

**Model:TLPA2200M2400M-30-40**
**Power Amplifier**  
**2.2-2.4GHz,Gain:30dB,Psat:40dBm**
**Feature:**

- Ultra Wide Band:2.2-2.4GHz
- Gain:30dB Min
- Psat Output Power:40dBm 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	2.2-2.4			GHz
增益 Gain	30	33		dB
增益平坦度 Gain Flatness		±0.5	±1	dB
饱和输出功率 Output Psat	40	43		dBm
杂散 Spurious		-65	-60	dBc
输入驻波 Input VSWR		1.3	1.5	:1
输出驻波 Output VSWR			2	:1
直流电压 DC Voltage	+18	+28	+36	V DC
直流电流 DC Supply Current		0.7	3	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	170*140*40	mm
重量 Weight	1.3	Kg

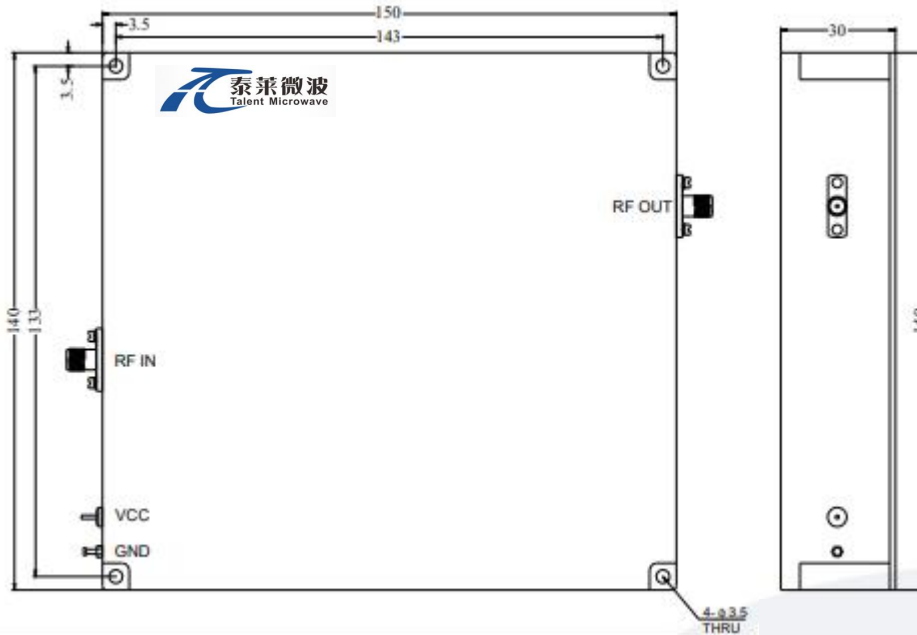
**绝对最大值 Absolute Maximum Ratings:**

参数Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	+36V
输入功率 RF Input Power	33dBm
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**



温度环境 Environmental Conditions:

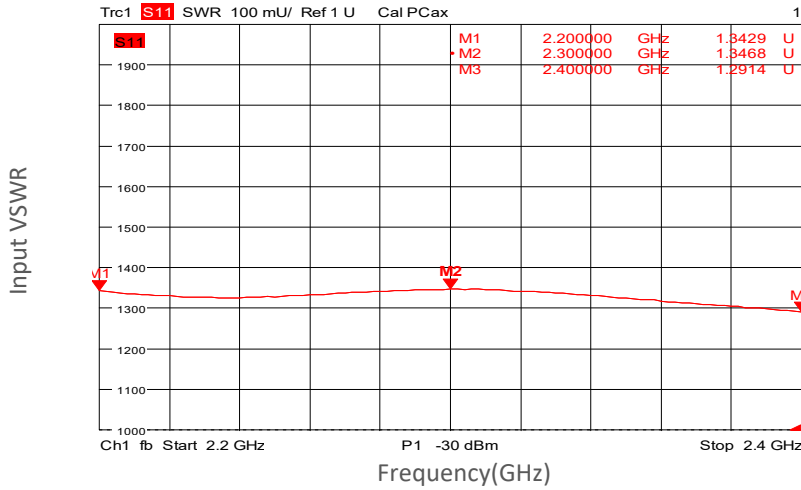
参数Parameter	Min	Typ	Max	单位Units
操作温度 Operating Temperature	-45		+85	°C
存储温度 Non-operating Temperature	-55		+125	°C
相对湿度 Relative humidity		95		%
海拔 Altitude	30000			feet
震动 Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
冲击 Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

订货信息 Ordering Information:

