

**Model:TLPA0.1G4G-45-41**
**Power Amplifier**  
**0.1-4GHz,Gain:45dB,Psat:41dBm**
**Feature:**

- Ultra Wide Band: 0.1-4GHz
- Gain:45 dB Typ
- Psat Output Power: 41 dBm 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	0.1-4			GHz
增益 Gain		45		dB
增益平坦度 Gain Flatness		±3		dB
线性输出功率 Output P1dB	0.1-1G	38		dBm
	1-4G	40		
饱和输出功率 Output Psat		41		dBm
输入驻波 Input VSWR			1.8	:1
直流电压 DC Voltage	+28			V DC
直流电流 DC Supply Current		2.5		A
阻抗 Impedance	50			Ohms

**机械特性 Mechanical Specifications:**

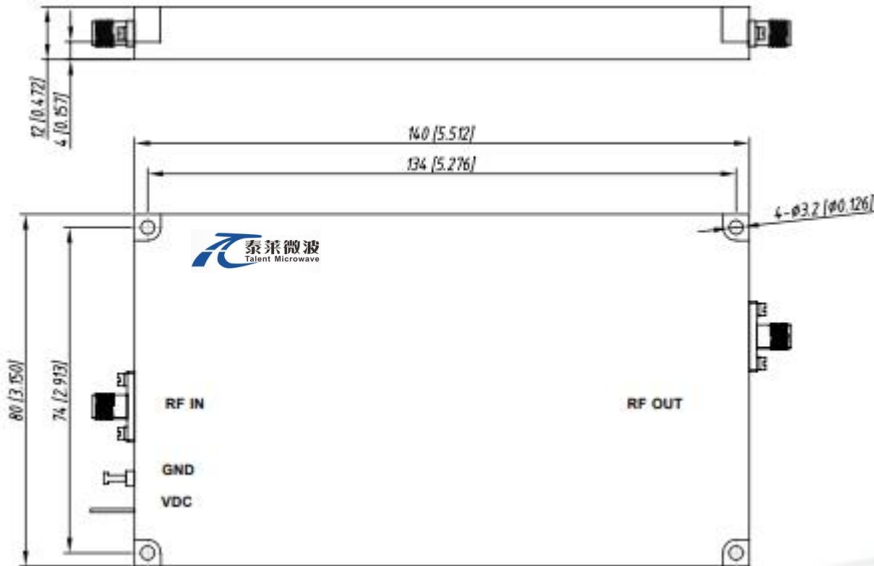
参数Parameter	指标 Value	单位Units
输入输出接口 Input /Output Connector	SMA Female/SMA Female	
直流偏置 DC Bias	Solder Pin	
尺寸 Size	140*80*12	mm
重量 Weight	260	g

**绝对最大值 Absolute Maximum Ratings:**

参数Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	+28V
输入功率 RF Input Power	0 dBm
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V

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*				°C
存储温度 Non-operating Temperature*				°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		

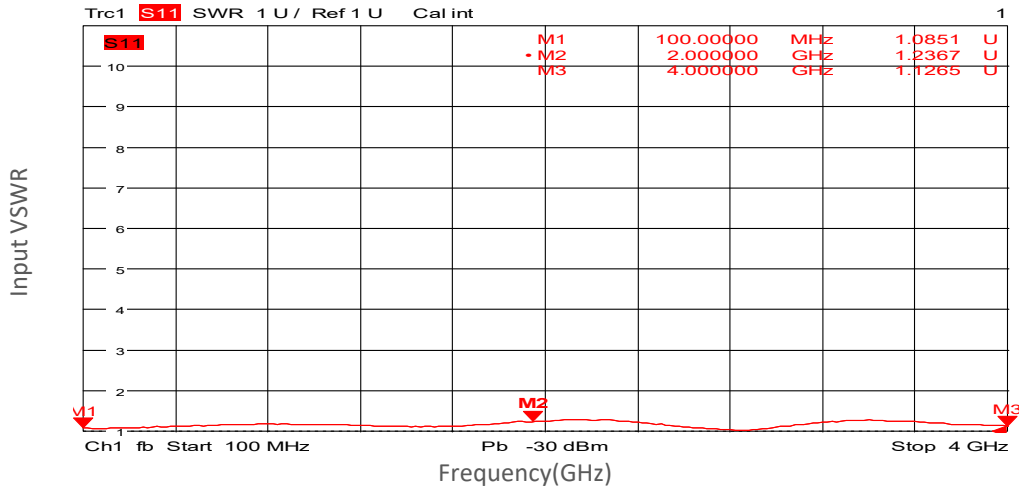
\*Note: For a wider temperature range, please consult the manufacturer.

