

Model: TLLA1G40G-40-45
Low Noise Amplifier
1-40GHz, NF:4.5dB, Gain:43dB, 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 Specifications:

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 Output P1dB	17	20		dBm
饱和输出功率 Output Psat		21		dBm
杂散 Spurious		-60		dBc
输出三阶交调 Output IP3		28		dBm
输入驻波 Input VSWR		1.8	2	:1
输出驻波 Output VSWR		1.8	2	:1
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 Specifications:

参数 Parameter	指标 Value	单位 Units
输入/输出接口 Input /Output Connector	2.92mm Female/2.92mm Female	
直流偏置 DC Bias	Solder Pin	
尺寸 Size	40.3*35.3*12	mm
重量 Weight	/	g

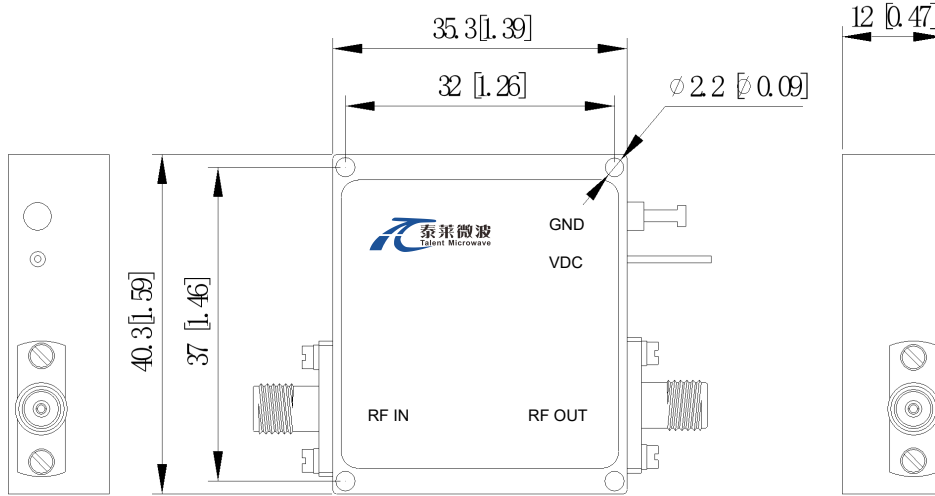
绝对最大值 Absolute Maximum Ratings:

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

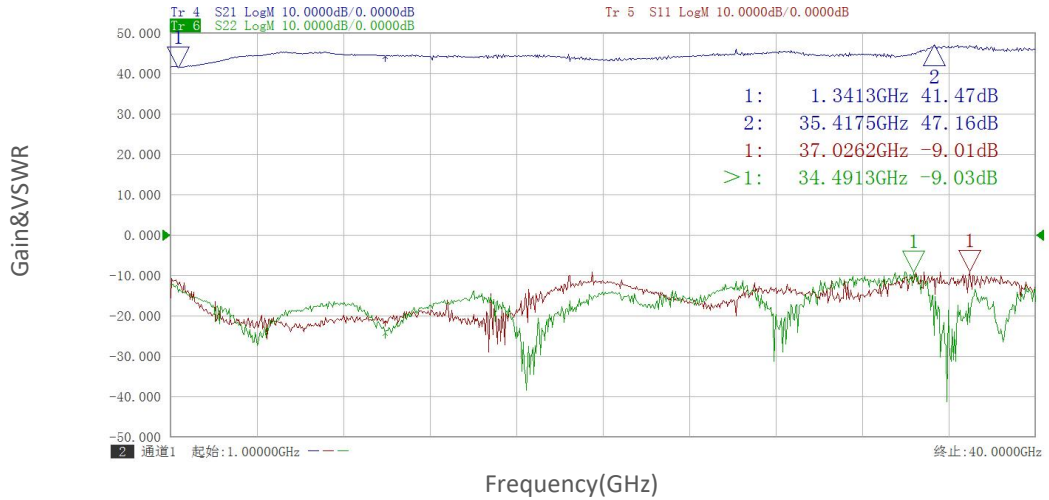
参数 Parameter	Min	Typ	Max	单位 Units
操作温度 Operating Temperature	-45		+85	°C
存储温度 Non-operating Temperature	-55		+125	°C
相对湿度 Relative humidity		95		%
海拔 Altitude	50,000			feet
震动 Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
冲击 Shock(non operating)	20G for 11msc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

