

**Model: TLLA4G8G-45-07**
**Low Noise Amplifier**
**4-8GHz, NF:0.8 dB, Gain:40 dB, P1dB:10dBm**
**Feature:**

- Ultra Wide Band: 4-8GHz
- Gain: 45 dB Typ
- Noise Figure: 0.8 dB 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	4-8			GHz
增益 Gain	43	45		dB
增益平坦度 Gain Flatness		±1.0	±1.5	dB
噪声系数 Noise Figure		0.8		dB
线性输出功率P1dB	10	12		dBm
输出三阶交调Output IP3		25		dBm
输入驻波 Input VSWR		1.5	2.0	:1
输出驻波 Output VSWR		1.5	2.2	:1
直流电压 DC Voltage		+8		V DC
直流电流 DC Supply Current		70		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	SMA Female	
直流偏置 Bias	Solder Pin	
尺寸 Size	44.8*29.2*11	mm
重量 Weight	/	g

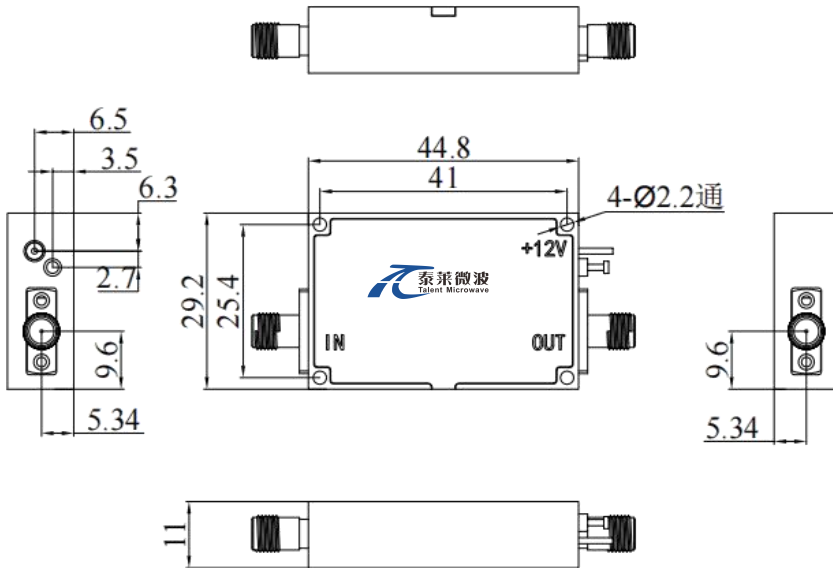

 Available 220V System  
 Benchtop Amplifier

**绝对最大值 Absolute Maximum Ratings:**

参数Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	+9V
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



OBSERVE PRECAUTIONS  
ELECTROSTATIC SENSITIVE  
DEVICES

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

温度环境 Environmental Conditions:

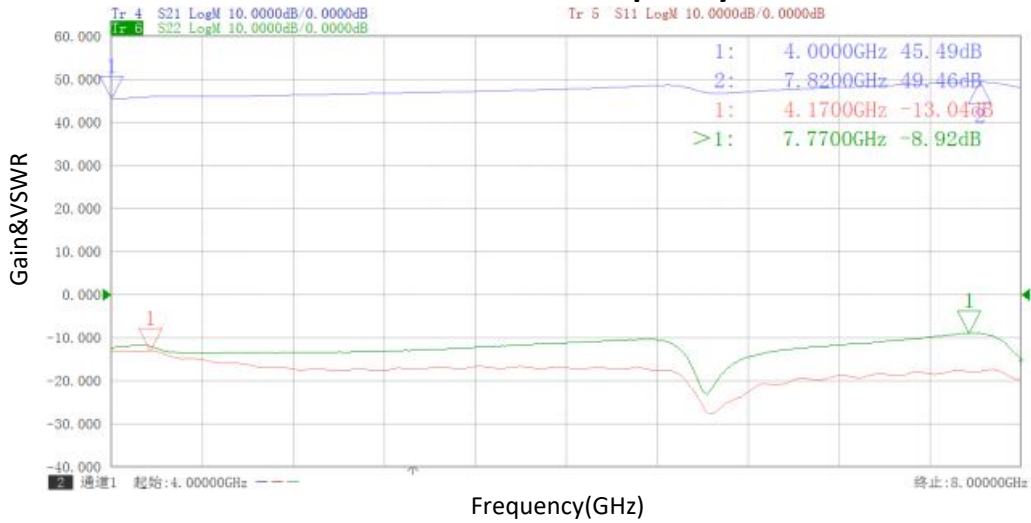
参数Parameter	Min.	Typ.	Max.	单位Units
操作温度 Operating Temperature	-45		+85	°C
存储温度 Non-operating Temperature	-55		+125	°C
相对湿度 Relative humidity		95		%
海拔 Altitude		50,000		feet
震动 Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
冲击 Shock(non operating)	20G for 11msc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

