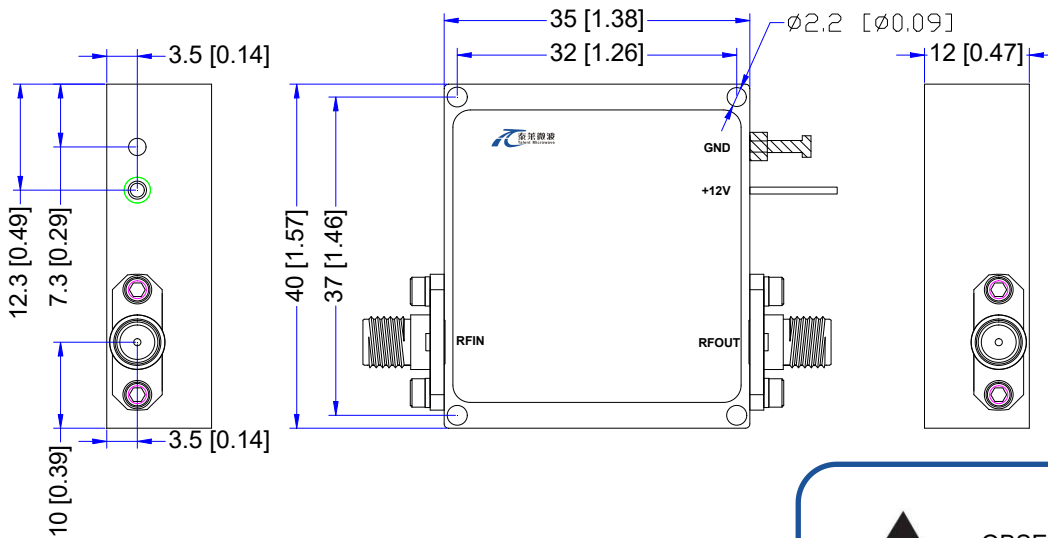
Available 220V System
Benchtop Amplifier

绝对最大值 Absolute Maximum Ratings:

参数Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	+12 V
输入功率 RF INPUT POWER	-15 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:

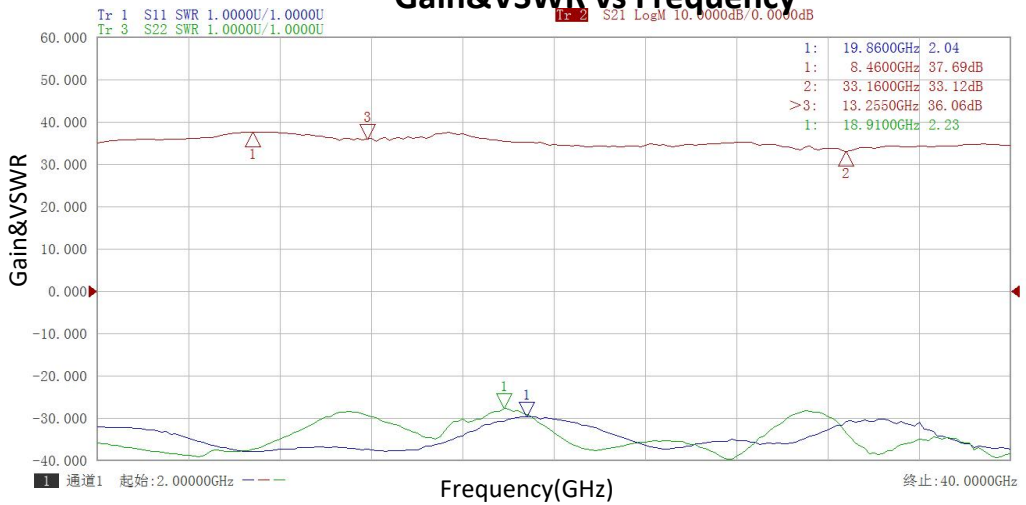
参数Parameter	Min.	Typ.	Max.	单位Units
操作温度 Operating Temperature	-25		+85	°C
存储温度 Non-operating Temperature	-55		+125	°C
相对湿度 Relative humidity	100% RH at 35c,95%RH at 40°C			
海拔 Altitude	50,000			feet
震动 Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
冲击 Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

