

Model: TLLA0.03G6G-38-20
Low Noise Amplifier
0.03-6GHz, NF:2dB, Gain:38dB, P1dB:13dBm
Feature:

- Ultra Wide Band: 0.03-6GHz
- Gain: 38dB Typ
- Noise Figure: 2dB Max
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

电气特性 Electrical Specifications:

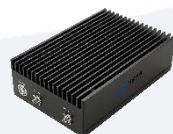
参数 Parameter	Min	Typ	Max	单位 Units
频率范围 Frequency range	0.03-6			GHz
增益 Gain		38		dB
增益平坦度 Gain Flatness		±2.5		dB
噪声系数 Noise Figure	@30~100MHz	3.0		dB
	@0.1~6GHz		2.0	dB
线性输出功率 Output P1dB	13	15		dBm
输入驻波 Input VSWR		2.0	2.2	:1
输出驻波 Output VSWR		2.0	2.2	:1
直流电压 DC Voltage	+8	+12	+15	V DC
直流电流 DC Supply 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	SMA Female/SMA Female	
直流偏置 DC Bias	Solder Pin	
尺寸 Size	32.1*29.2*11	mm
重量 Weight	/	g

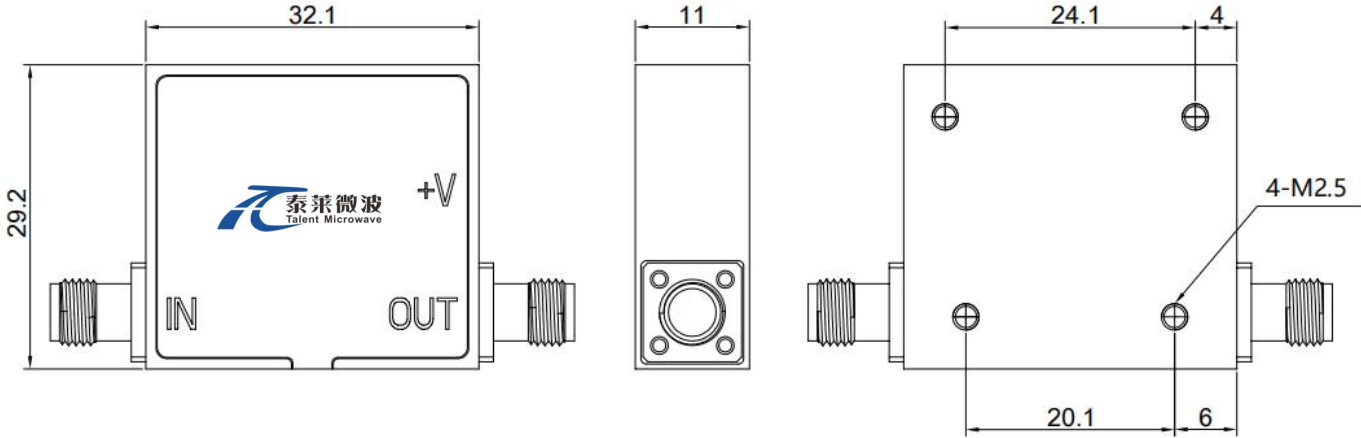
绝对最大值 Absolute Maximum Ratings:

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



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



OBSERVE PRECAUTIONS
ELECTROSTATIC SENSITIVE
DEVICES

温度环境 Environmental Conditions:

