

## Model: TLLA18G40G-40-35

## Low Noise Amplifier

18-40GHz, NF:3.0dB, Gain:43 dB, P1dB:12dBm

### Feature:

- Ultra Wide Band: 18-40GHz
- Gain: 43dB Typ
- Noise Figure: 3.0dB Typ
- Good Power and Gain Flatness
- 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	18-40			GHz
增益 Gain	40	43		dB
增益平坦度 Gain Flatness		±2.0		dB
噪声系数 Noise Figure		3.0	3.5	dB
线性输出功率P1dB	12	15		dBm
杂散 Non-Harmonic Spurious		-60		dBc
输入驻波 Input VSWR		1.6	2.0	:1
输出驻波 Output VSWR		1.6	2.2	:1
直流电压 DC Voltage		+12		V DC
直流电流 DC Supply Current		100		mA
阻抗 Impedance	50			Ohms

### 机械特性 Mechanical :

参数Parameter	指标 Value	单位Units
输入输出接口 Input /Output Connector	2.92 Female	
直流偏置 Bias	Solder Pin	
尺寸 Size	44.8*29.2*11	mm
重量 Weight	50	g



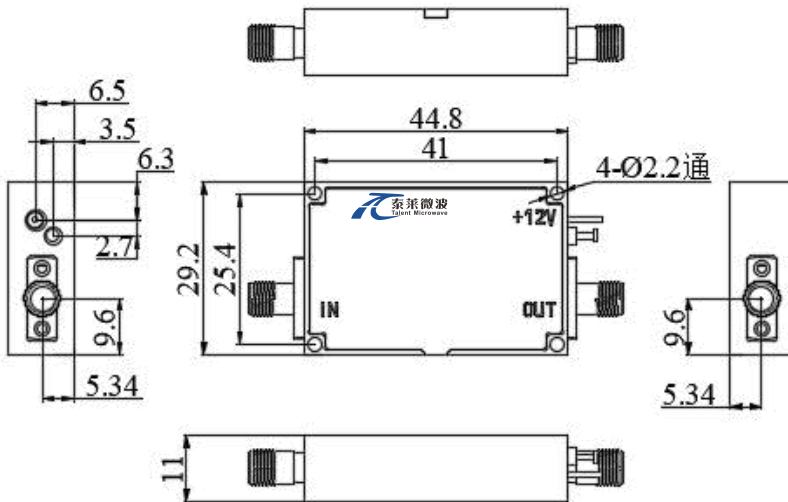
Available 220V System  
Benchtop Amplifier

### 绝对最大值 Absolute Maximum Ratings:

参数Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	+20 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: mm(inches)



OBSERVE PRECAUTIONS  
ELECTROSTATIC SENSITIVE  
DEVICES

**\*\*\*Heat Sink Required During Operation**

**温度环境 Environmental Conditions:**

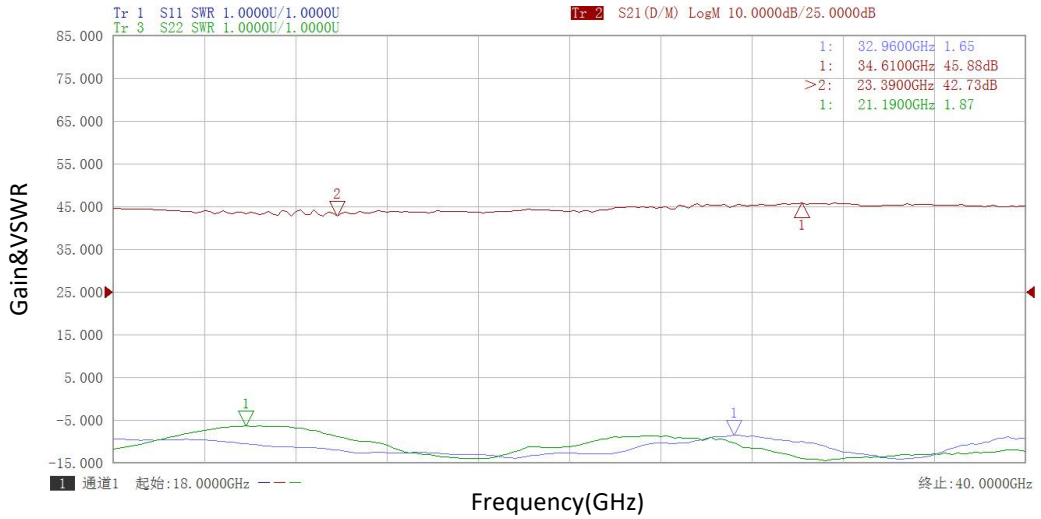
参数Parameter	Min.	Typ.	Max.	单位Units
操作温度 Operating Temperature	-40		+85	°C
存储温度 Non-operating Temperature	-55		+125	°C
相对湿度 Relative humidity		95		%
海拔 Altitude	50,000			feet
震动 Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
冲击 Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

