

## Model: TLLA1G1.6G-32-13

## L-Band Low Noise Amplifier

1-1.6GHz, NF:0.5dB, Gain:32 dB, P1dB:13dBm

### Feature:

- Ultra Wide Band: 1-1.6GHz
- Gain: 32dB Type
- Noise Figure: 0.5dB Max
- 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 | 1-1.6 |      |       | GHz     |
| 增益 Gain              | 27    | 32   |       | dB      |
| 增益平坦度 Gain Flatness  |       | ±1.0 | ±1.75 | dB      |
| 噪声系数 Noise Figure    |       |      | 0.5   | dB      |
| 线性输出功率P1dB           | 12    | 13   |       | dBm     |
| 输入驻波 Input VSWR      |       | 1.4  | 1.8   | : 1     |
| 输出驻波 Output VSWR     |       | 1.4  | 1.8   | : 1     |
| 直流电压 DC Voltage      | 4.85  | 5    | 6     | V DC    |
| 直流供电 DC power supply |       | 50   | 60    | 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 | SMA Female         |
| 直流偏置 Bias                      | Solder Pin         |
| 尺寸 Size                        | 17.8mm*20mm*8.35mm |
| 重量 Weight                      | 11 g               |



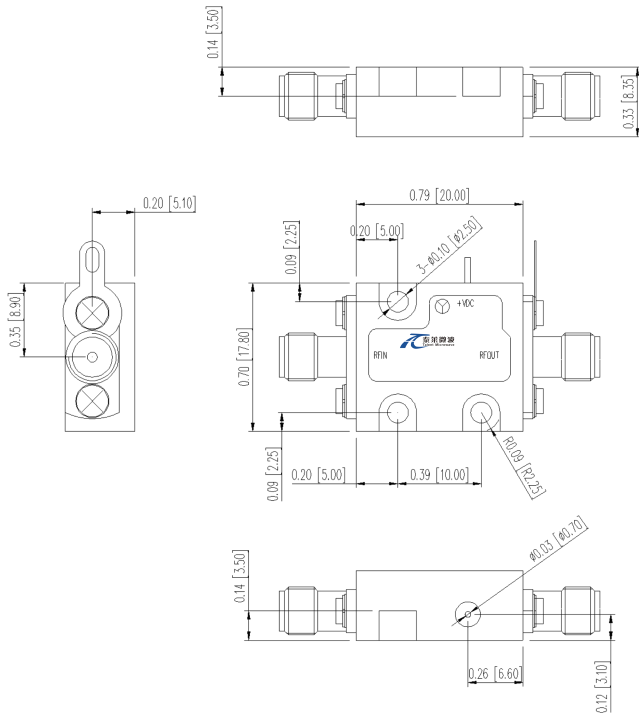
Available 220V System  
Benchtop Amplifier

### 绝对最大值 Absolute Maximum Ratings:

| 参数Parameter                  | 指标 Value             |
|------------------------------|----------------------|
| 供电偏置电压 Supply Bias Voltage   | TBD                  |
| 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



**温度环境 Environmental Conditions:**

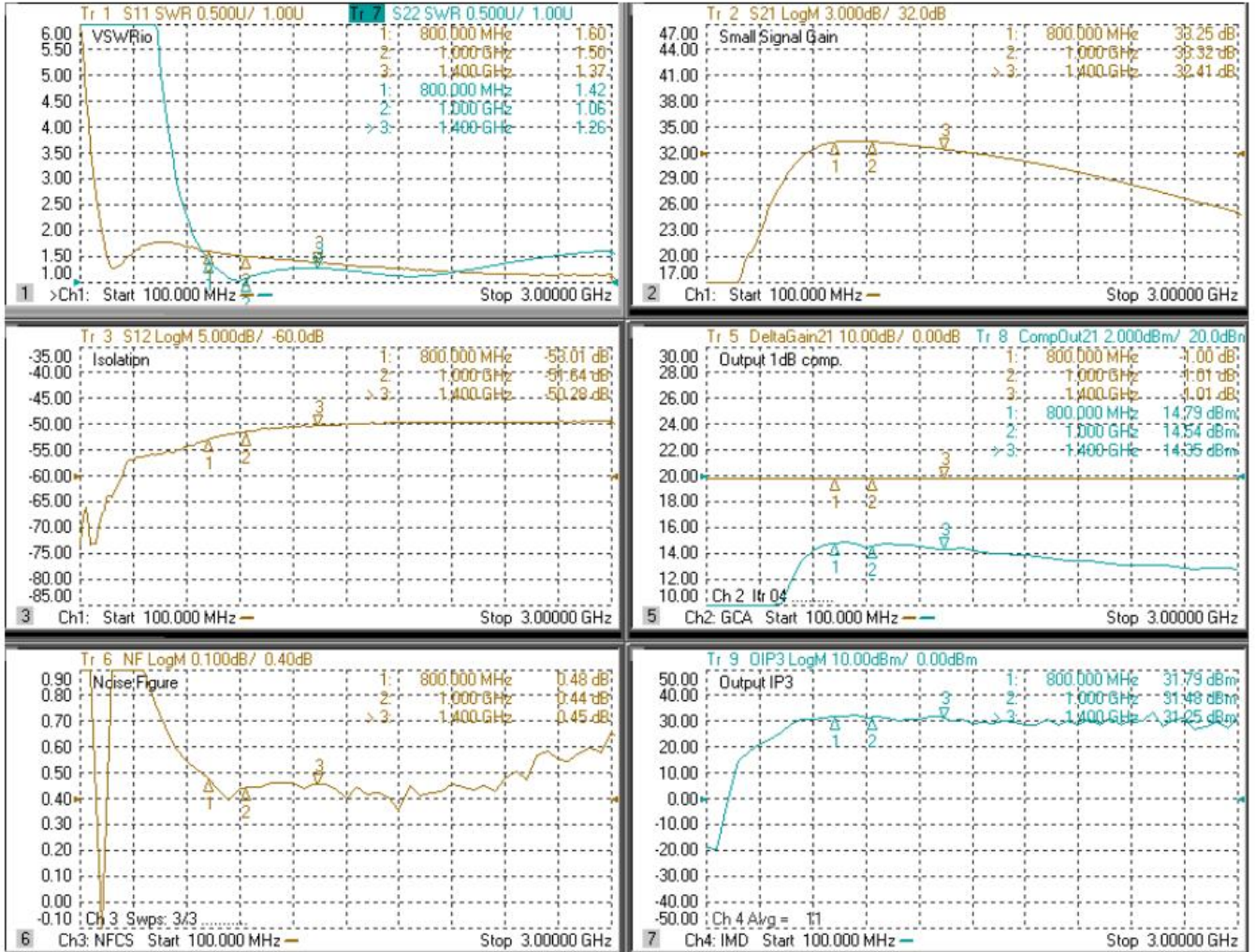
| 参数Parameter                        | Min.  | Typ. | Max. | 单位Units |
|------------------------------------|---|------|------|---------|
| 操作温度 Operating Temperature         | -40   |      | +70  | °C      |
| 存储温度 Non-operating Temperature     | -65   |      | +150 | °C      |
| 相对湿度 Relative humidity             | 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 |
|--------------------|--|-------------|
| TLLA0.8G1.6G-32-13 | L-Band Low Noise Amplifier,0.1-1.6GHz,Noise Figure:0.5dB, Gain:32 dB,P1dB:13dBm,SMA Female | Rev.1.1     |