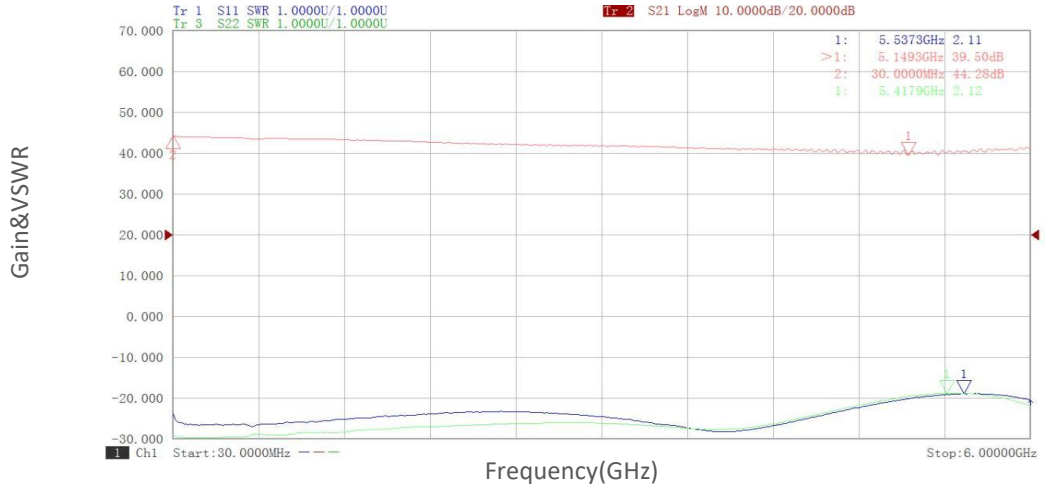
参数 Parameter	Min	Typ	Max	单位 Units
操作温度 Operating Temperature	-45		+85	°C
存储温度 Non-operating Temperature	-55		+125	°C
相对湿度 Relative humidity		95		%
海拔 Altitude	10,000			feet
震动 Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
冲击 Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

订货信息 Ordering Information:

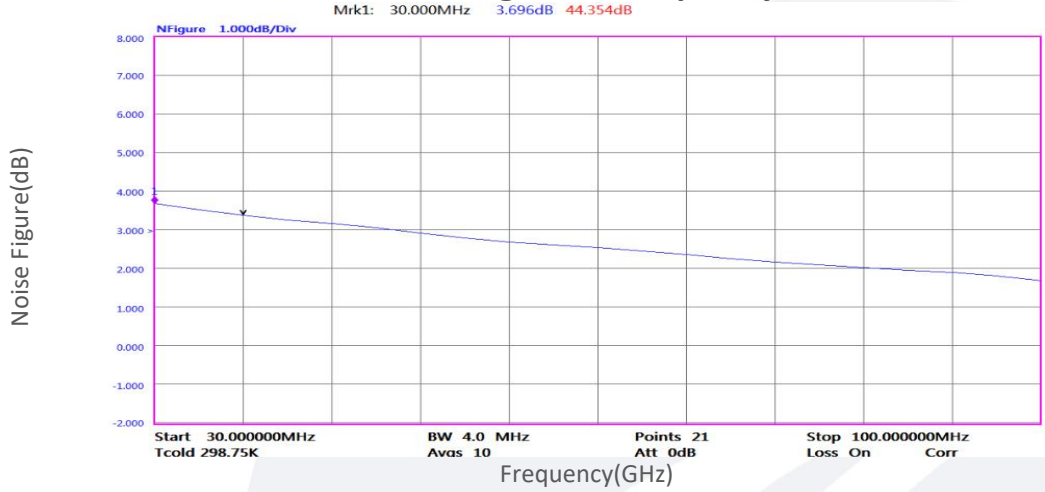
标准型号 Part Number	描述 Description	版本号 Revision
TLLA0.03G6G-38-20	Low Noise Amplifier, 0.03-6GHz, Noise Figure:2 dB, Gain:38 dB,P1dB:15dBm,+12V DC,Without Heatsink	Rev.1.1
TLLA0.03G6G-38-20-HS	Low Noise Amplifier, 0.03-6GHz, Noise Figure:2 dB, Gain:38 dB,P1dB:15dBm,+12V DC,With Heatsink	Rev.1.1

典型曲线 Typical Performance Data:

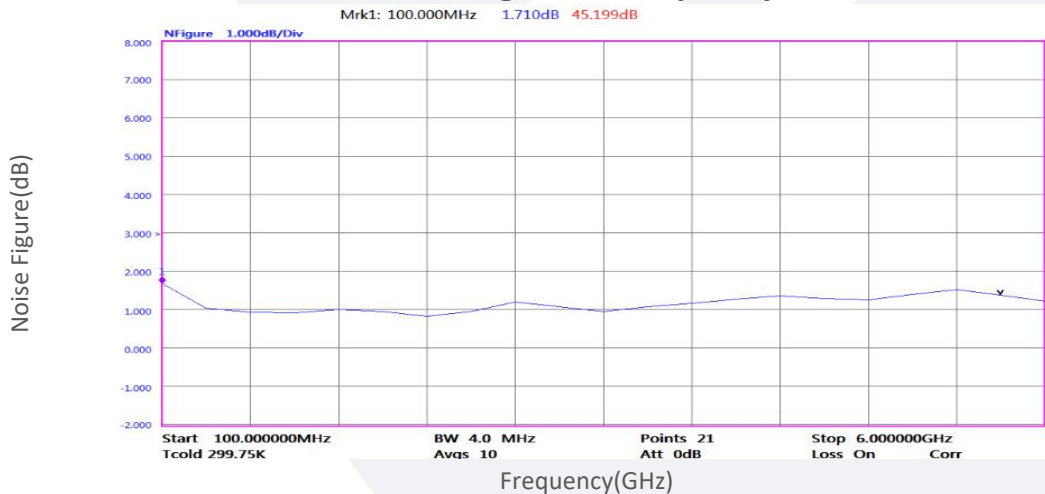
Gain&VSWR vs Frequency



Noise Figure vs Frequency



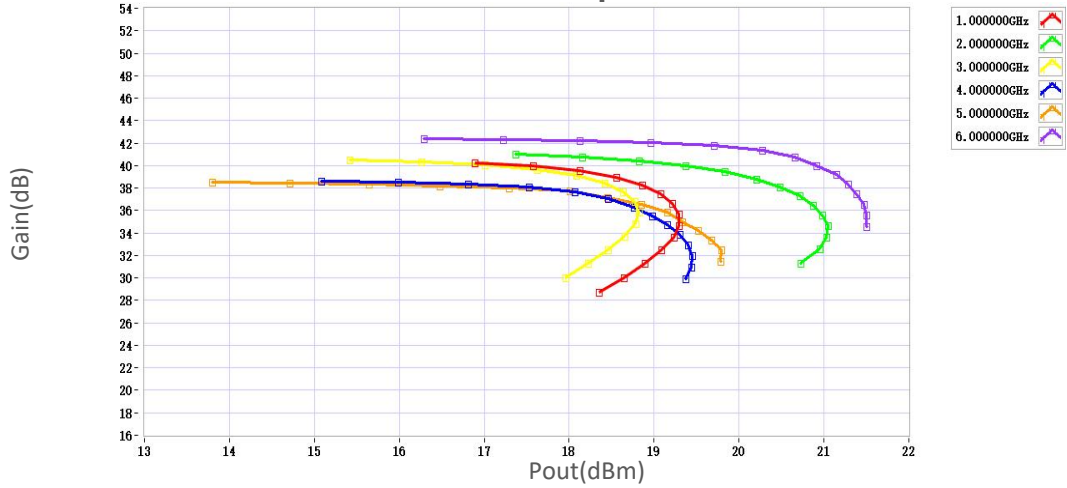
Noise Figure vs Frequency



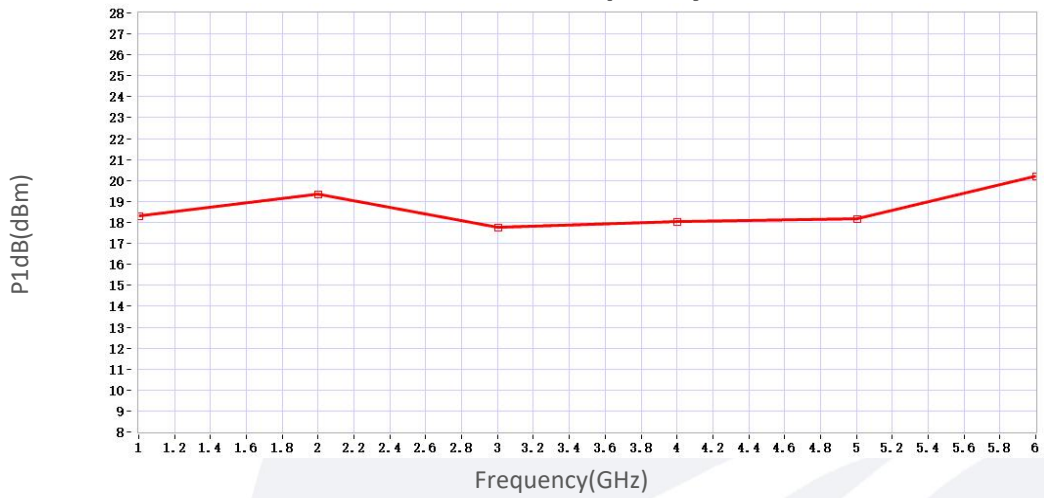
Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

