泰莱微波
Talent Microwave

Suzhou Talent Microwave,Inc
+86-0512-62657975
sales@talentmw.com
www.talentmw.com

Model:TLPA0.01G18G-31-25

Power Amplifier 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
供电偏置电压 Supply Bias Voltage	+12 V
输入功率 RF Input Power	+10 dBm
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V

Available 220V System Benchtop Amplifier

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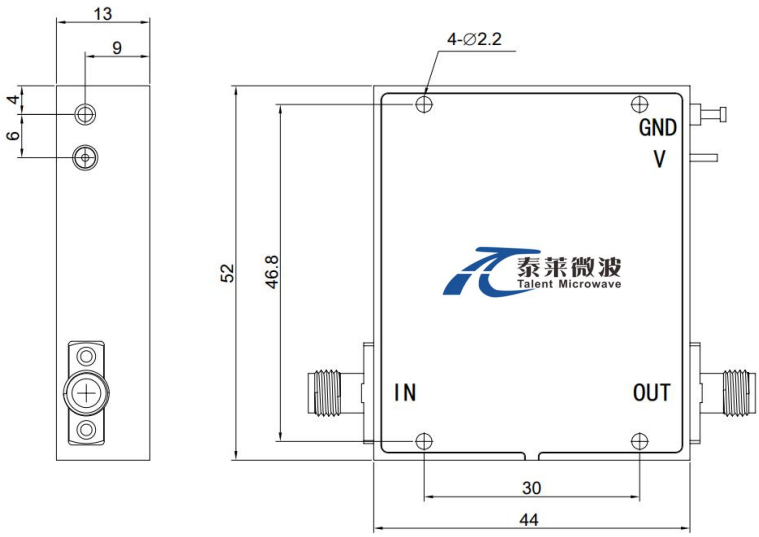
外形尺寸Outline Drawing:

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	-40		+75	℃
存储温度 Non-operating Temperature	-55		+125	℃
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
TLPA0.01G18G-31-25-HS	Power amplifier 0.01-18GHz,Gain:31dB,Psat:25dBm, +12V DC,With Heatsink	Rev.1.2

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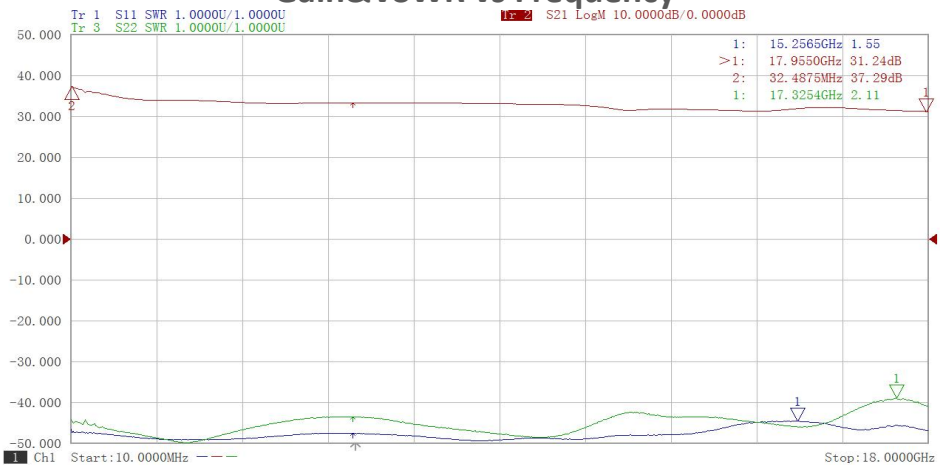
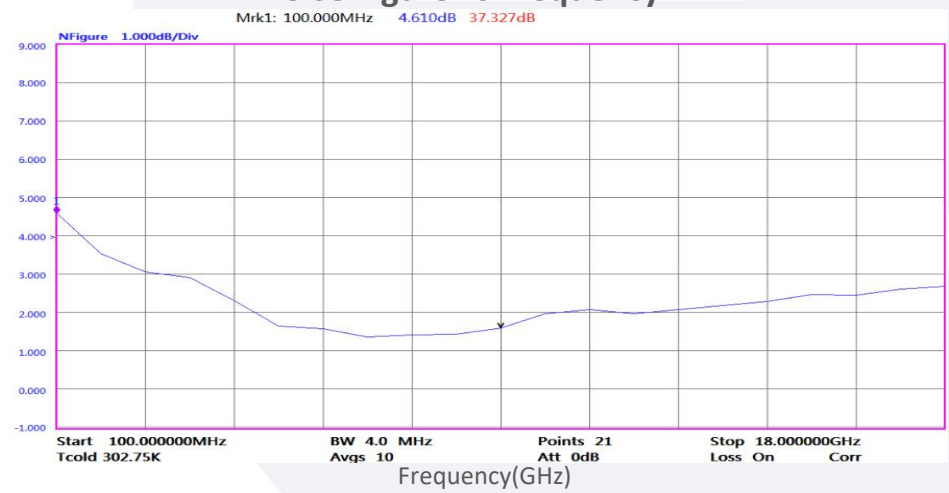
典型曲线 Typical Performance Data:

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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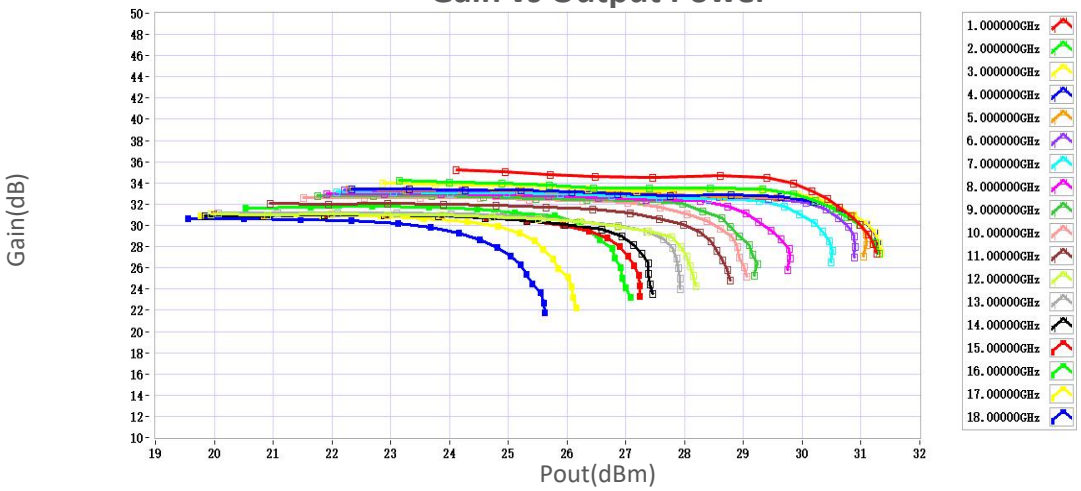
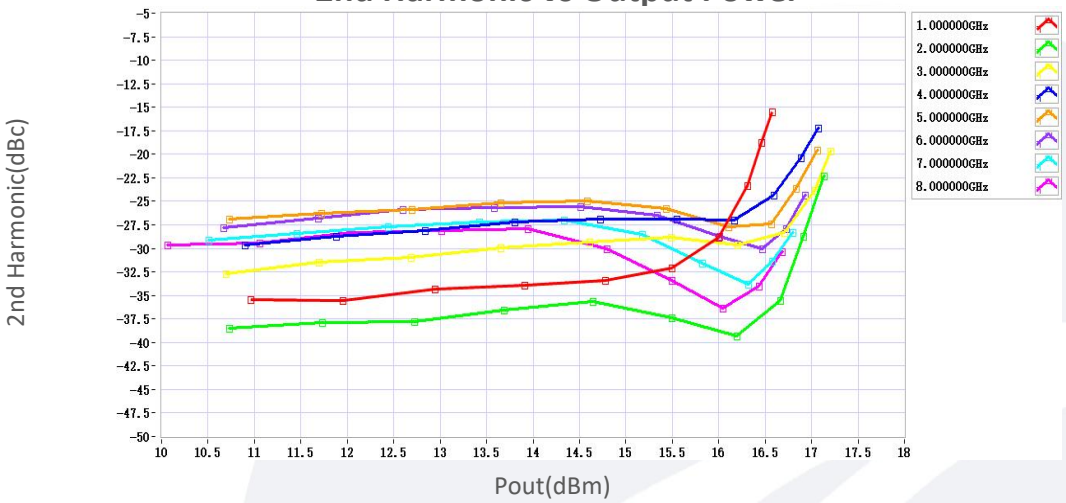
典型曲线 Typical Performance Data:

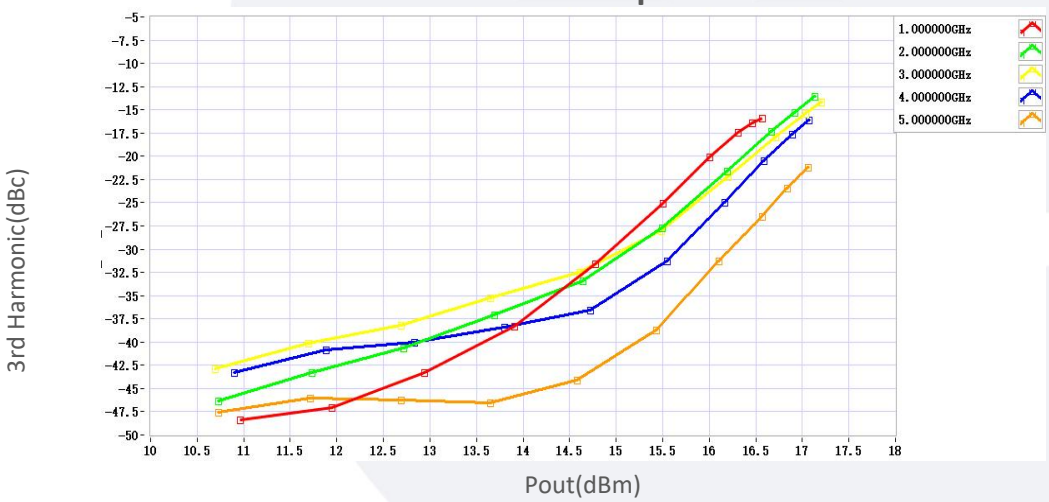
Gain vs Output Power



2nd Harmonic vs Output Power



3rd Harmonic vs Output Power



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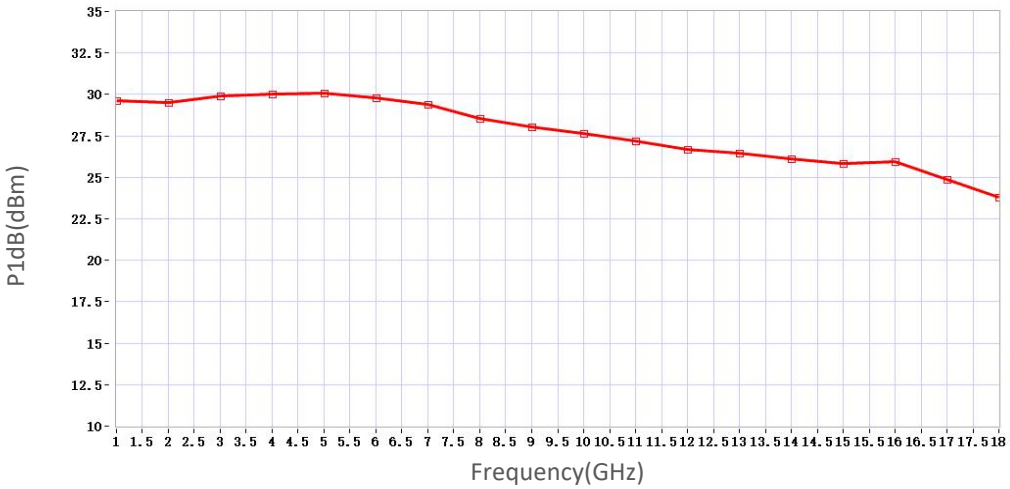
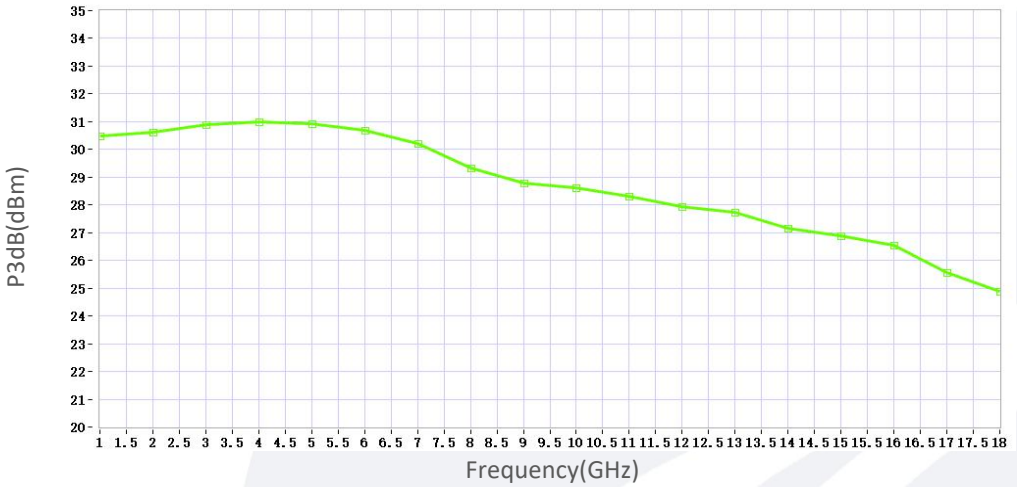
典型曲线 Typical Performance Data:

P1dB vs Frequency



P3dB vs Frequency



Psat vs Frequency

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