

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 Type
- Noise Figure: 5.0dB 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 | 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P1dB | | 18 | | dBm |
| 饱和输出功率 Saturated Output Power(Psat) | | 21 | | dBm |
| 杂散 Spurious | | -60 | | dBc |
| 输入驻波 Input VSWR | | 2.0 | 2.5 | : 1 |
| 输出驻波 Output VSWR | | 2.0 | 2.5 | : 1 |
| 直流电压 DC Voltage | +8 | +12 | | V DC |
| 直流供电 DC power supply | | 350 | | 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 | 2.92 Female |
| 直流偏置 Bias | Solder Pin |
| 尺寸 Size | 44mm*36mm*12mm |
| 重量 Weight | 30 g |

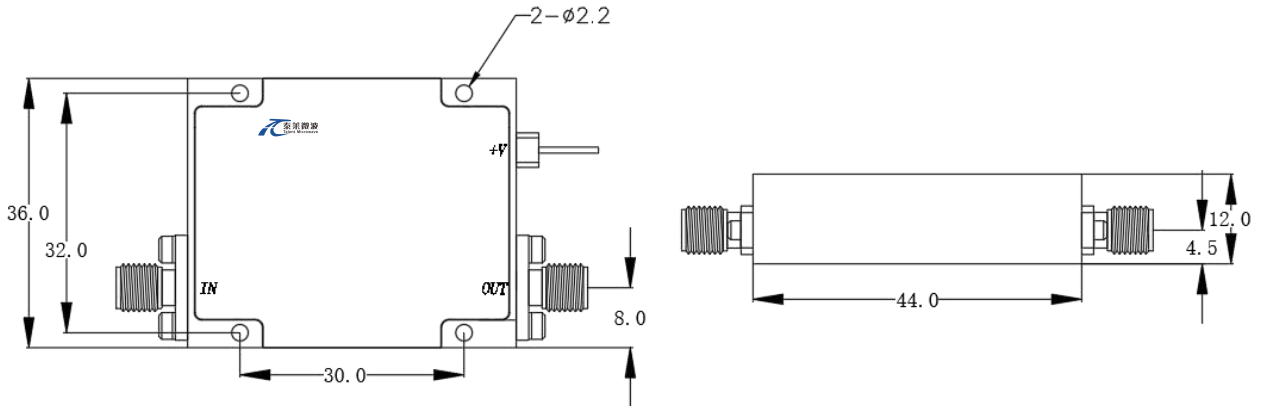

 Available 220V System
 Benchtop Amplifier

绝对最大值 Absolute Maximum Ratings:

| 参数Parameter | 指标 Value |
|------------------------------|----------------------|
| 供电偏置电压 Supply Bias Voltage | +15 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: Inches



OBSERVE PRECAUTIONS
ELECTROSTATIC SENSITIVE
DEVICES

温度环境 Environmental Conditions:

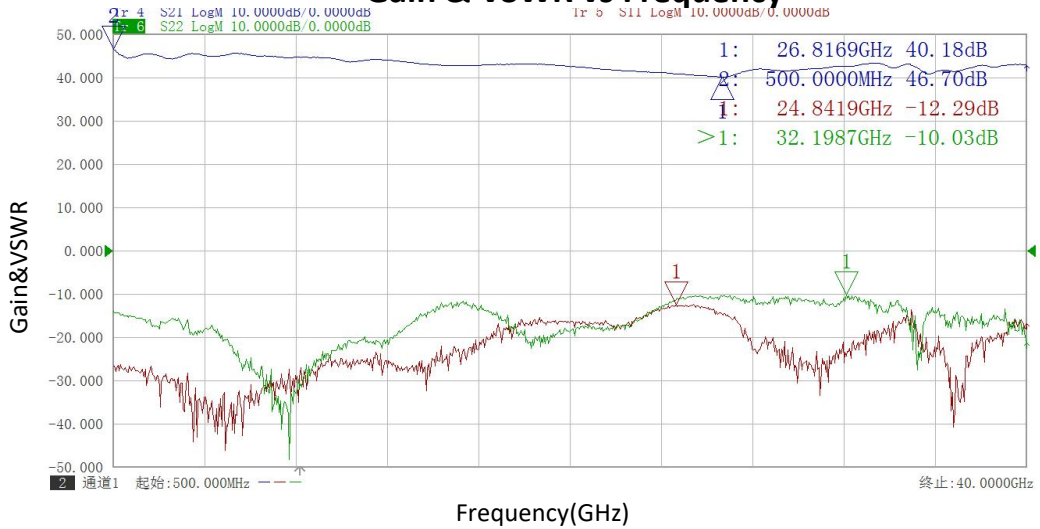
| 参数Parameter | Min. | Typ. | Max. | 单位Units |
|------------------------------------|---|------|------|---------|
| 操作温度 Operating Temperature | -45 | | +85 | °C |
| 存储温度 Non-operating Temperature | -55 | | +125 | °C |
| 相对湿度 Relative humidity | 100% RH at 35c,95%RH at 40°C | | | |
| 海拔 Altitude | 50,000 | | | 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:

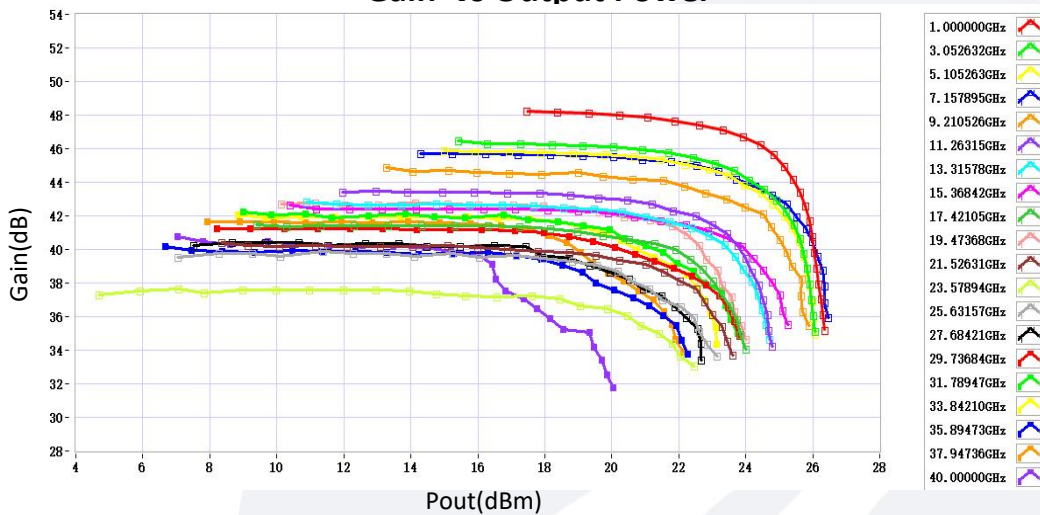
| 标准型号 Part Number | 描述 Description | 版本号Revision |
|----------------------|---|-------------|
| TLLA0.5G40G-40-50 | Low Noise Amplifier,0.5-40GHz,Noise Figure:5.0dB, Gain:43 dB,P1dB:18dBm,8~12V DC,Without Heatsink | Rev.1.1 |
| TLLA0.5G40G-40-50-HS | Low Noise Amplifier,0.5-40GHz,Noise Figure:5.0dB, Gain:43 dB,P1dB:18dBm,8~12V DC,With Heatsink | Rev.1.1 |

典型曲线 Typical Performance Data:

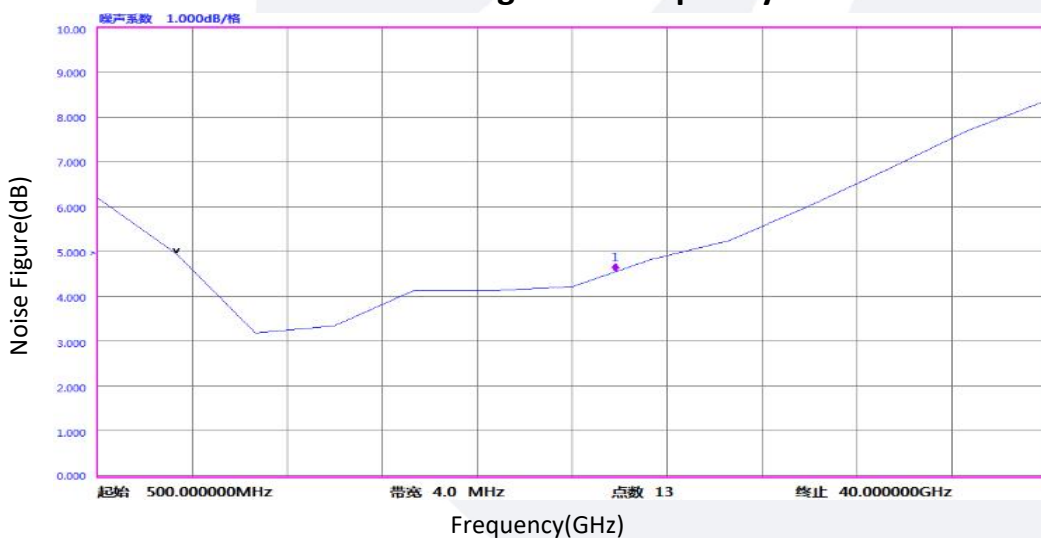
Gain & VSWR vs Frequency



Gain vs Output Power

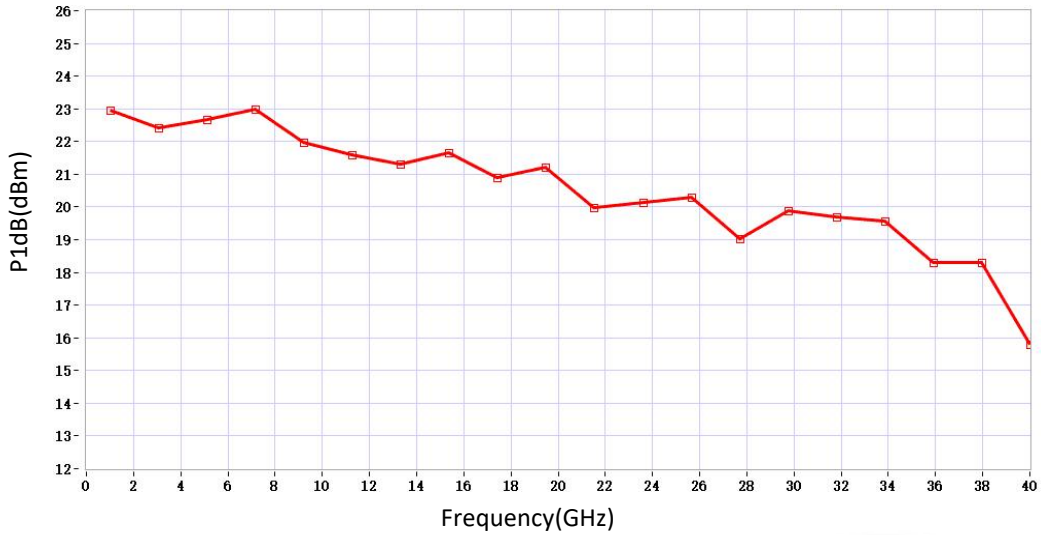


Noise Figure vs Frequency



典型曲线 Typical Performance Data:

P1dB vs Frequency



P3dB vs Frequency