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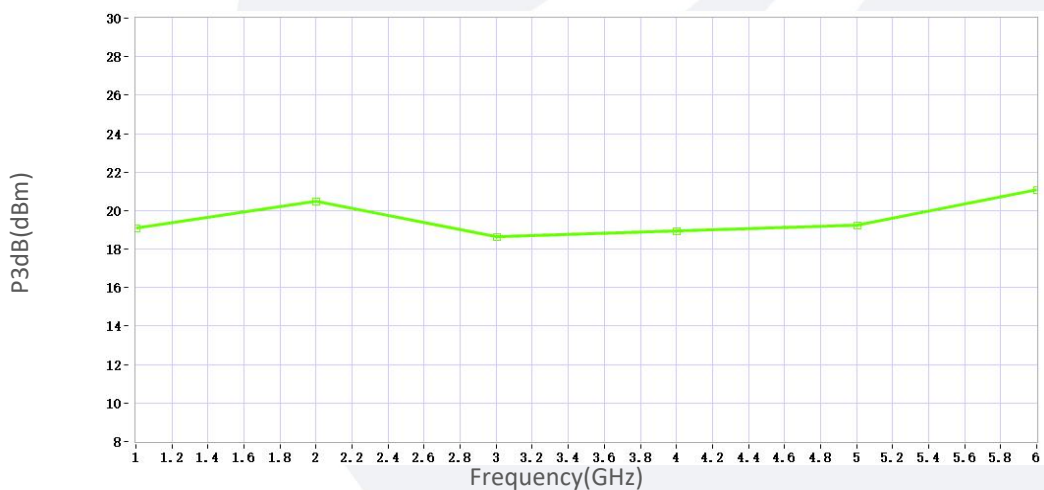
Gain vs Output Power



P1dB vs Frequency



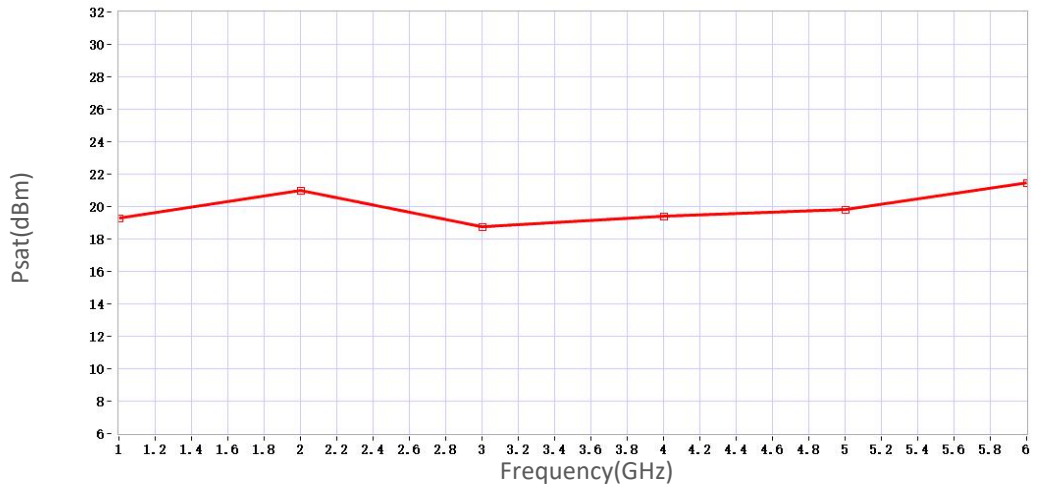
P3dB vs Frequency



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典型曲线 Typical Performance Data:

Psat vs Frequency



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