

Model: TLLA1G40G-40-45

Low Noise Amplifier

1-40GHz, NF:4.5 dB, Gain:43 dB, P1dB:20dBm

Feature:

- Ultra Wide Band: 1-40GHz
- Gain: 43dB Typ
- Noise Figure: 4.5dB 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	1-40			GHz
增益 Gain	40	43		dB
增益平坦度 Gain Flatness		±3.0		dB
噪声系数 Noise Figure		4.5	5.2	dB
线性输出功率 P1dB	17	20		dBm
饱和输出功率 Psat		21		dBm
输入驻波 Input VSWR		1.8	2.0	:1
输出驻波 Output VSWR		1.8	2.0	:1
杂散 Spurious		-60		dBc
三阶交调 OIP3		28		dBm
直流电压 DC Voltage		+12		V DC
直流电流 DC Supply Current		550		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	2.92mm Female	
直流偏置 Bias	Solder Pin	
尺寸 Size	40.3*35.3*12	mm
重量 Weight	/	g



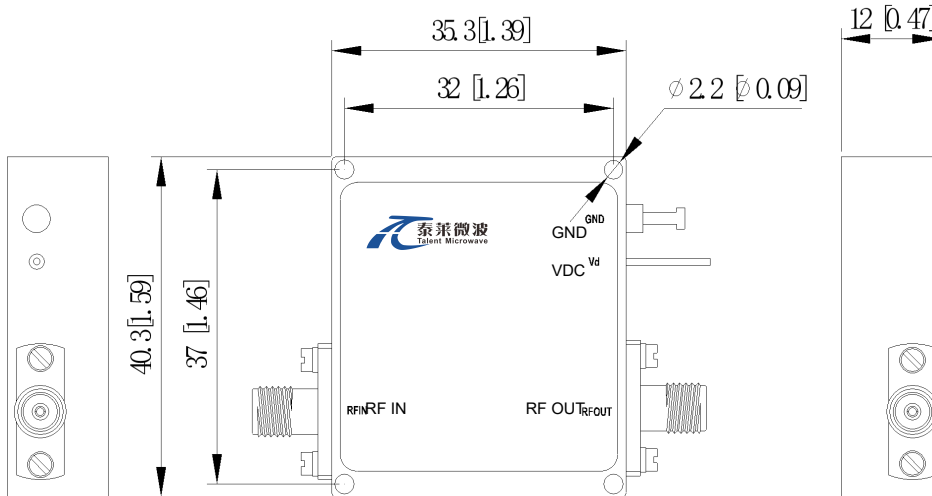
Available 220V System
Benchtop Amplifier

绝对最大值 Absolute Maximum Ratings:

参数Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	+15V
输入功率 RF INPUT POWER	-16dBm
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:

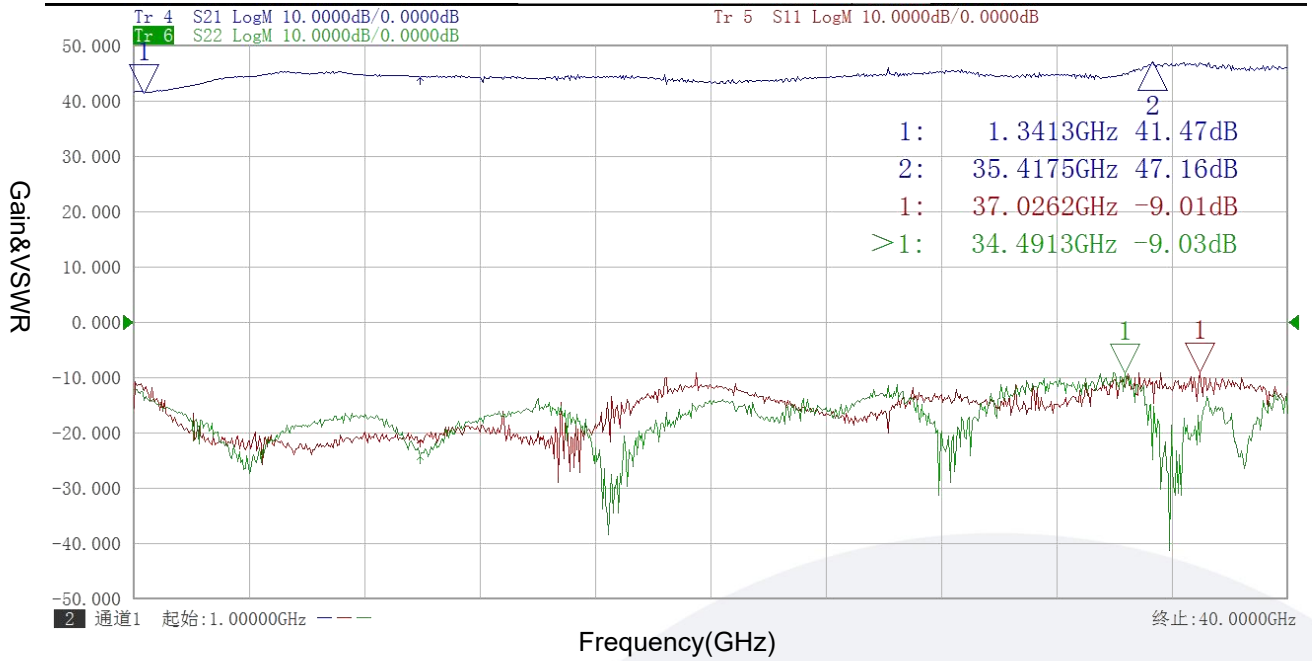
参数Parameter	Min.	Typ.	Max.	单位Units
操作温度 Operating Temperature	-45		+85	°C
存储温度 Non-operating Temperature	-55		+125	°C
相对湿度 Relative humidity	100% RH at 35c, 95%RH at 40°C			%
海拔 Altitude	50,000			feet
震动 Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
冲击 Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

