

**Model:TLPA1M200M-45-45**
**Power Amplifier**  
**1-200MHz,Gain:45dB,Psat:45dBm**
**Feature:**

- Ultra Wide Band: 1-200MHz
- Gain: 45 dB Min
- Psat Output Power: 43 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	1-200			MHz
增益 Gain	45	47		dB
增益平坦度 Gain Flatness			±3	dB
线性输出功率 Outout P1dB	43			dBm
饱和输出功率 Output Psat	45			dBm
输入驻波 Input VSWR		1.5	2.0	:1
直流电压 DC Voltage	+28			V DC
直流电流 DC Supply Current	5			A
阻抗 Impedance	50			Ohms

**机械特性 Mechanical Specifications:**

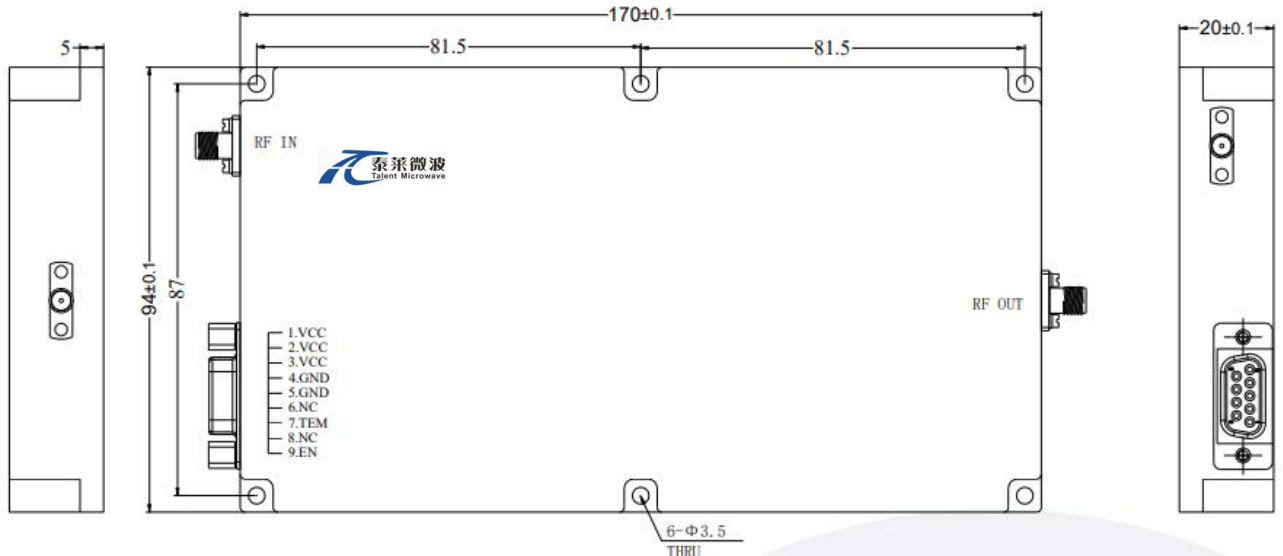
参数Parameter	指标 Value	单位Units
输入输出接口Input /Output Connector	SMA Female/SMA Female	
直流偏置 DC Bias	D-SUB-9	
尺寸 Size	170*94*20	mm
重量 Weight	200	g

**绝对最大值 Absolute Maximum Ratings:**

参数Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	+30 V
输入功率 RF Input Power	+5 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**



温度环境 Environmental Conditions:

参数 Parameter	Min	Typ	Max	单位 Units
操作温度 Operating Temperature*	-40		+50	°C
存储温度 Non-operating Temperature*	-50		+60	°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		

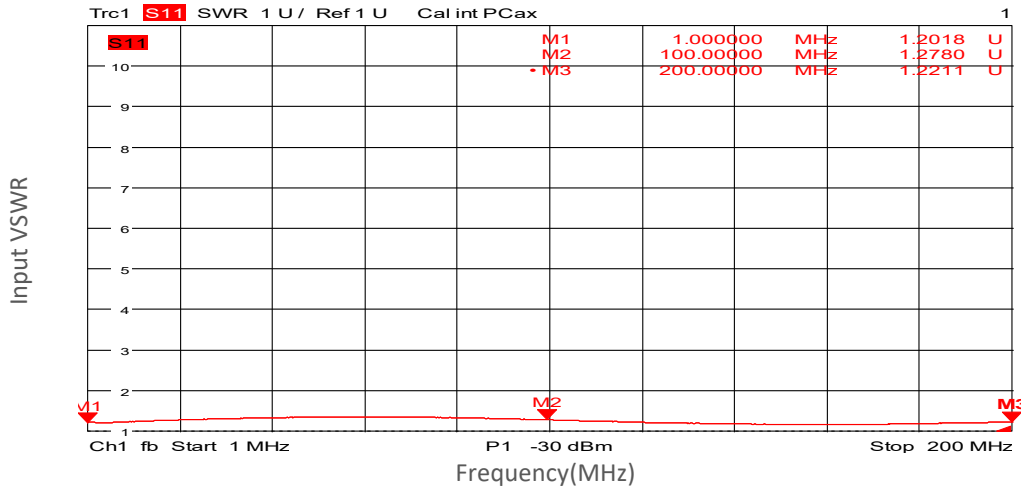
\*Note: For a wider temperature range, please consult the manufacturer.