**订货信息 Ordering Information:**

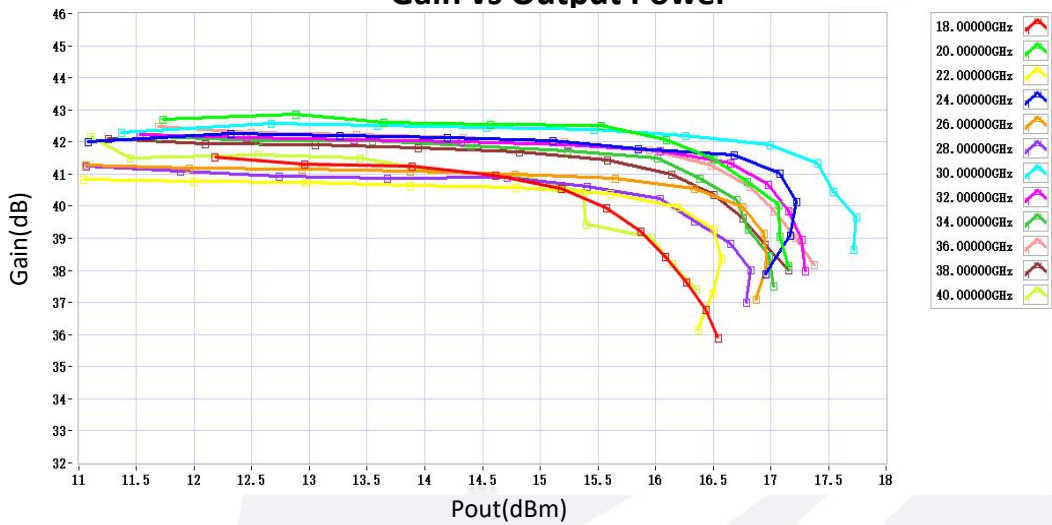
标准型号 Part Number	描述 Description	版本号Revision
TLLA18G40G-40-35	Low Noise Amplifier, 18-40GHz, Noise Figure:3.0 dB, Gain:43 dB,P1dB:12dBm,12V DC,Without Heatsink	Rev.1.1
TLLA18G40G-40-35-HS	Low Noise Amplifier, 18-40GHz, Noise Figure:3.0 dB, Gain:43 dB,P1dB:12dBm,12V DC,With Heatsink	Rev.1.1

典型曲线 Typical Performance Data:

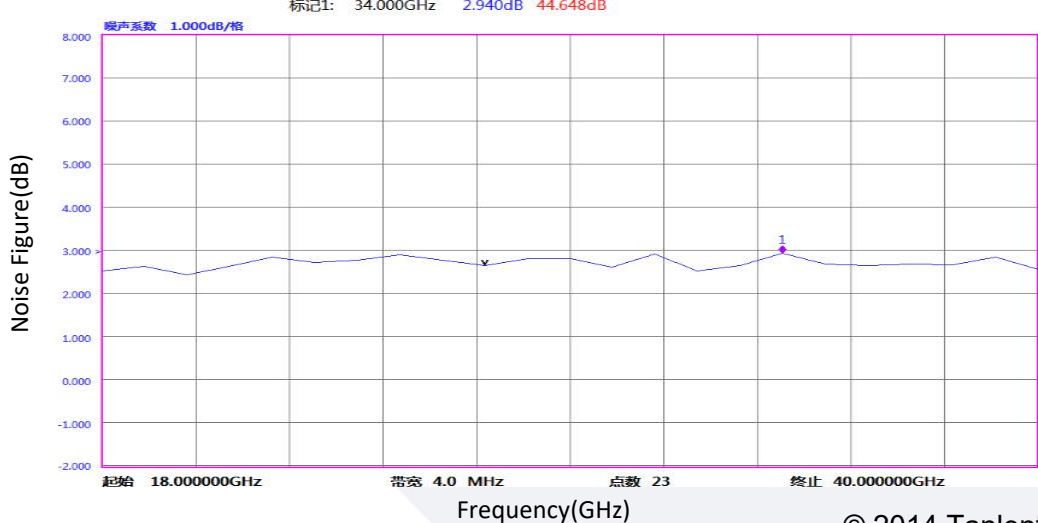
Gain&VSWR vs Frequency



Gain vs Output Power



Noise Figure vs Frequency



典型曲线 Typical Performance Data:

P1dB vs Frequency