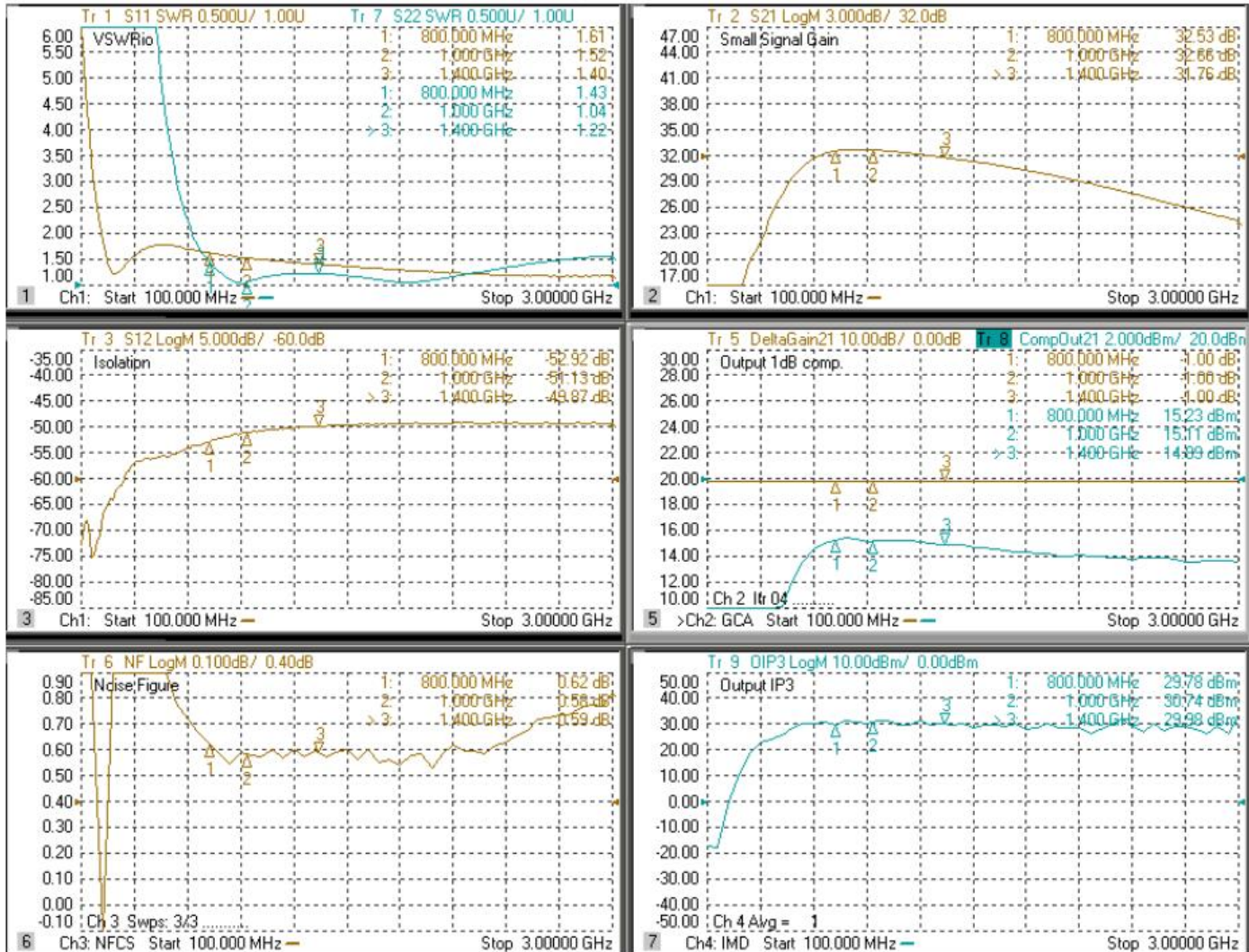
典型曲线 Typical Performance Data:

TA=25°C



典型曲线 Typical Performance Data:

TA=+70°C



典型曲线 Typical Performance Data:

TA=-55°C