订货信息 Ordering Information:

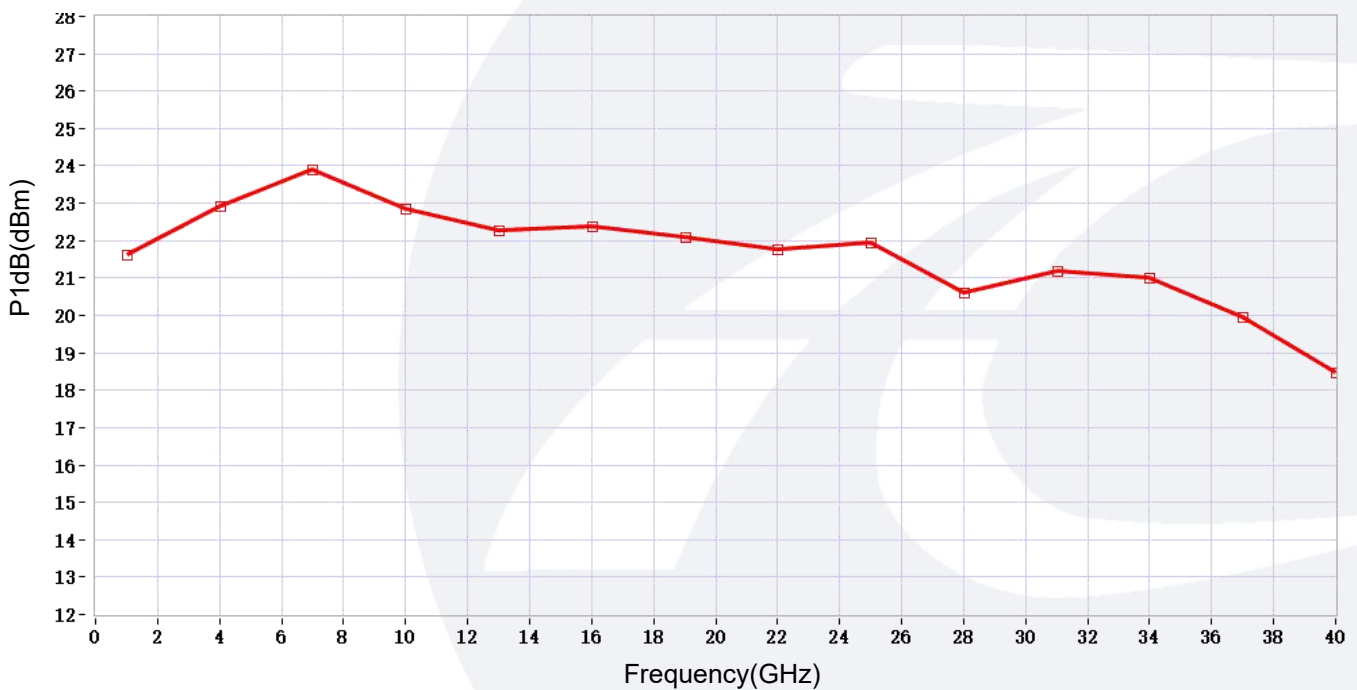
标准型号 Part Number	描述 Description	版本号Revision
TLLA1G40G-40-45	Low Noise Amplifier, 1-40GHz, Noise Figure:4.5dB, Gain:43dB,P1dB:20dBm,12V DC,Without Heatsink	Rev.1.1
TLLA1G40G-40-45-HS	Low Noise Amplifier, 1-40GHz, Noise Figure:4.5dB, Gain:43 dB,P1dB:20dBm,12V DC,With Heatsink	Rev.1.1