订货信息 Ordering Information:

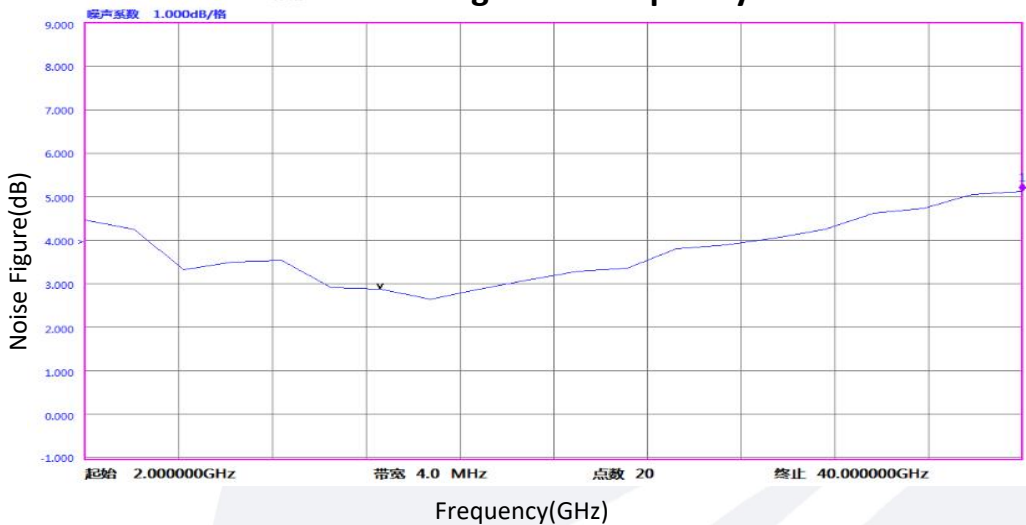
标准型号 Part Number	描述 Description	版本号Revision
TLLA2G40G-30-45	Low Noise Amplifier,2-40GHz,Noise Figure:5.5dB, Gain:30 dB,P1dB:19dBm,12V DC,Without Heatsink	Rev.1.1
TLLA2G40G-30-45-HS	Low Noise Amplifier,2-40GHz,Noise Figure:5.5dB, Gain:30 dB,P1dB:19dBm,12V DC,With Heatsink	Rev.1.1

典型曲线 Typical Performance Data:

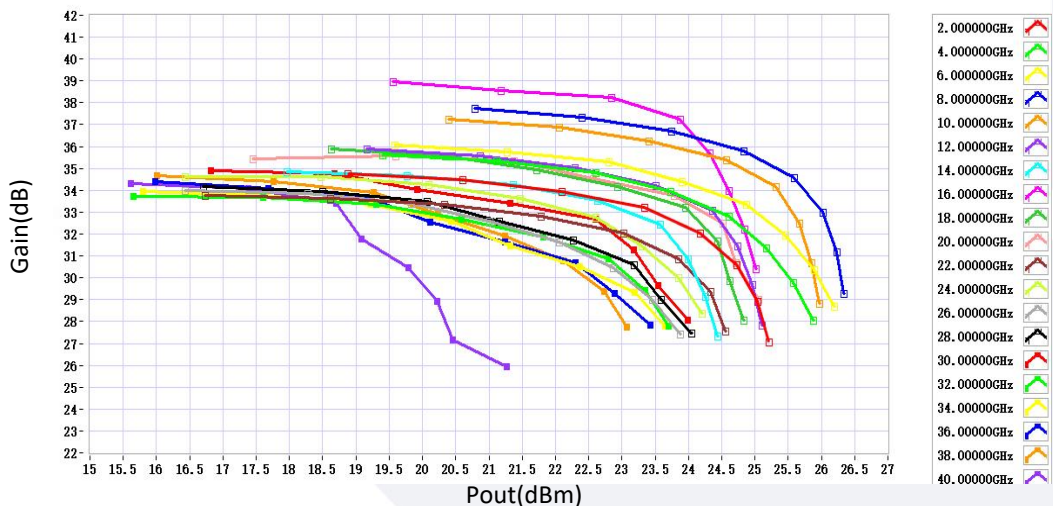
Gain&VSWR vs Frequency



Noise Figure vs Frequency

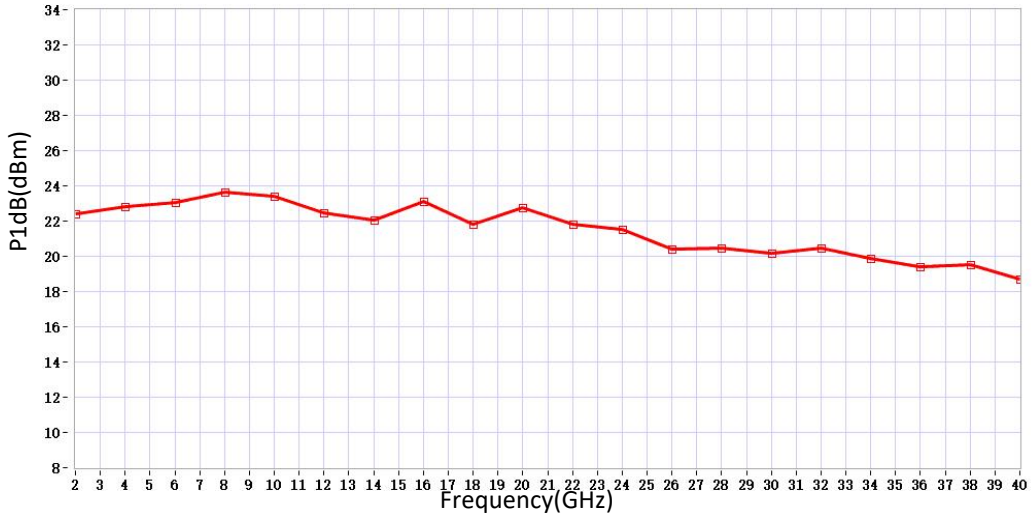


Gain vs Output Power

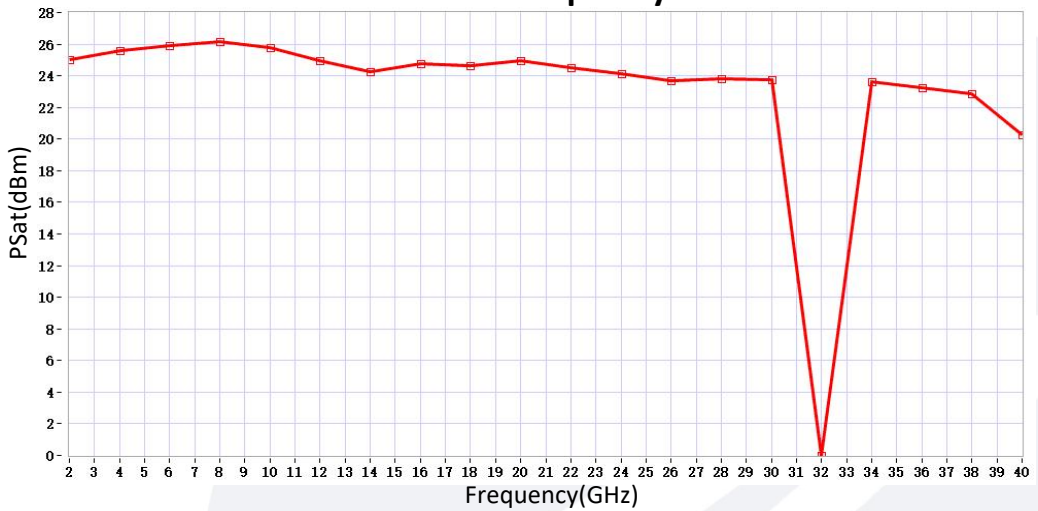


典型曲线 Typical Performance Data:

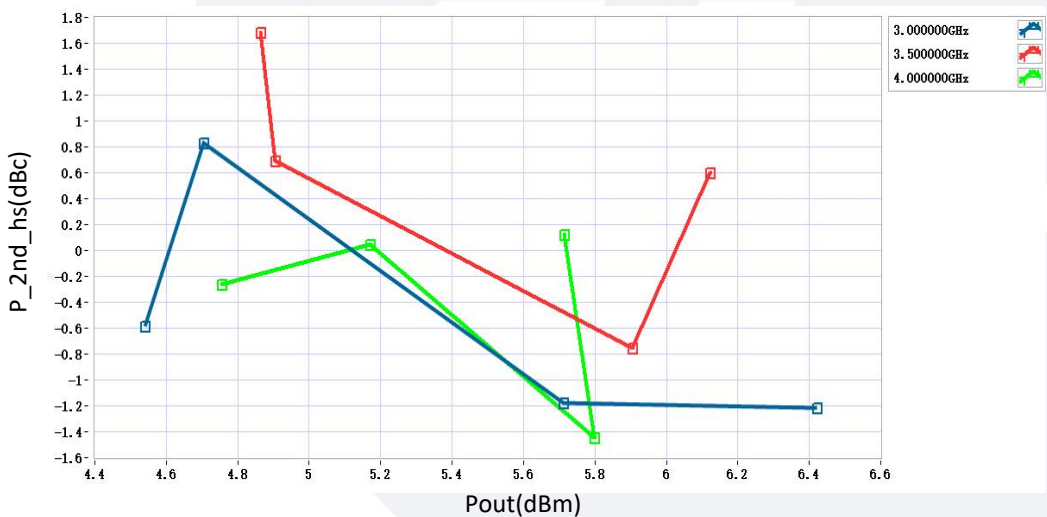
P1dB vs Frequency



PSat vs Frequency

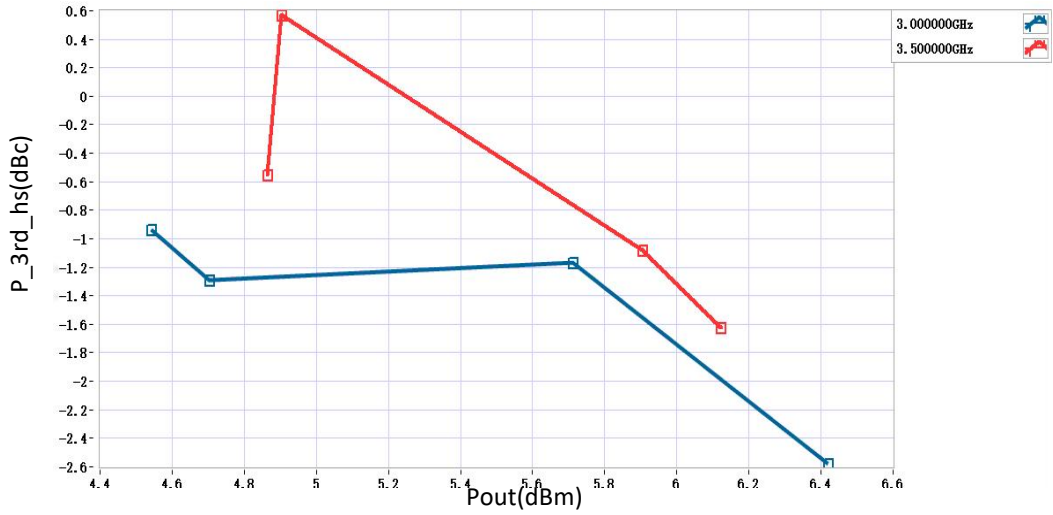


2nd Harmonic vs Output Power



典型曲线 Typical Performance Data:

3rd Harmonic vs Output Power



Current vs Output Power