订货信息 Ordering Information:

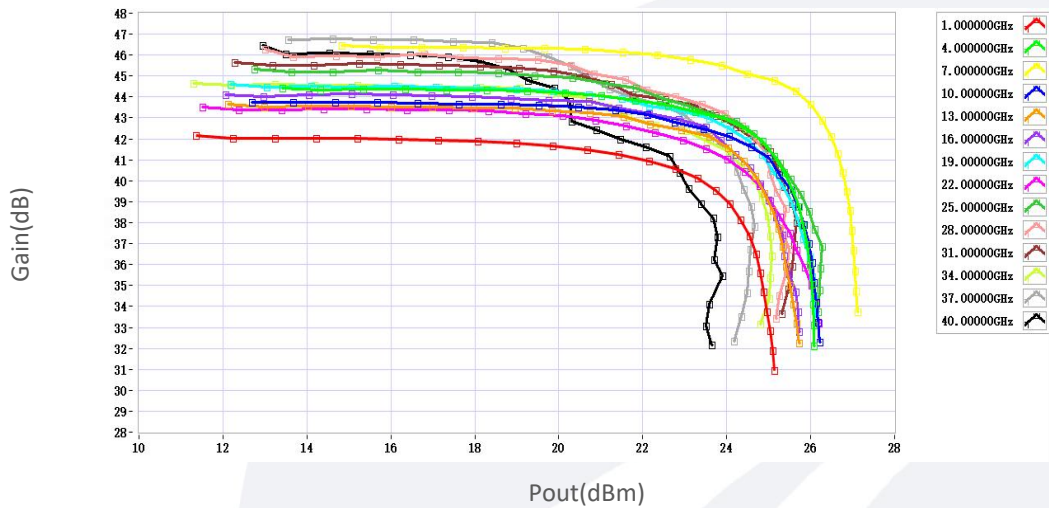
标准型号 Part Number	描述 Description	版本号 Revision
TLLA1G40G-40-45	Low Noise Amplifier, 1-40GHz, Noise Figure:4.5dB, Gain:43 dB,P1dB:20dBm,+12V DC,Without Heatsink	Rev.1.1
TLLA1G40G-40-45-HS	Low Noise Amplifier, 1-40GHz, Noise Figure:4.5dB, Gain:43 dB,P1dB:20dBm,+12V DC,With Heatsink	Rev.1.1

典型曲线 Typical Performance Data:

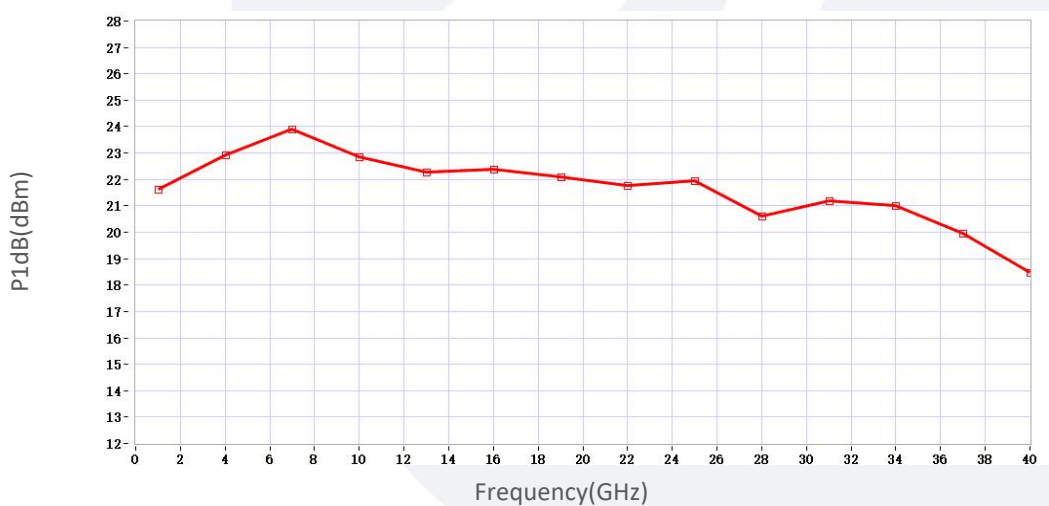
Gain&VSWR vs Frequency



Gain vs Output Power



P1dB vs Frequency



典型曲线 Typical Performance Data:

Psat vs Frequency

