

**Model:TLLA0.5G40G-40-50**
**Low Noise Amplifier**
**0.5-40GHz, NF:5.0dB, Gain:43dB,P1dB:18dBm**
**Feature:**

- Ultra Wide Band: 0.5-40GHz
- Gain: 43dB Typ
- Noise Figure: 5.0dB 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	0.5-40			GHz
增益 Gain		43		dB
增益平坦度 Gain Flatness		±2.5		dB
噪声系数 Noise Figure		5.0		dB
线性输出功率 Output P1dB		18		dBm
饱和输出功率 Output Psat		21		dBm
杂散 Spurious		-60		dBc
输入驻波 Input VSWR		2	2.5	:1
输出驻波 Output VSWR		2	2.5	:1
直流电压 DC Voltage	8	12		V DC
直流电流 DC Supply Current		350		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	44*36*12	mm
重量 Weight	30	g

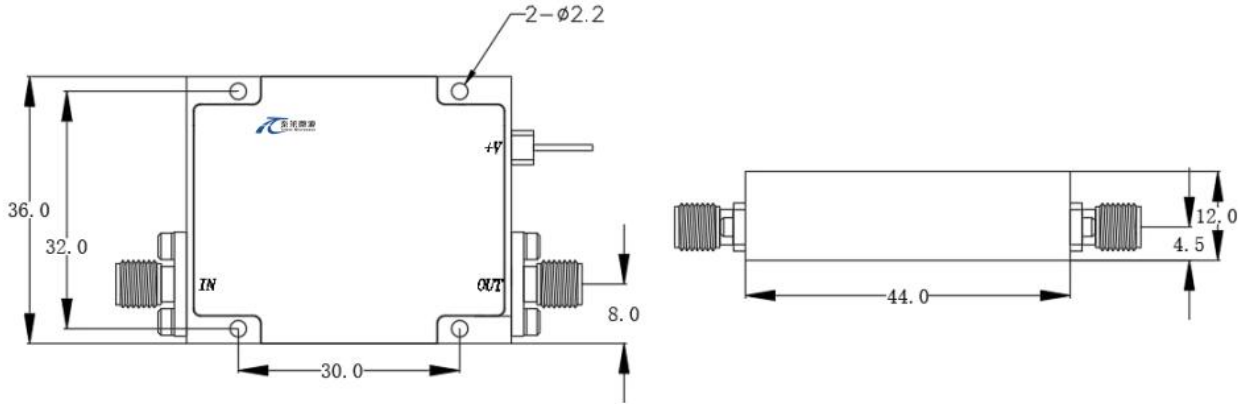
**绝对最大值 Absolute Maximum Ratings:**

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

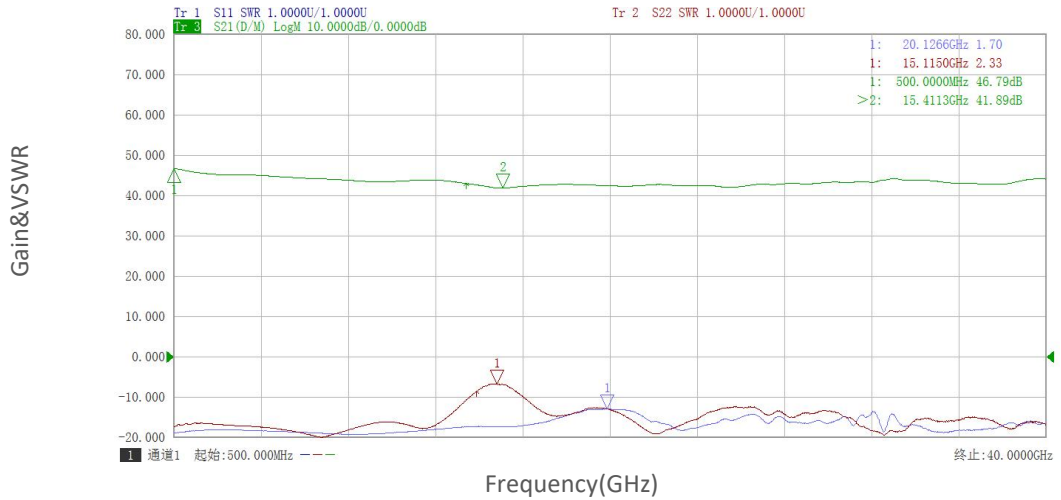
参数 Parameter	Min	Typ	Max	单位 Units
操作温度 Operating Temperature	-45		+85	°C
存储温度 Non-operating Temperature	-55		+125	°C
相对湿度 Relative humidity		95		%
海拔 Altitude	50,000			feet
震动 Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
冲击 Shock(non operating)	20G for 11msc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

订货信息 Ordering Information:

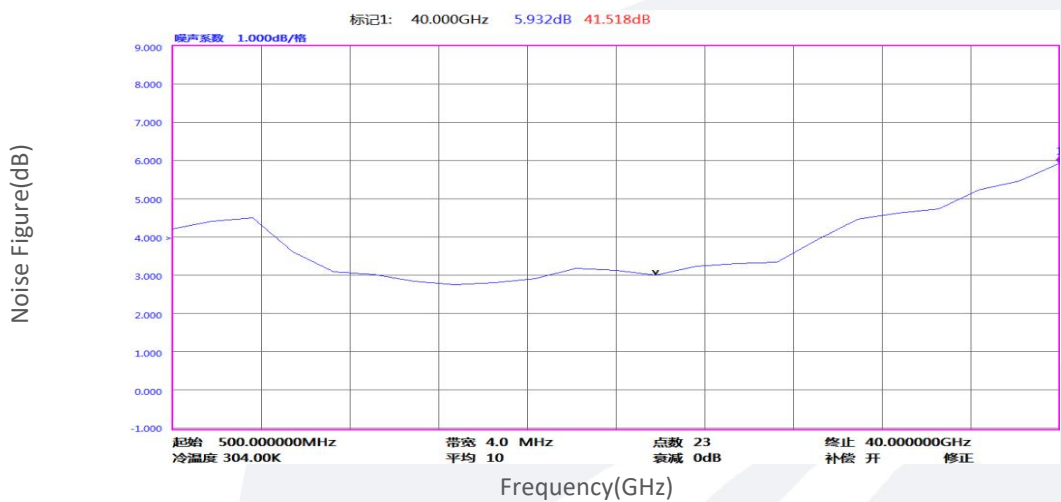
标准型号 Part Number	描述 Description	版本号 Revision
TLLA0.5G40G-40-50	Low Noise Amplifier, 0.5-40GHz, Noise Figure:5.0dB, Gain:43 dB,P1dB:18dBm,+12V DC,Without Heatsink	Rev.1.1
TLLA0.5G40G-40-50-HS	Low Noise Amplifier, 0.5-40GHz, Noise Figure:5.0dB, Gain:43 dB,P1dB:18dBm,+12V DC,With Heatsink	Rev.1.1

典型曲线 Typical Performance Data:

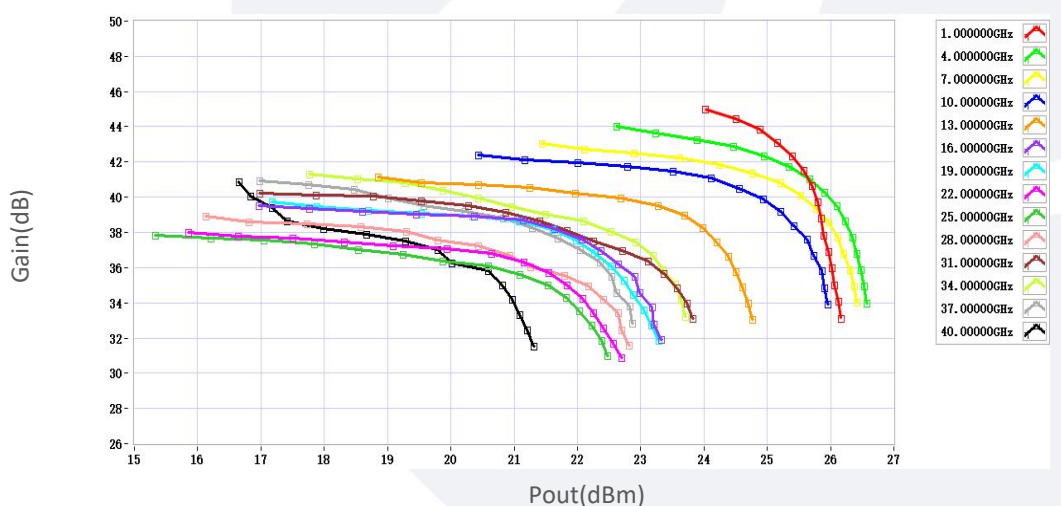
Gain&VSWR vs Frequency



Noise Figure vs Frequency

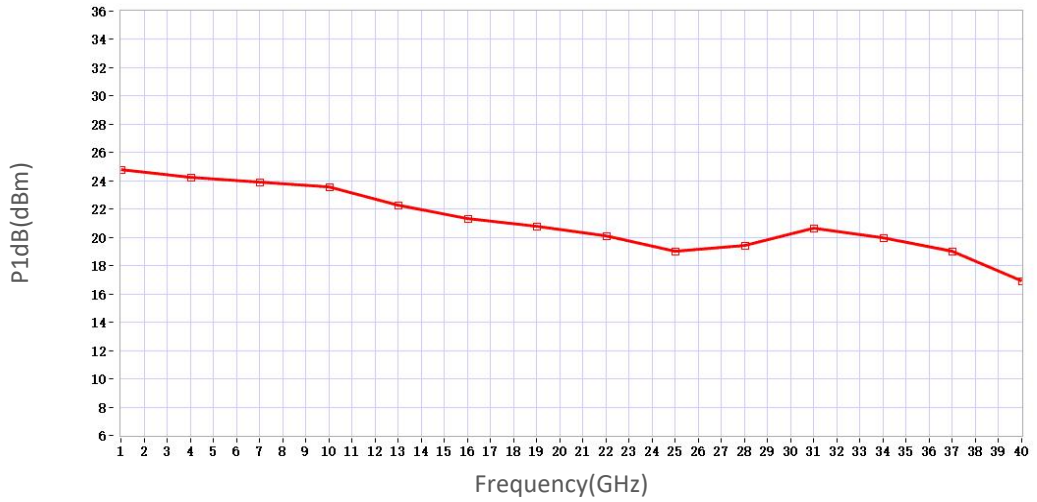


Gain vs Output Power



典型曲线 Typical Performance Data:

P1dB vs Frequency



P3dB vs Frequency

