

0.01-18GHz, Gain:31dB, Psat:25dBm

Feature:

- Ultra Wide Band: 0.01-18GHz
- Gain: 31 dB Typ
- Psat Output Power: 25 dBm Min
- 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	0.01-18			GHz
增益 Gain	27	31		dB
增益平坦度 Gain Flatness		±2.5		dB
线性输出功率 Output P1dB		25		dBm
饱和输出功率 Output Psat	25	27		dBm
噪声系数 Noise Figure		2.5		dB
输入驻波 Input VSWR		2.0	2.5	:1
输出驻波 Output VSWR		1.8	2.4	:1
直流电压 DC Voltage	+12			V DC
直流电流 DC Supply Current	500			mA
阻抗 Impedance	50			Ohms

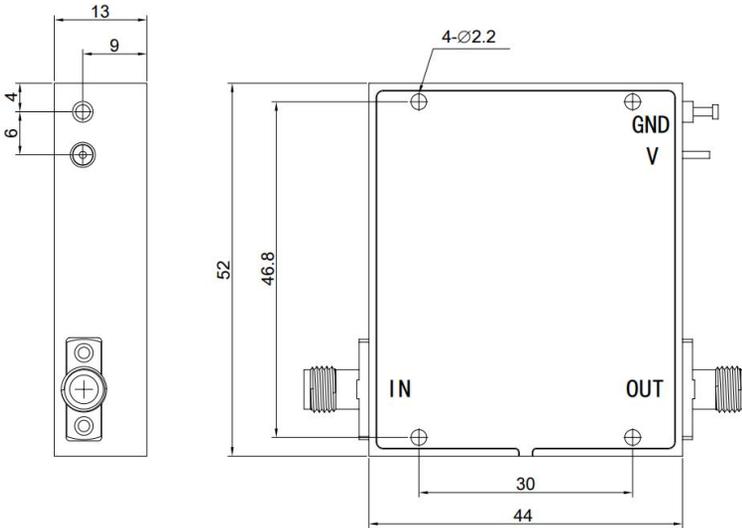
机械特性 Mechanical Specifications:

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	52*44*13	mm

绝对最大值 Absolute Maximum Ratings:

参数 Parameter	指标 Value
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Unit: mm



***Heat Sink Required During Operation



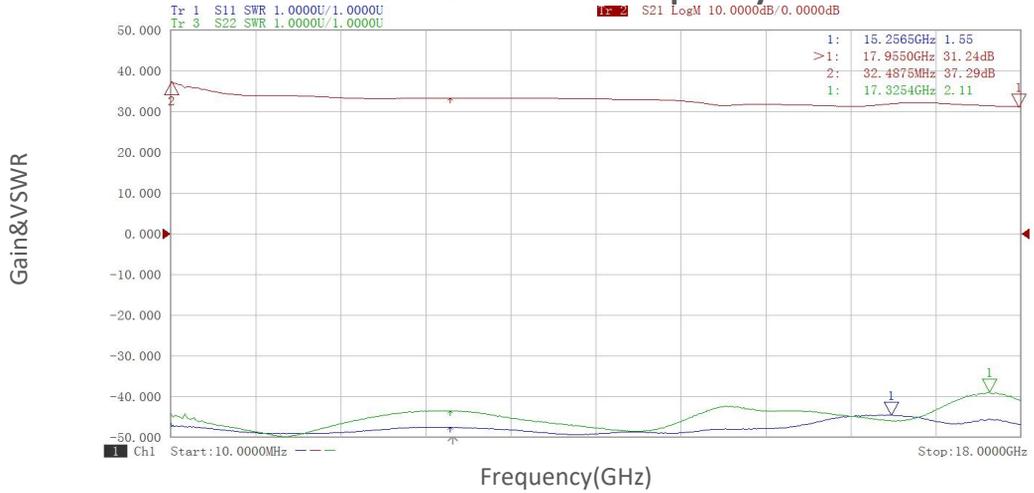
温度环境 Environmental Conditions:

参数 Parameter	Min	Typ	Max	单位 Units
操作温度 Operating Temperature	-40		+75	°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)	20g,11ms,saw-tooth			
冲击 Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