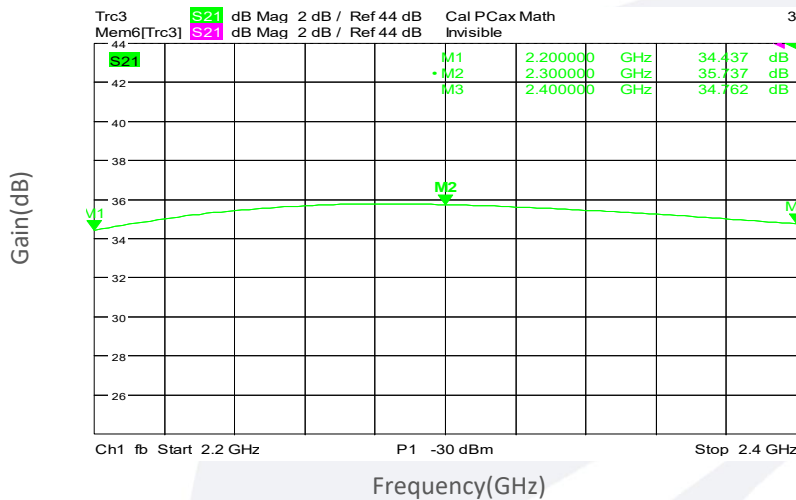
标准型号 Part Number	描述 Description	版本号Revision
TLPA2200M2400M-30-40	Power amplifier 2200-2400MHz, Gain30dB, Psat:40dBm, +28V DC, Without Heatsink.	Rev.1.1
TLPA2200M2400M-30-40-HS	Power amplifier 2200-2400MHz, Gain30dB, Psat:40dBm, +28V DC, With Heatsink.	Rev.1.1

典型曲线 Typical Performance Data:

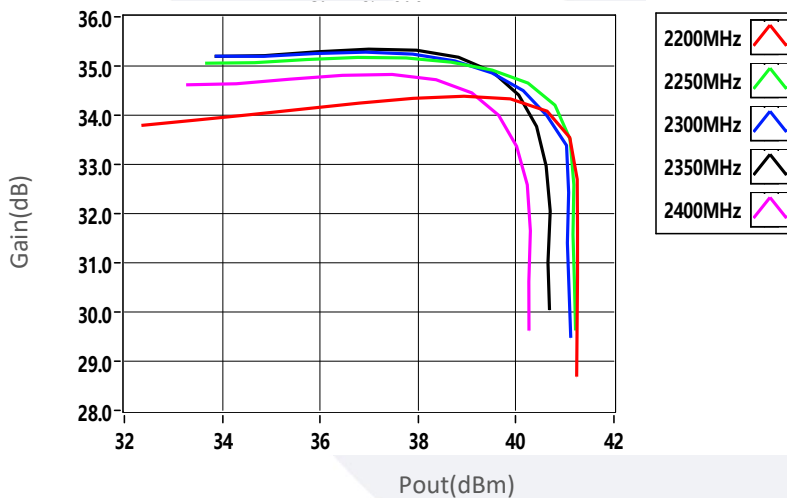
Input VSWR vs Frequency



Gain vs Frequency

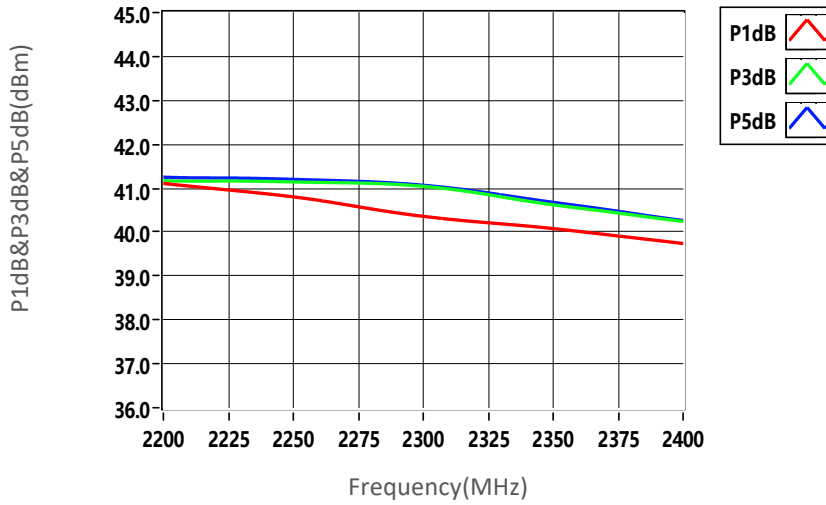


Gain vs Output Power

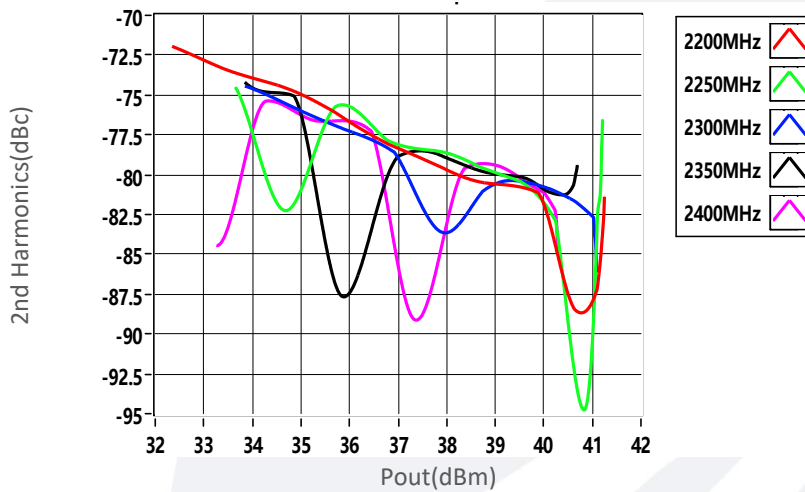


典型曲线 Typical Performance Data:

P1dB&P3dB&P5dB vs Frequency



2nd Harmonics vs Output Power



3rd Harmonics vs Output Power