典型曲线 Typical Performance Data:

Gain&VSWR vs Frequency

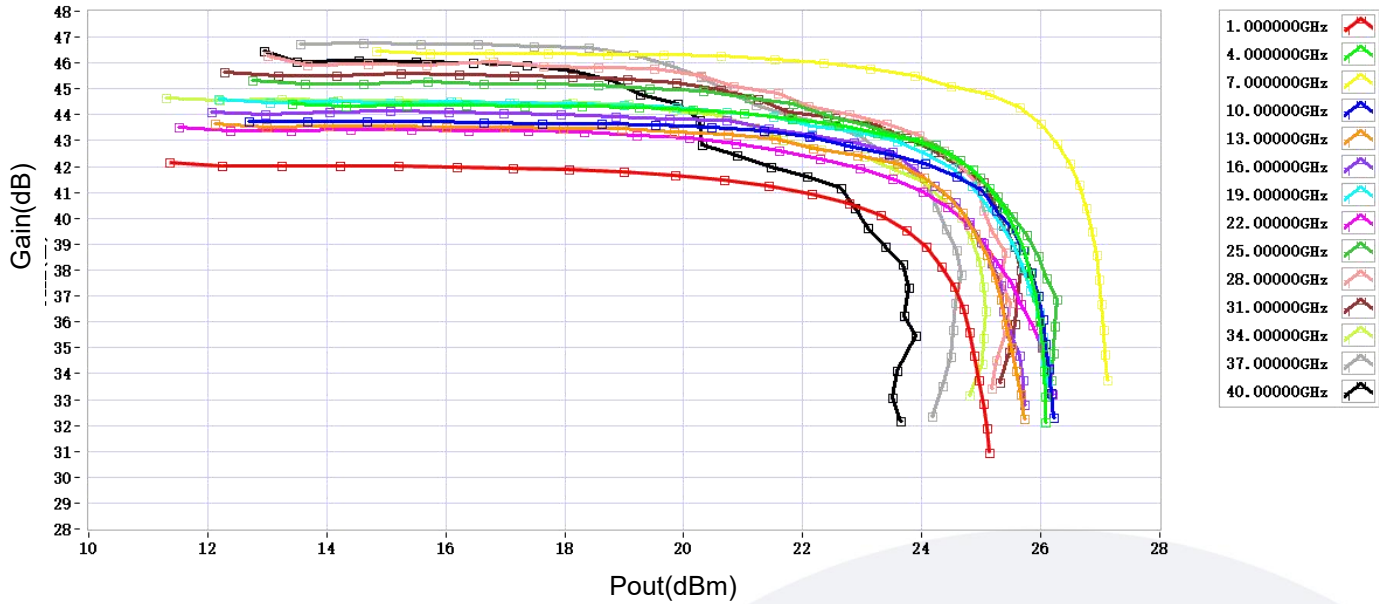


P1dB vs Frequency

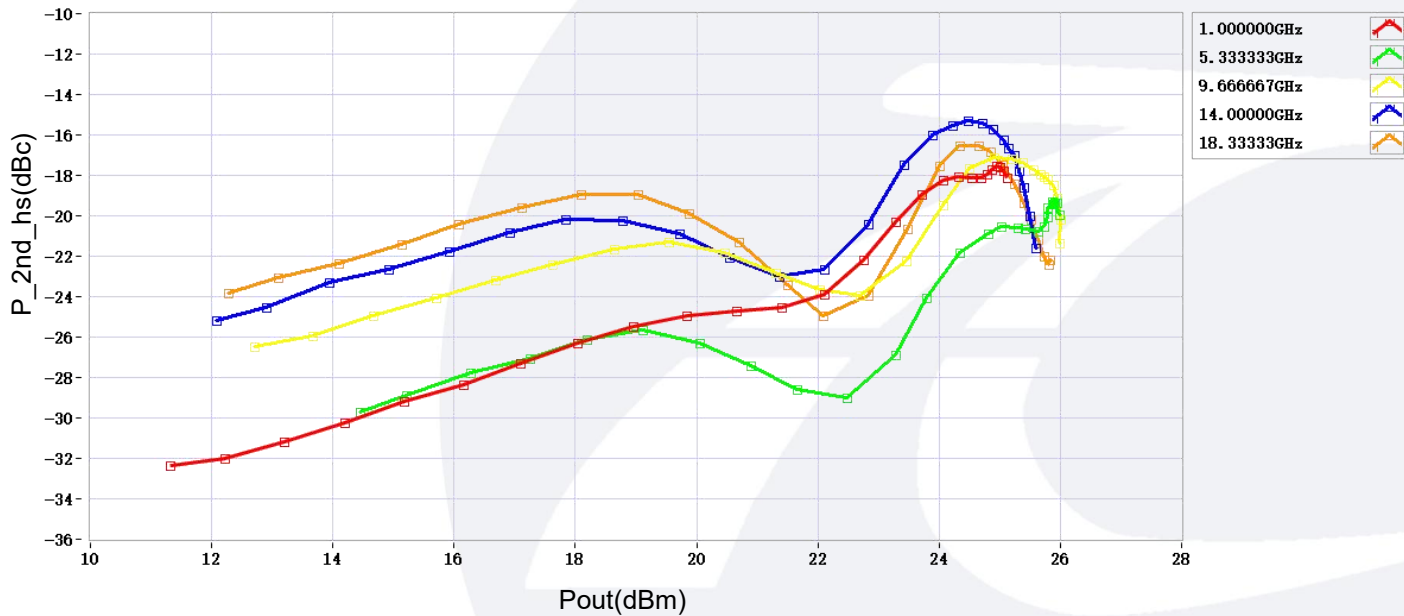


典型曲线 Typical Performance Data:

Gain vs Output Power

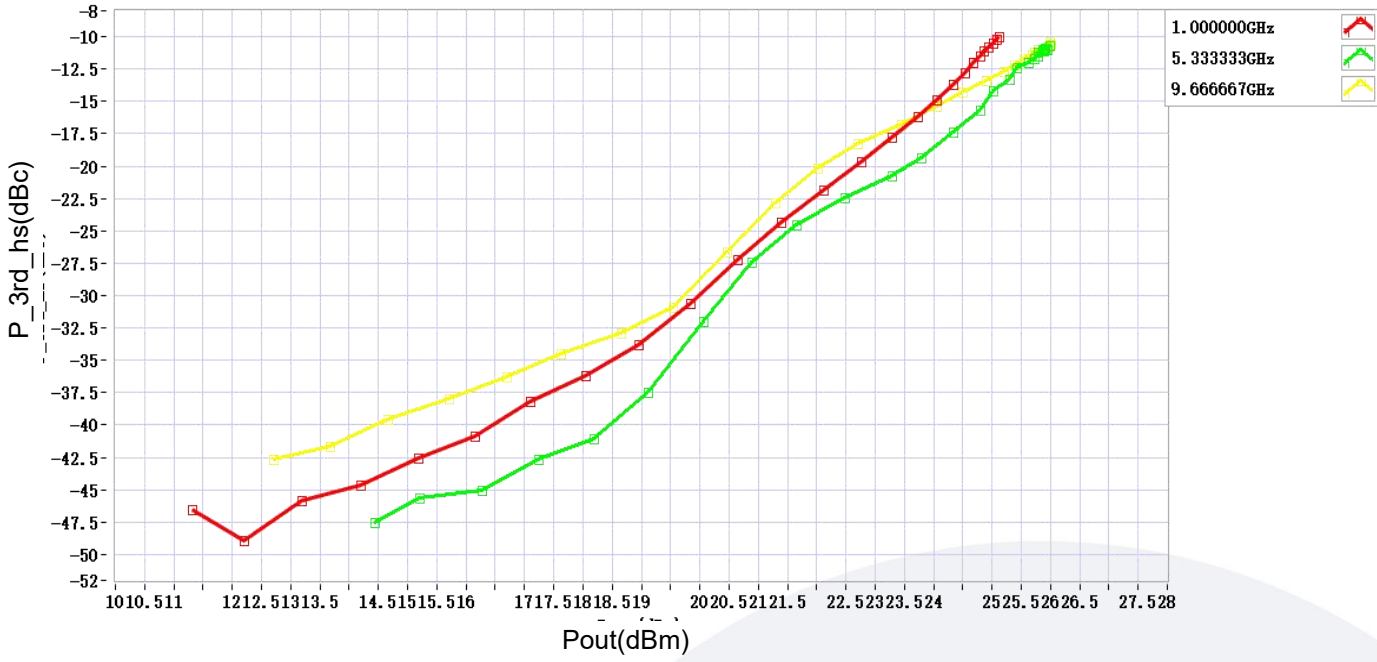


2nd Harmonic(dBc) vs Output Power



典型曲线 Typical Performance Data:

3rd Harmonic(dBc) vs Output Power



Current vs Output Power