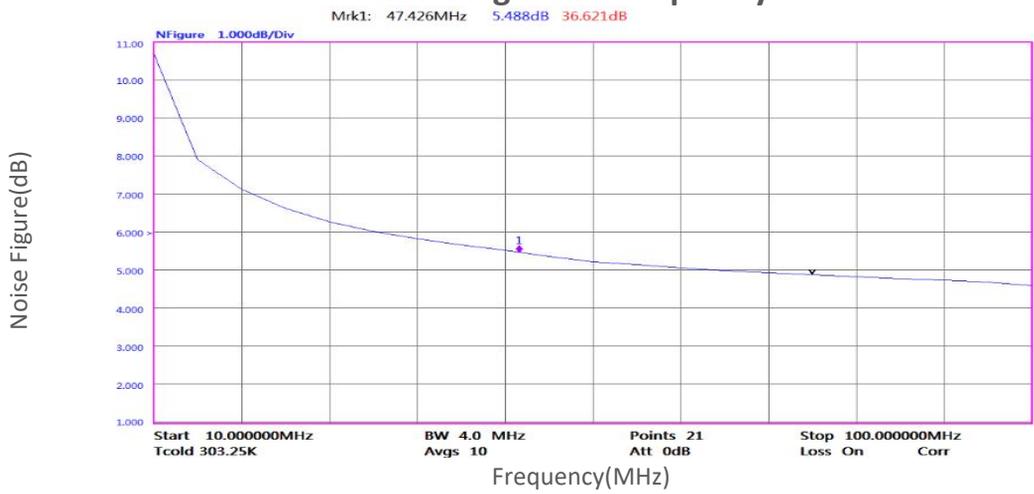
订货信息 Ordering Information:

标准型号 Part Number	描述 Description	版本号 Revision
TLPA0.01G18G-31-25	Power amplifier 0.01-18GHz,Gain:31dB,Psat:25dBm,+12V DC,Without Heatsink	Rev.1.2