订货信息 Ordering Information:

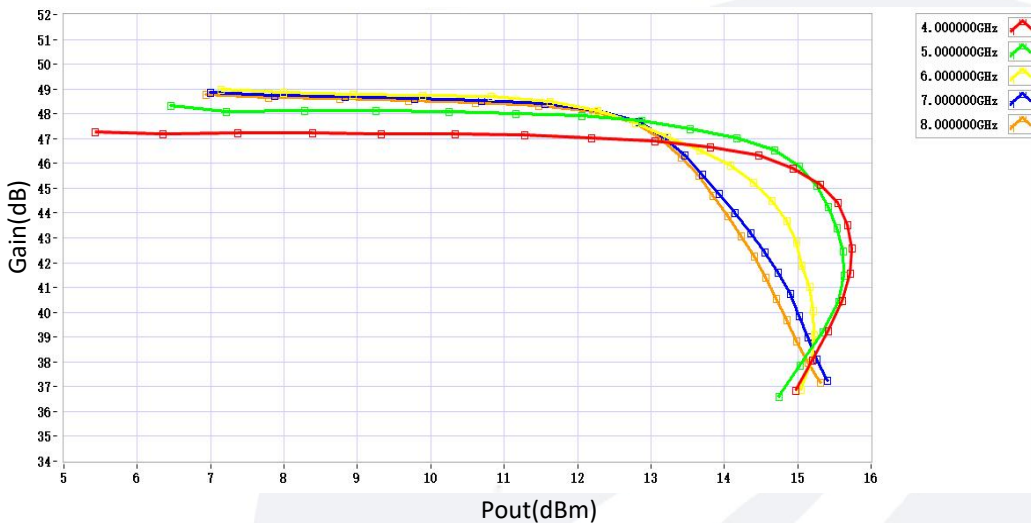
标准型号 Part Number	描述 Description	版本号Revision
TLLA4G8G-45-07	Low Noise Amplifier,4-8GHz, NF:0.8 dB, Gain:45 dB,P1dB:10dBm 8 V DC,Without Heatsink	Rev.1.1
TLLA4G8G-45-07-HS	Low Noise Amplifier,4-8GHz, NF:0.8 dB, Gain:45 dB,P1dB:10dBm 8 V DC,With Heatsink	Rev.1.1

典型曲线 Typical Performance Data:

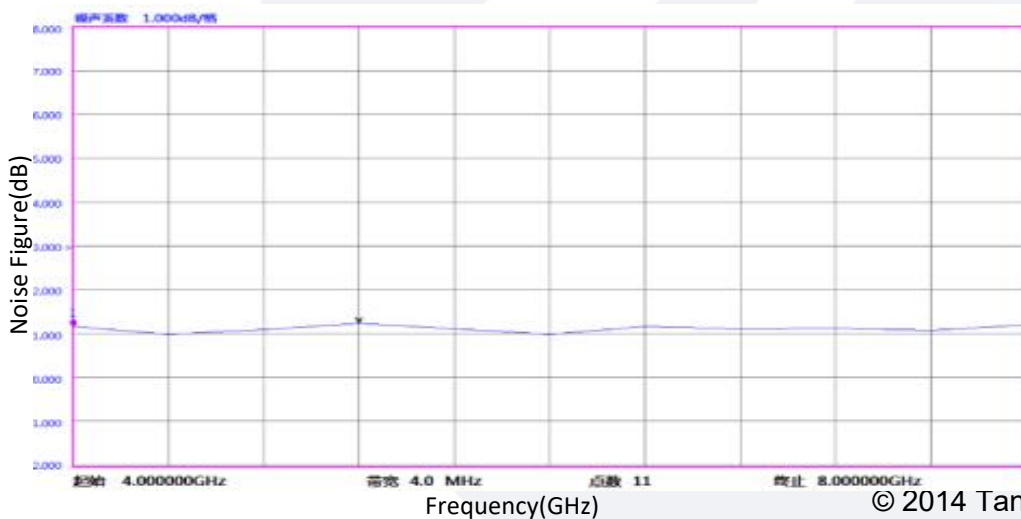
Gain & VSWR vs Frequency



Gain vs Output Power

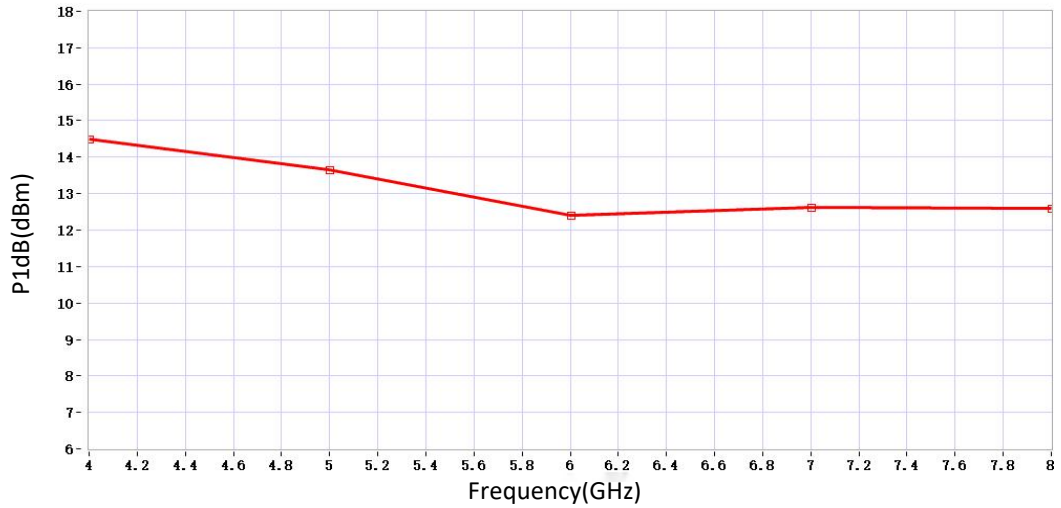


Noise Figure vs Frequency

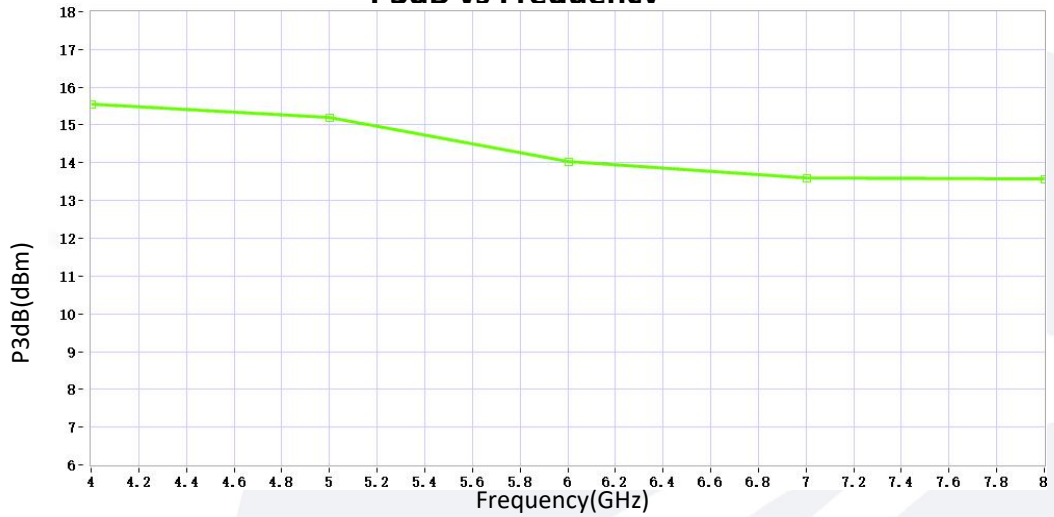


典型曲线 Typical Performance Data:

**P1dB vs Frequency**



**P3dB vs Frequency**



**PSat vs Frequency**