订货信息 Ordering Information:

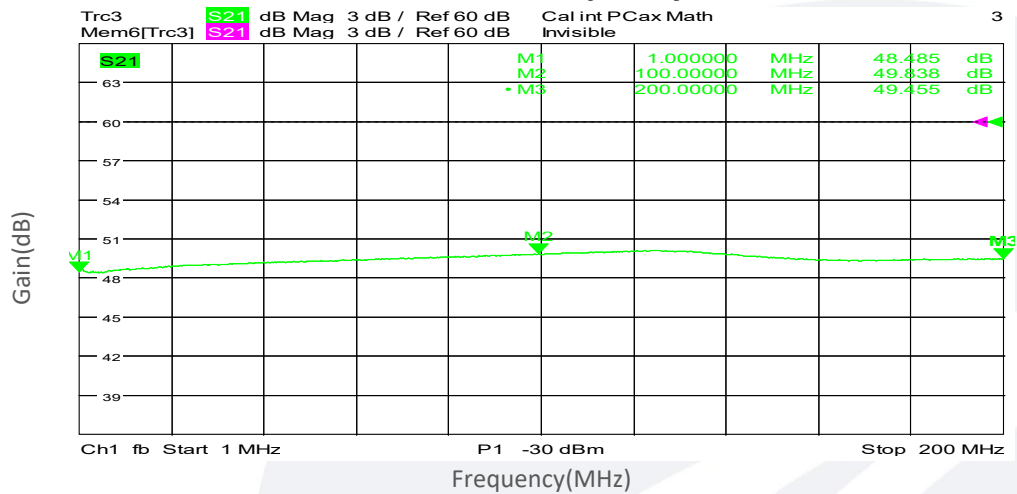
标准型号 Part Number	描述 Description	版本号 Revision
TLPA1M200M-45-45	Power amplifier 1-200MHz, Gain:45dB, Psat:45dBm, +28V DC, Without Heatsink	Rev.1.1
TLPA1M200M-45-45-HS	Power amplifier 1-200MHz, Gain:45dB, Psat:45dBm, +28V DC, With Heatsink	Rev.1.1

典型曲线 Typical Performance Data:

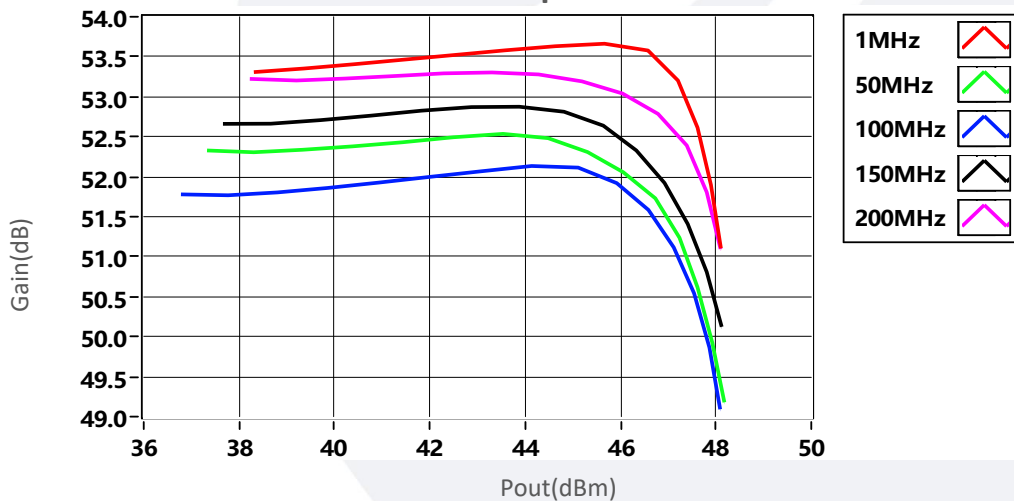
Input VSWR vs Frequency



Gain vs Frequency



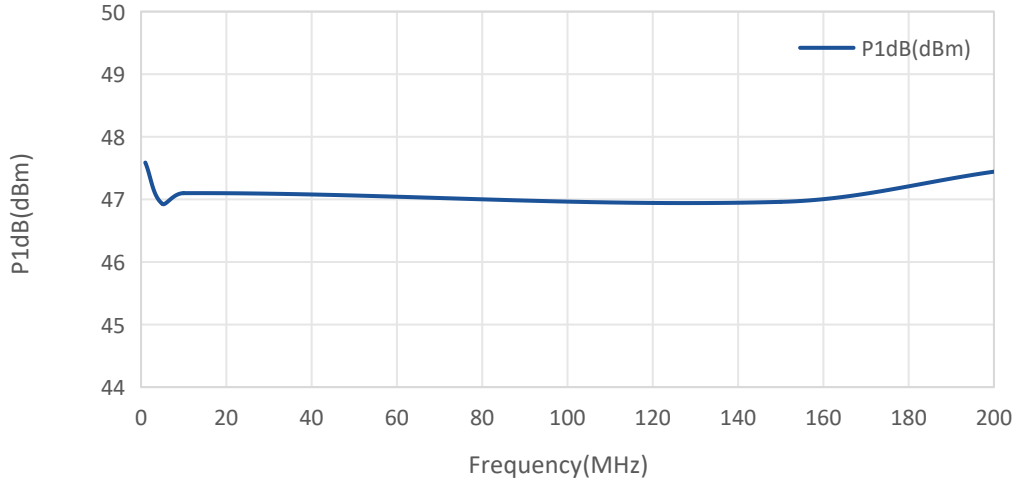
Gain vs Output Power



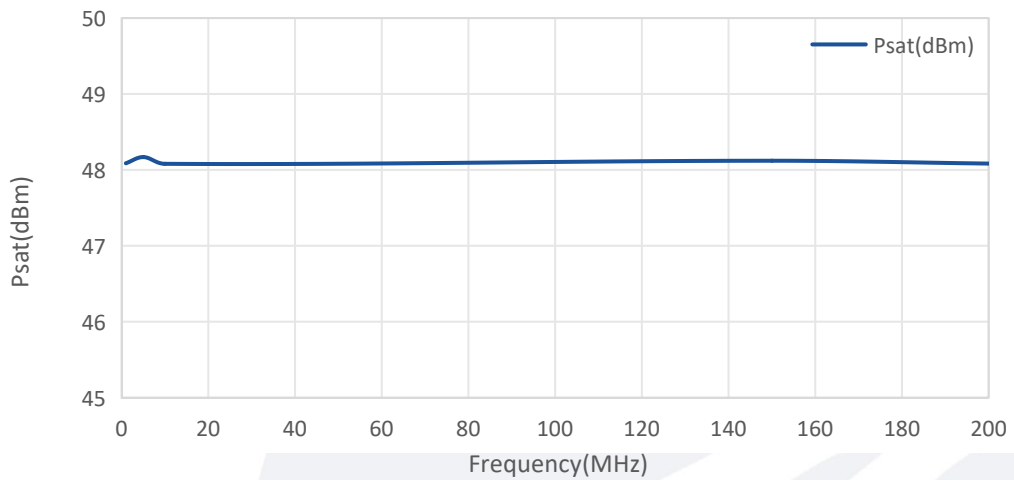
Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

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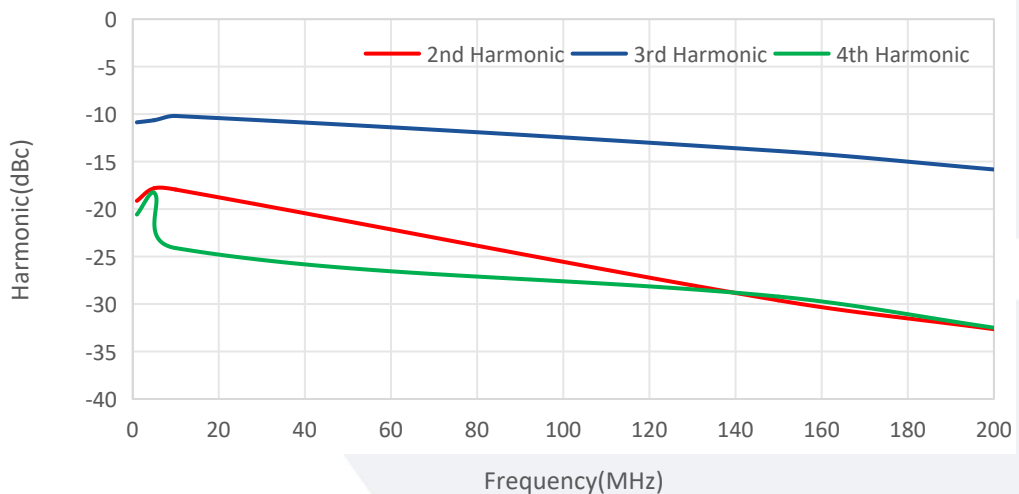
**P1dB vs Frequency**



**Psat vs Frequency**



**Harmonics vs Frequency**



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