Gain&VSWR vs Frequency



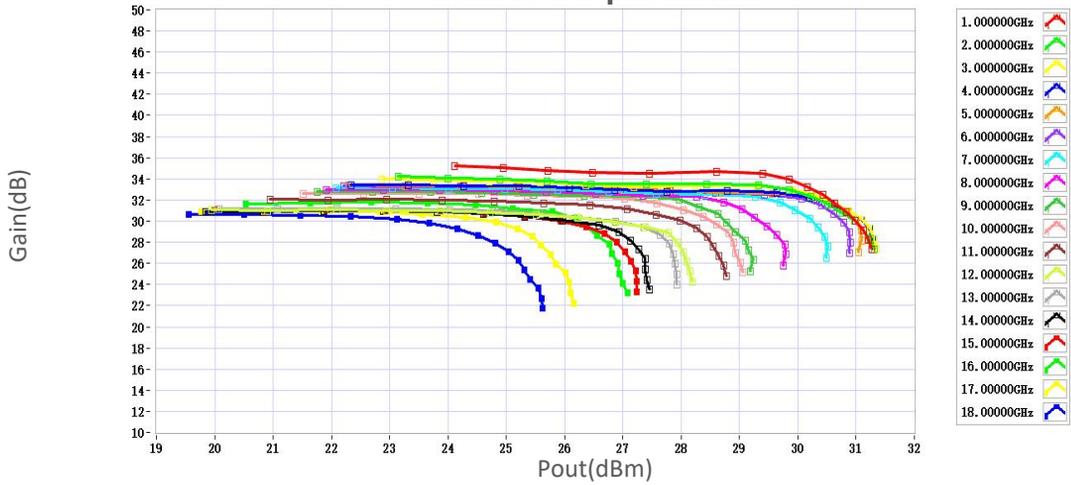
Noise Figure vs Frequency



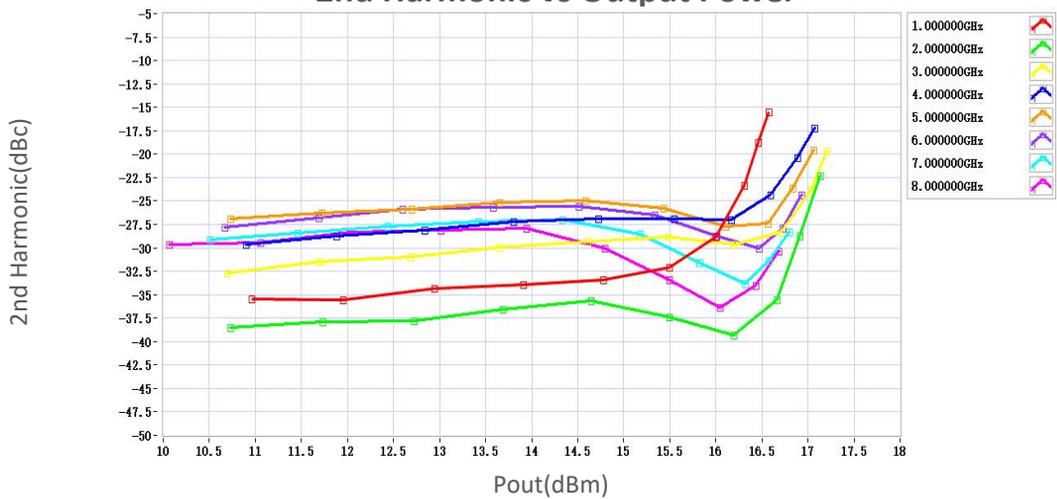
Noise Figure vs Frequency

Noise Figure(dB)

Gain vs Output Power



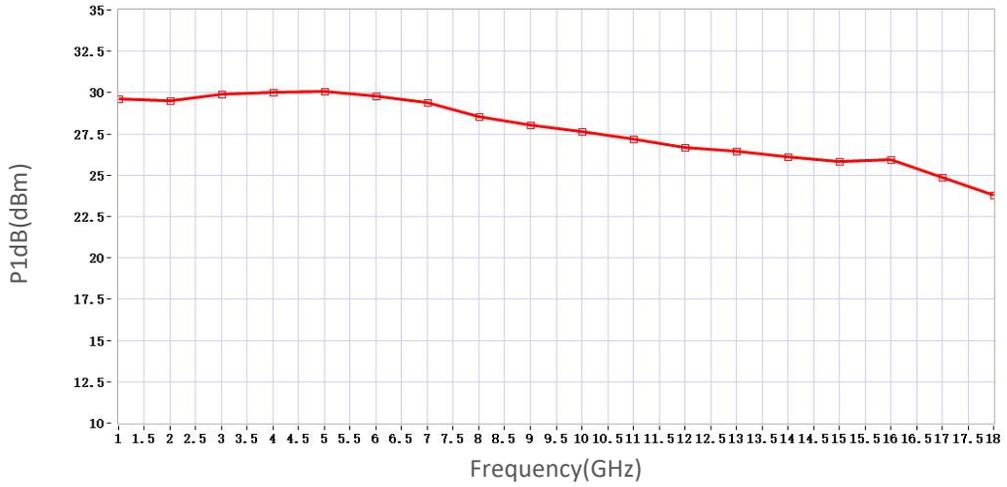
2nd Harmonic vs Output Power



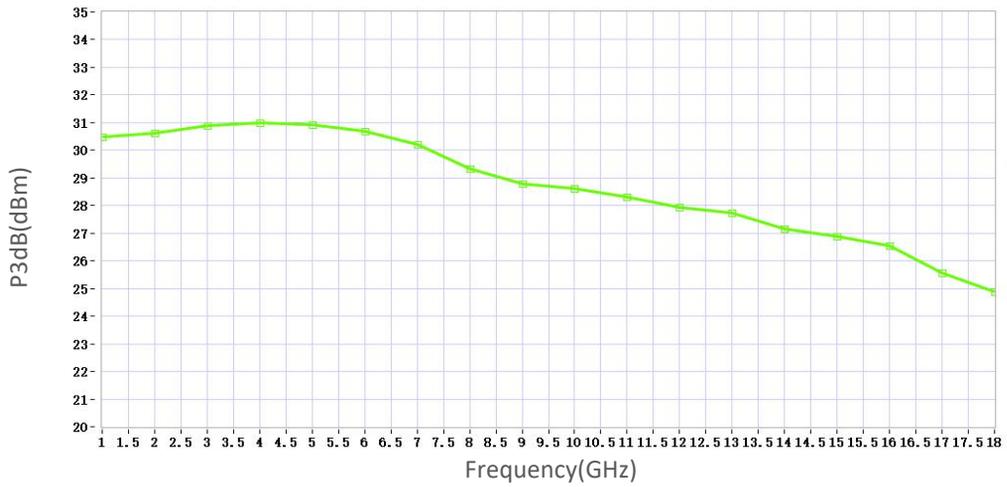
3rd Harmonic vs Output Power

3rd Harmonic(dBc)

P1dB vs Frequency



P3dB vs Frequency



Psat vs Frequency

Psat(dBm)