

Model:TLLA50K67G-25-50
Low Noise Amplifier
50KHz-67GHz,NF:5.0dB,Gain:25dB,P1dB:15dBm
Feature:

- Ultra Wide Band: 50KHz-67GHz
- Gain: 25dB Typ
- Noise Figure: 5.0dB Typ
- 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	50KHz-67GHZ			GHz
增益 Gain		25		dB
增益平坦度 Gain Flatness		±2.0		dB
噪声系数 Noise Figure		5		dB
线性输出功率P1dB		15		dBm
输出三阶交调 Output IP3		20		dBm
输入驻波 Input VSWR		2.0		:1
输出驻波 Output VSWR		2.0		:1
直流电压 DC Voltage		+12		V DC
直流电流 DC Supply Current		300		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	1.85mm Female	
直流偏置 DC Bias	Solder Pin	
尺寸 Size	44.8*29.2*11	mm
重量 Weight	/	g

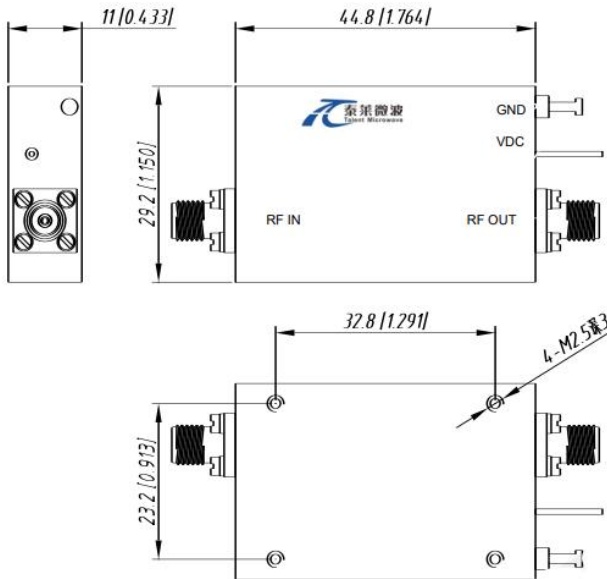

 Available 220V System
 Benchtop Amplifier

绝对最大值 Absolute Maximum Ratings:

参数 Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	TBD
输入功率 RF Input Power	10 dBm
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V

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	-40		+75	°C
存储温度 Non-operating Temperature	-55		+85	°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			

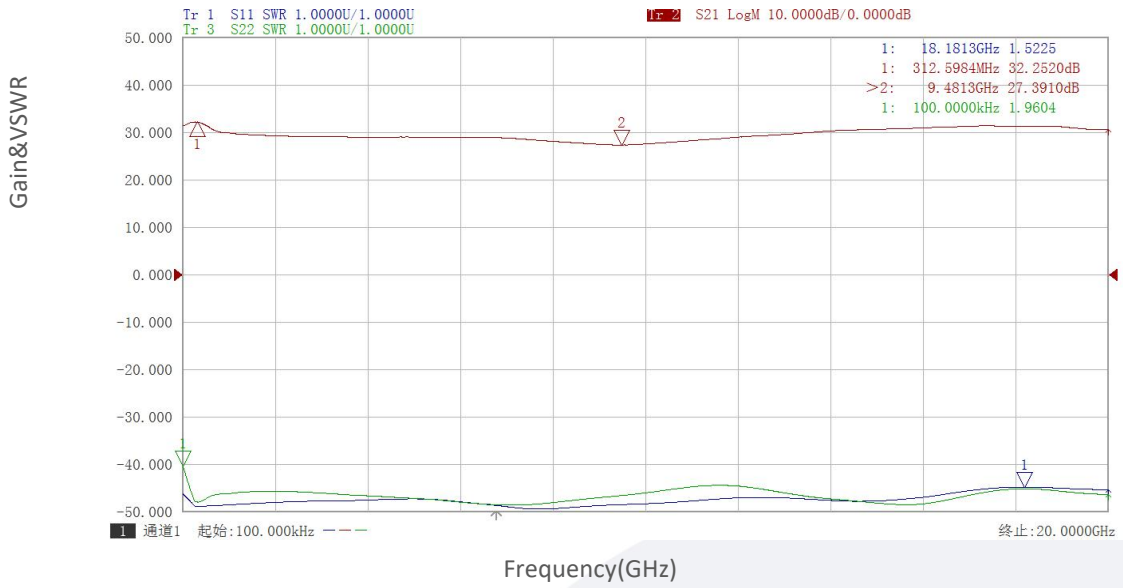
订货信息 Ordering Information:

标准型号 Part Number	描述 Description	版本号 Revision
TLLA50K67G-25-50	Low Noise Amplifier, 50K-67GHz, Noise Figure:5.0dB, Gain:25 dB,P1dB:15dBm,+12V DC,Without Heatsink	Rev.1.1
TLLA50K67G-25-50-HS	Low Noise Amplifier, 50K-67GHz, Noise Figure:5.0dB, Gain:25 dB,P1dB:15dBm,+12V DC,With Heatsink	Rev.1.1

典型曲线 Typical Performance Data:

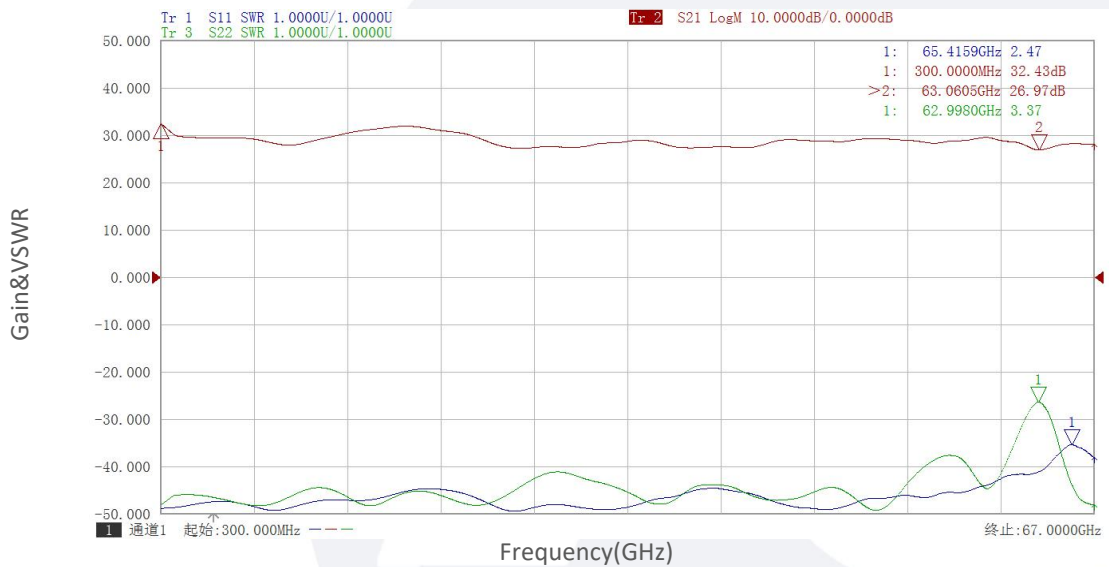
Gain&VSWR vs Frequency

100KHz-20GHz:



Gain&VSWR vs Frequency

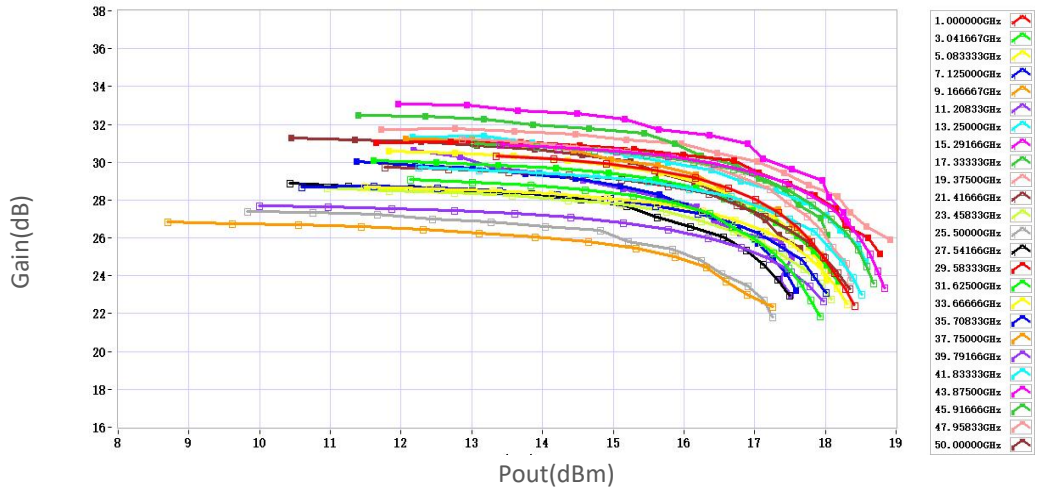
300MHz-67GHz:



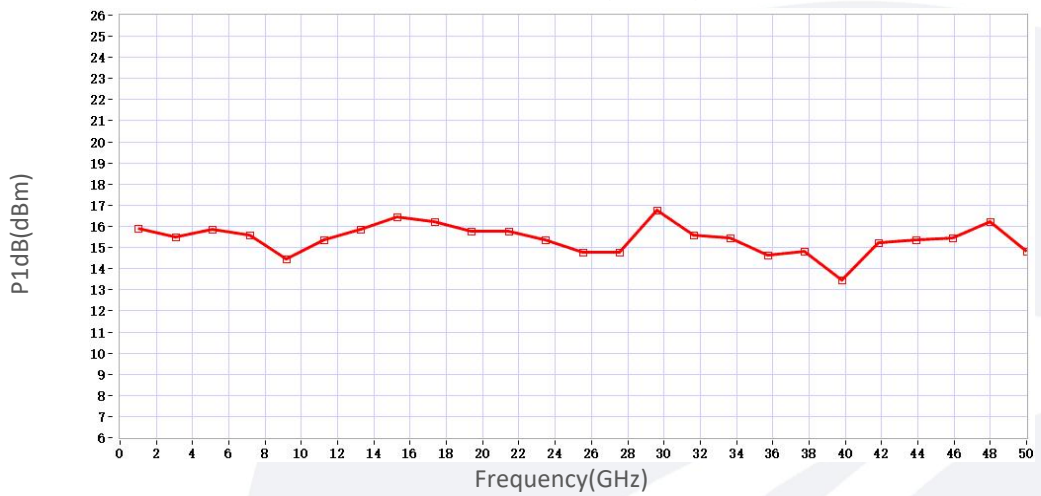
Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

典型曲线 Typical Performance Data:

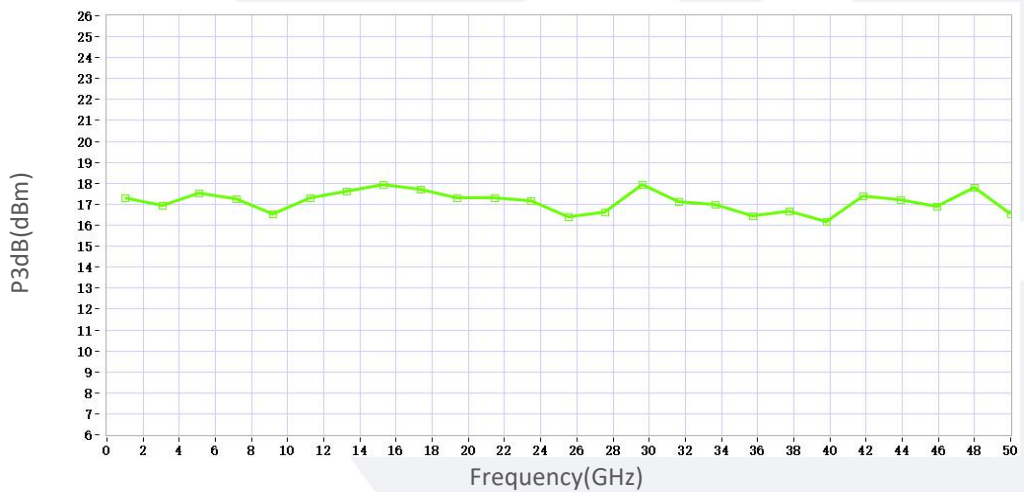
Gain vs Output Power



P1dB vs Frequency



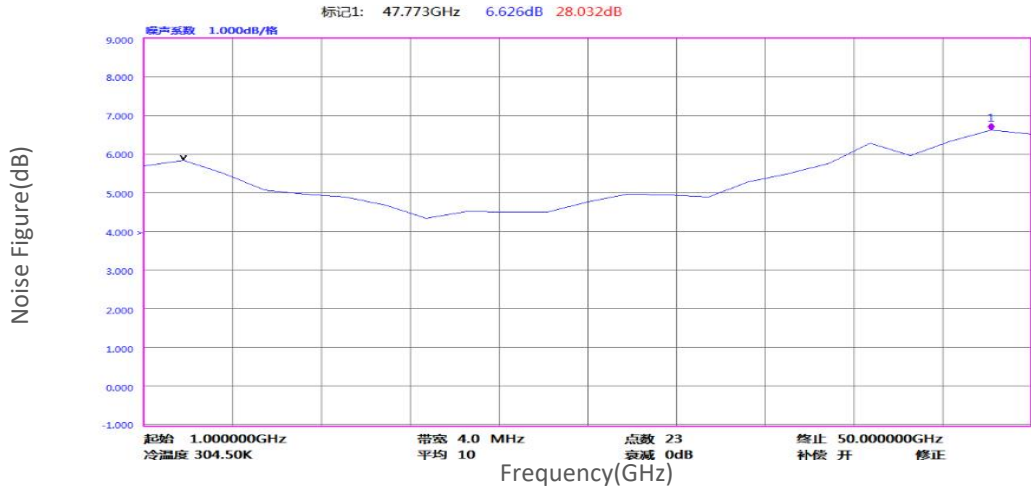
P3dB vs Frequency



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典型曲线 Typical Performance Data:

Noise Figure vs Frequency



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