

**Model: TLLA18G40G-36-35**
**Low Noise Amplifier**
**18-40GHz, NF:3.5dB, Gain:36dB, P1dB:15dBm**
**Feature:**

- Ultra Wide Band: 18-40GHz
- Gain: 36dB Typ
- Noise Figure: 3.5dB Max
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

**电气特性 Electrical Specifications:**

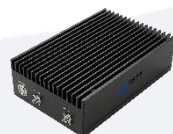
| 参数 Parameter           | Min   | Typ | Max  | 单位 Units |
|------------------------|-------|-----|------|----------|
| 频率范围 Frequency range   | 18-40 |     |      | GHz      |
| 增益 Gain                |       | 36  |      | dB       |
| 增益平坦度 Gain Flatness    |       |     | ±2.5 | dB       |
| 噪声系数 Noise Figure      |       | 3   | 3.5  | dB       |
| 线性输出功率 Output P1dB     |       | 15  |      | dBm      |
| 杂散 Spurious            |       | -60 |      | dBc      |
| 输入驻波 Input VSWR        |       |     | 2.2  | :1       |
| 输出驻波 Output VSWR       |       |     | 2.2  | :1       |
| 直流电压 DC Voltage        | 8     | 12  | 15   | V DC     |
| 直流电流 DC Supply Current |       | 80  |      | 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                         | 44.8*29.2*11                | mm       |
| 重量 Weight                       | 55                          | g        |

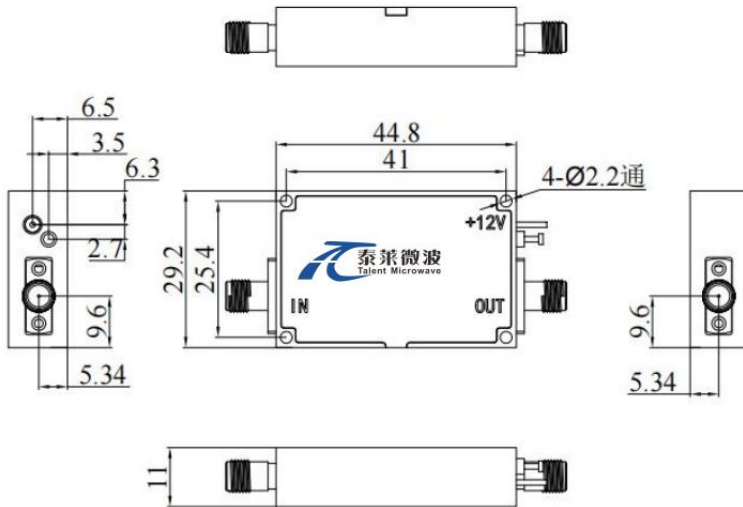
**绝对最大值 Absolute Maximum Ratings:**

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

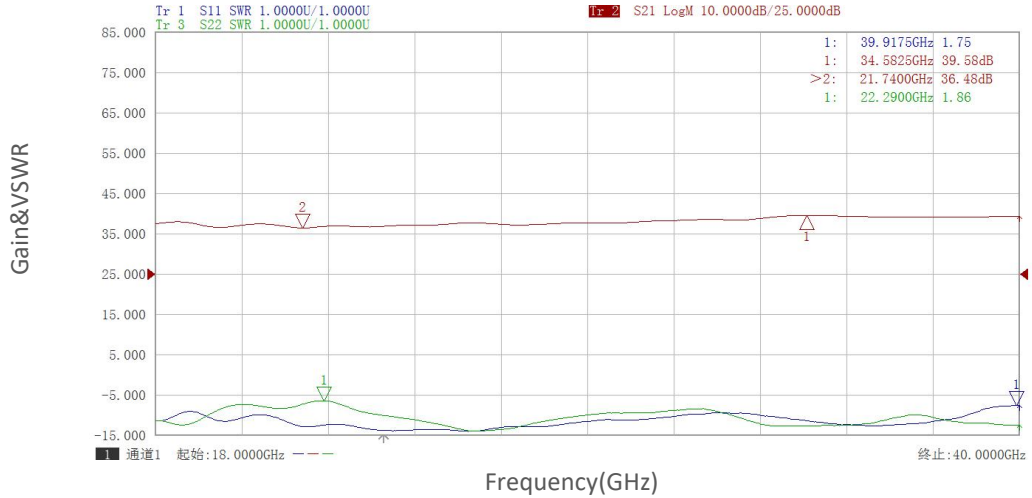
| 参数 Parameter                       | Min   | Typ | Max  | 单位 Units |
|------------------------------------|---|-----|------|----------|
| 操作温度 Operating Temperature         | -45   |     | +85  | °C       |
| 存储温度 Non-operating Temperature     | -55   |     | +125 | °C       |
| 相对湿度 Relative humidity             |   | 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:

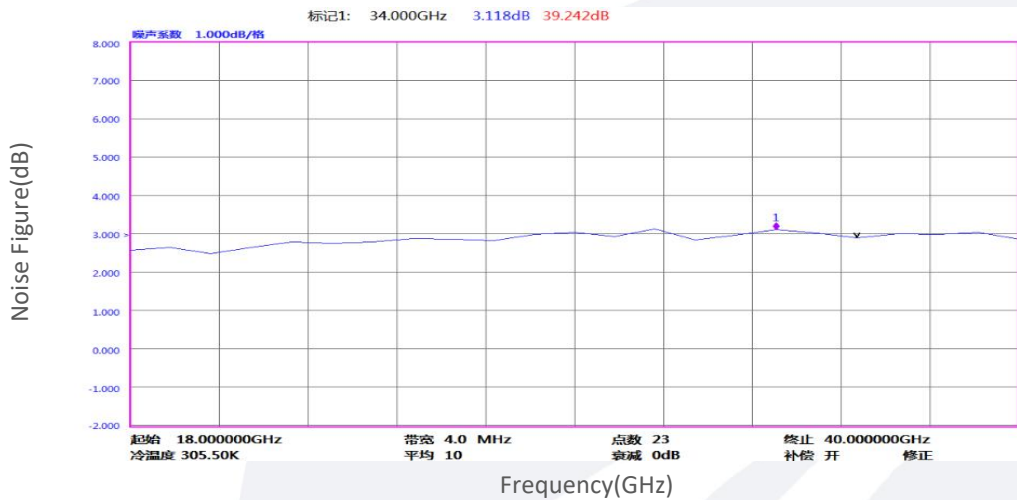
| 标准型号 Part Number    | 描述 Description  | 版本号 Revision |
|---------------------|---|--------------|
| TLLA18G40G-36-35    | Low Noise Amplifier, 18-40GHz, Noise Figure:3.5dB, Gain:36 dB,P1dB:15dBm,+12V DC,Without Heatsink | Rev.1.1      |
| TLLA18G40G-36-35-HS | Low Noise Amplifier, 18-40GHz, Noise Figure:3.5dB, Gain:36 dB,P1dB:15dBm,+12V DC,With Heatsink    | Rev.1.1      |

典型曲线 Typical Performance Data:

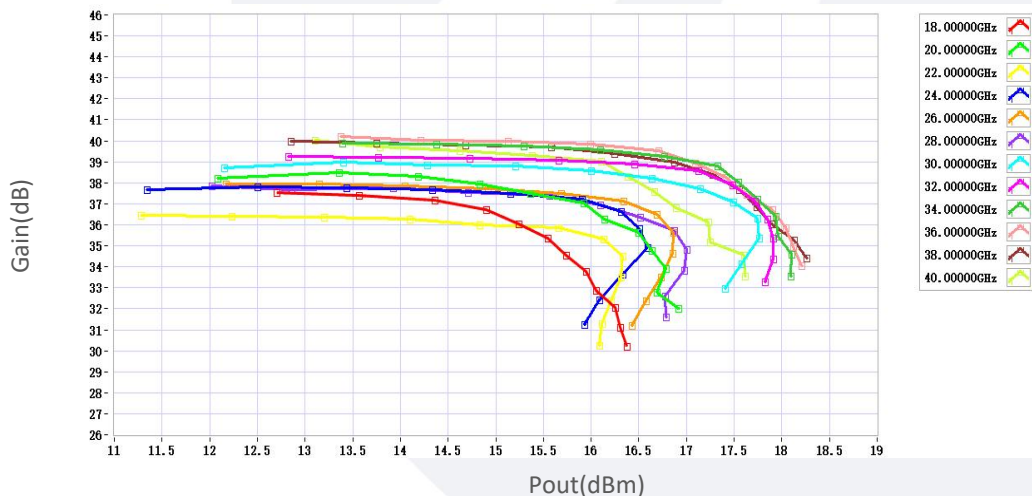
### Gain&VSWR vs Frequency



### Noise Figure vs Frequency

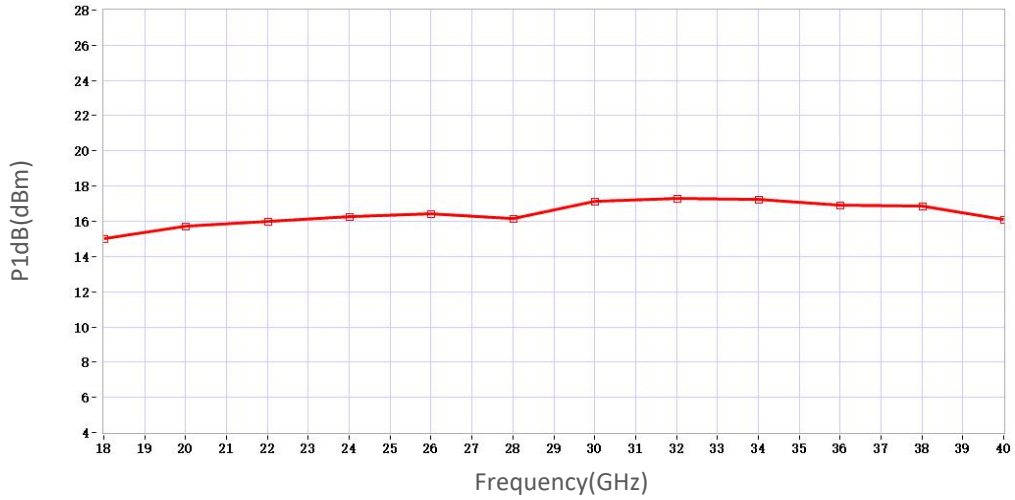


### Gain vs Output Power



典型曲线 Typical Performance Data:

P1dB vs Frequency



P3dB vs Frequency