订货信息 Ordering Information:

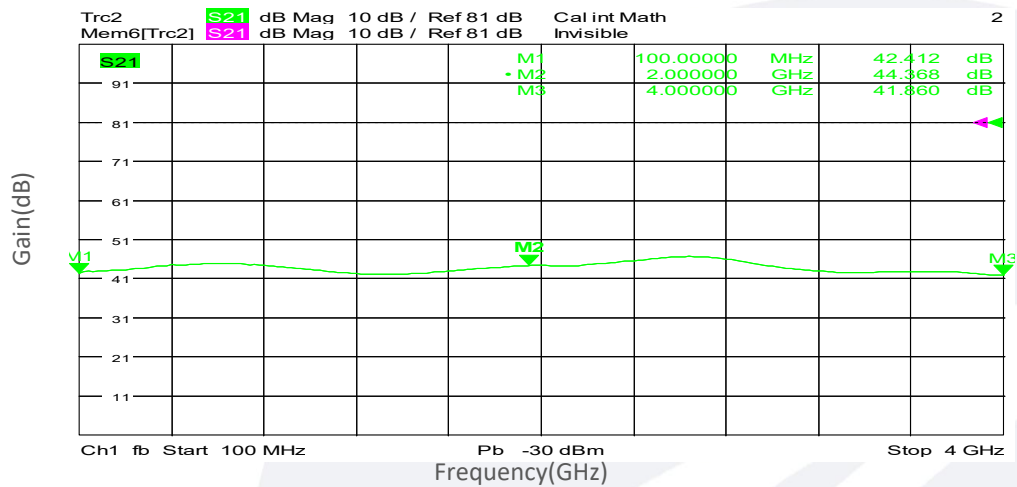
标准型号 Part Number	描述 Description	版本号 Revision
TLPA0.1G4G-45-41	Power amplifier 0.1-4GHz,Gain:45dB,Psat:41dBm, +28V DC,Without Heatsink	Rev.1.1
TLPA0.1G4G-45-41-HS	Power amplifier 0.1-4GHz,Gain:45dB,Psat:41dBm, +28V DC,With Heatsink	Rev.1.1

典型曲线 Typical Performance Data:

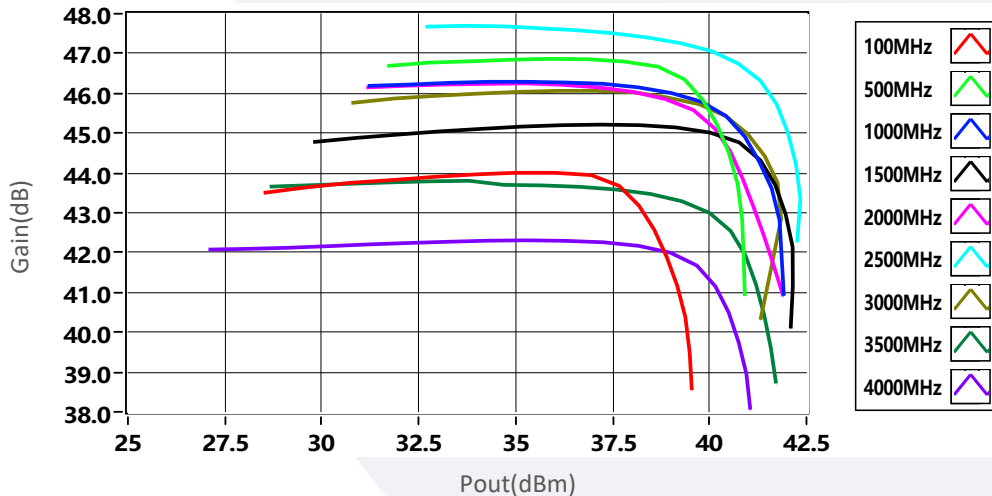
Input VSWR vs Frequency



Small Signal Gain vs Frequency



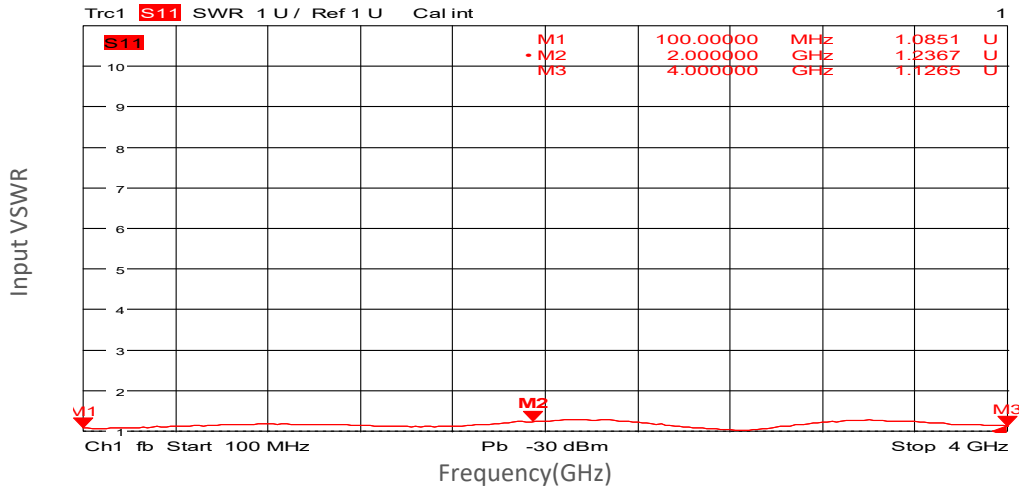
Gain vs Output Power



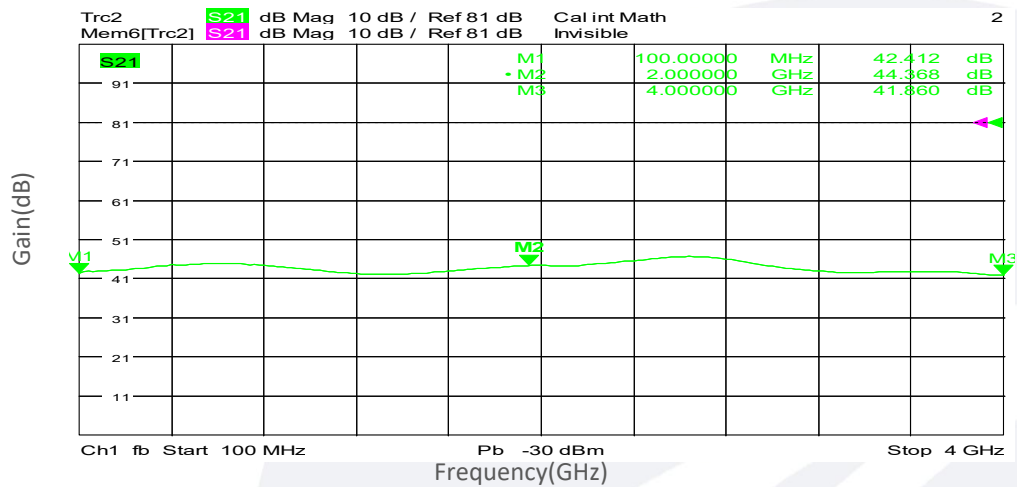
Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

