

Model: TLPA100K250M-50-50
Power Amplifier
0.1-250MHz, Gain: 50dB, Psat: 50dBm
Feature:

- Ultra Wide Band: 0.1-250MHz
- Gain: 50 dB Min
- Psat Output Power: 50 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	0.1-250			MHz
增益 Gain	50	52		dB
增益平坦度 Gain Flatness		±3	±5	dB
饱和输出功率 Output Psat	50	51		dBm
谐波抑制 Harmonic@Pout=50dBm		-12		dBc
输入驻波 Input VSWR		1.5	2.0	:1
直流电压 DC Voltage	+26	+28	+30	V DC
直流电流 DC Supply Current		1.8	18	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	DB9	
尺寸 Size	255*130*35	mm
重量 Weight	500	g

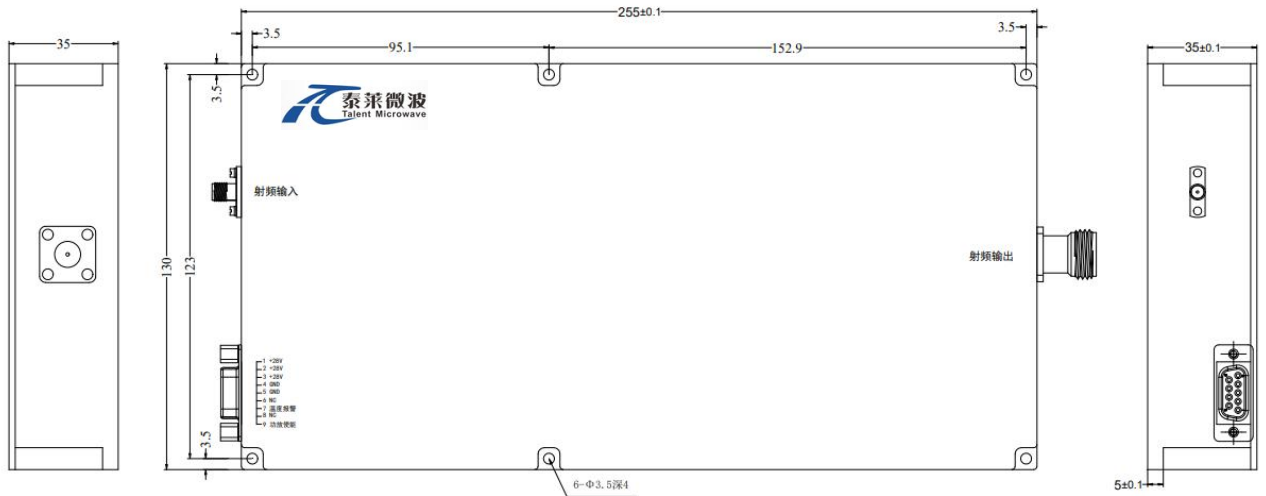
绝对最大值 Absolute Maximum Ratings:

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


**Available 220V System
 Benchtop Amplifier**

外形尺寸Outline Drawing:

Unit: mm



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



引脚编号	标识	类型	功能详细说明
1	+28V	输入	供电正极 +26.0-30.0VDC
2	+28V	输入	供电正极 +26.0-30.0VDC
3	+28V	输入	供电正极 +26.0-30.0VDC
4	GND	输入	供电负极
5	GND	输入	供电负极
6	NC	输入	
7	温度报警	输出	供电正极 +26.0-30.0VDC
8	NC	输入	功放壳体温度大于70℃时，功放关闭，此引脚将输出高电平。功放壳体温度降低到60℃时，功放恢复正常工作，此引脚将输出低电平。
9	功放使能	输入	高电平（或悬空）打开功放，短接到地关闭功放。

备注:

1, TTL为5V

2, 选配散热器风扇供电, 24V/0.2A

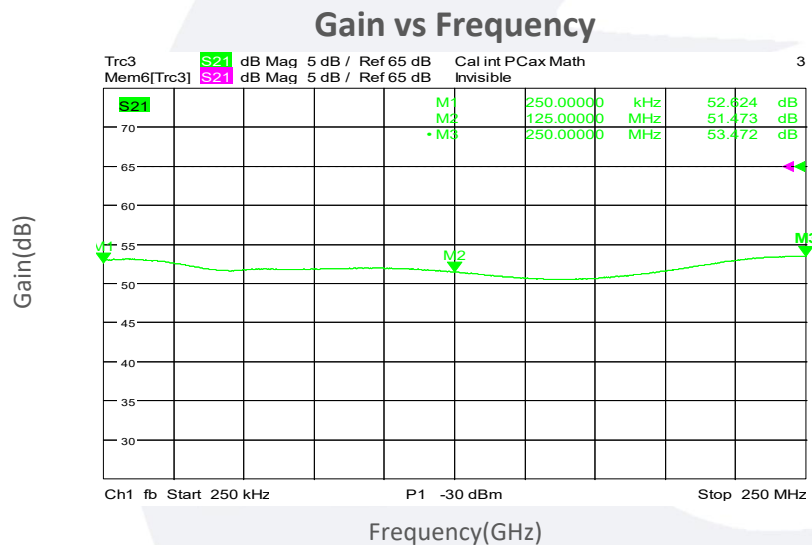
温度环境 Environmental Conditions:

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	30,000			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:

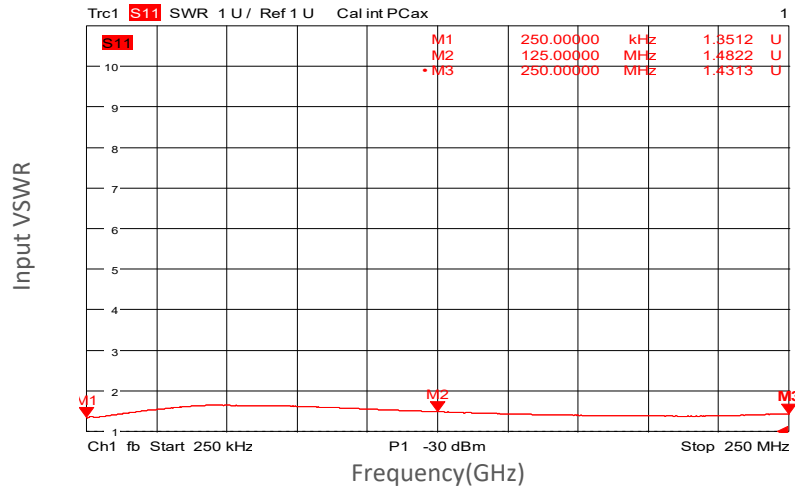
标准型号 Part Number	描述 Description	版本号Revision
TLPA100K250M-50-50	Power amplifier 0.1-250MHz,Gain:50dB,Psat:50dBm, +28V DC,Without Heatsink	Rev.1.1
TLPA100K250M-50-50- HS	Power amplifier 0.1-250MHz,Gain:50dB,Psat:50dBm, +28V DC,With Heatsink	Rev.1.1

典型曲线 Typical Performance Data:

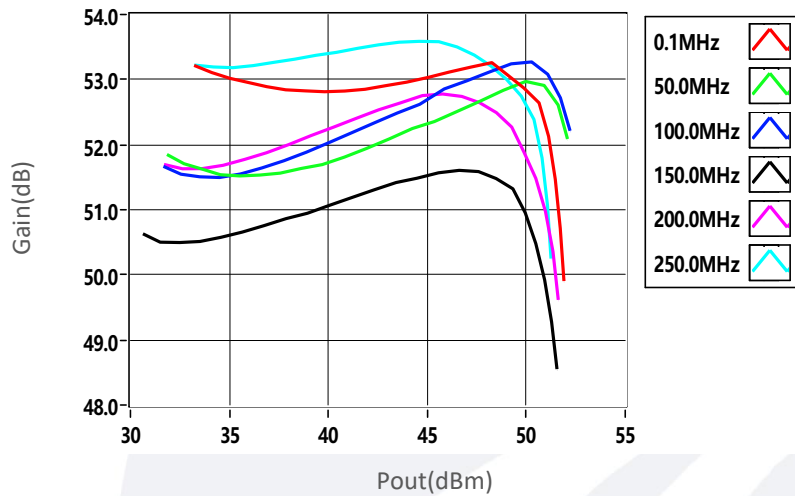


典型曲线 Typical Performance Data:

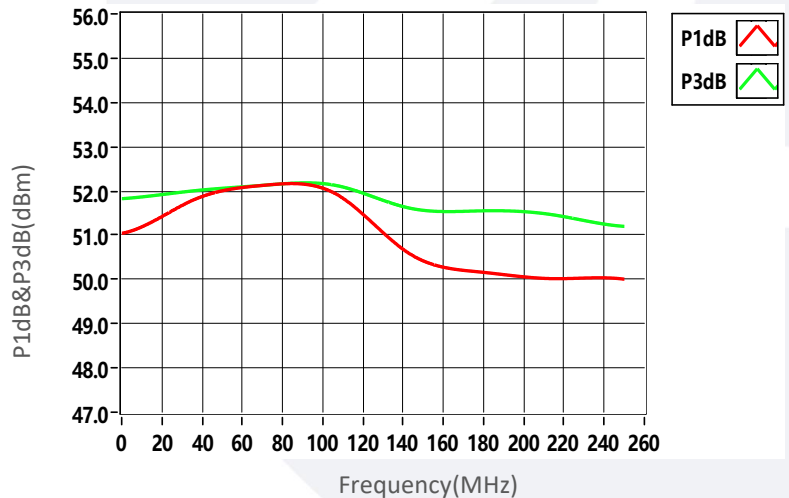
Input VSWR vs Frequency



Gain vs Output Power

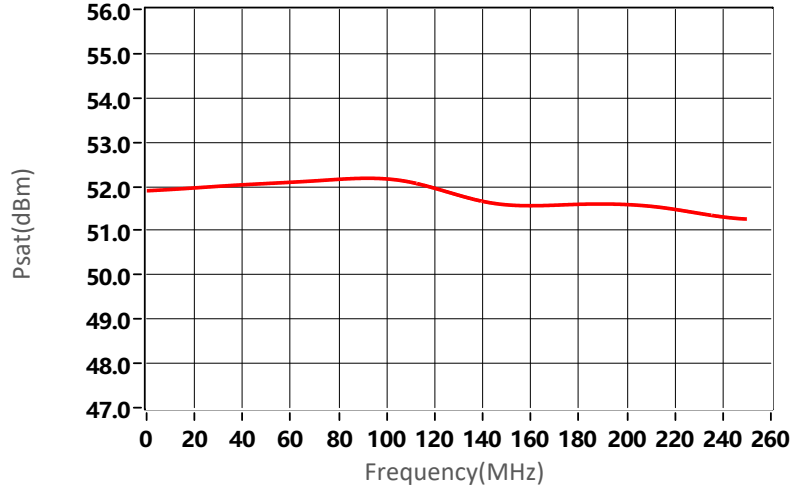


P1dB&P3dB vs Frequency

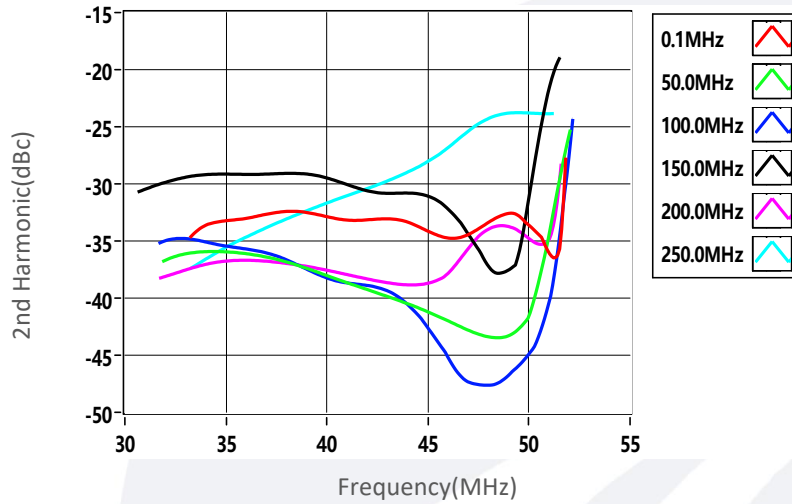


典型曲线 Typical Performance Data:

P_{sat} vs Frequency



2nd Harmonic vs Frequency



3rd Harmonic vs Frequency