典型曲线 Typical Performance Data:

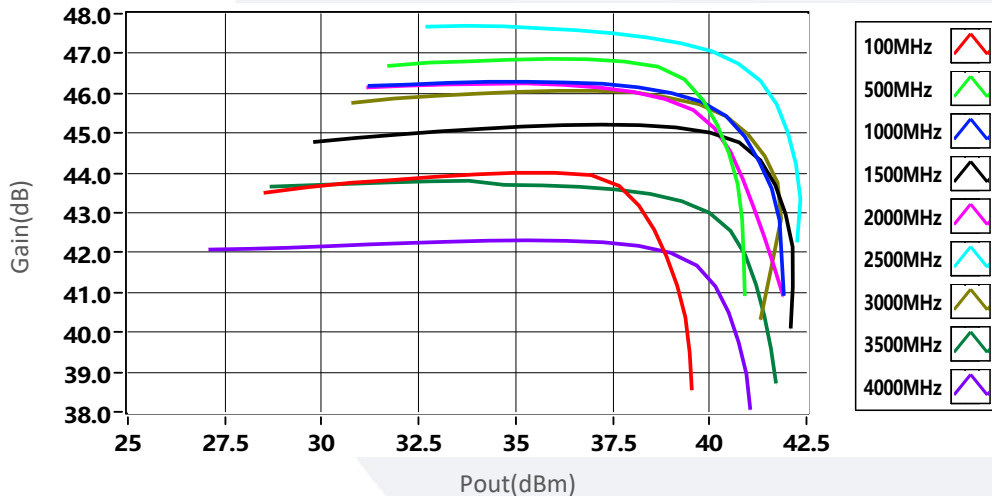
Input VSWR vs Frequency



Small Signal Gain vs Frequency



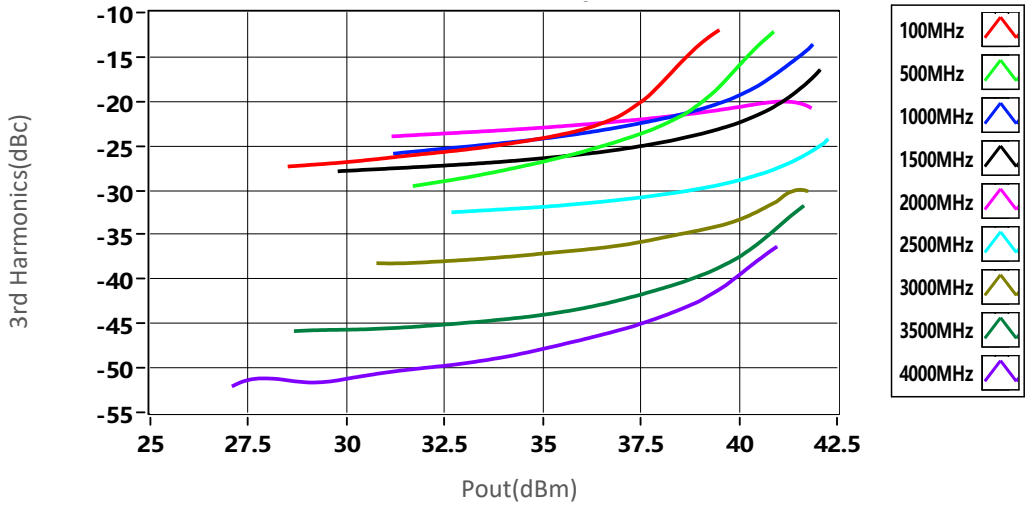
Gain vs Output Power



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典型曲线 Typical Performance Data:

3rd Harmonics vs Output Power



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