

**Model:TLPA10M1000M-39-39**
**Power Amplifier**  
**10-1000MHz,Gain:39dB,Psat:39dBm**
**Feature:**

- Ultra Wide Band: 10-1000MHz
- Gain:39dB Min
- Psat Output Power:39dBm 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	10-1000			MHz
增益 Gain	39	40		dB
增益平坦度 Gain Flatness			±3	dB
线性输出功率 Output P1dB	38			dBm
饱和输出功率 Output Psat	39			dBm
输入驻波 Input VSWR		1.5	2	:1
直流电压 DC Voltage		+28		V DC
直流电流 DC Supply Current		1.5		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	90*48*15	mm
重量 Weight	150	g

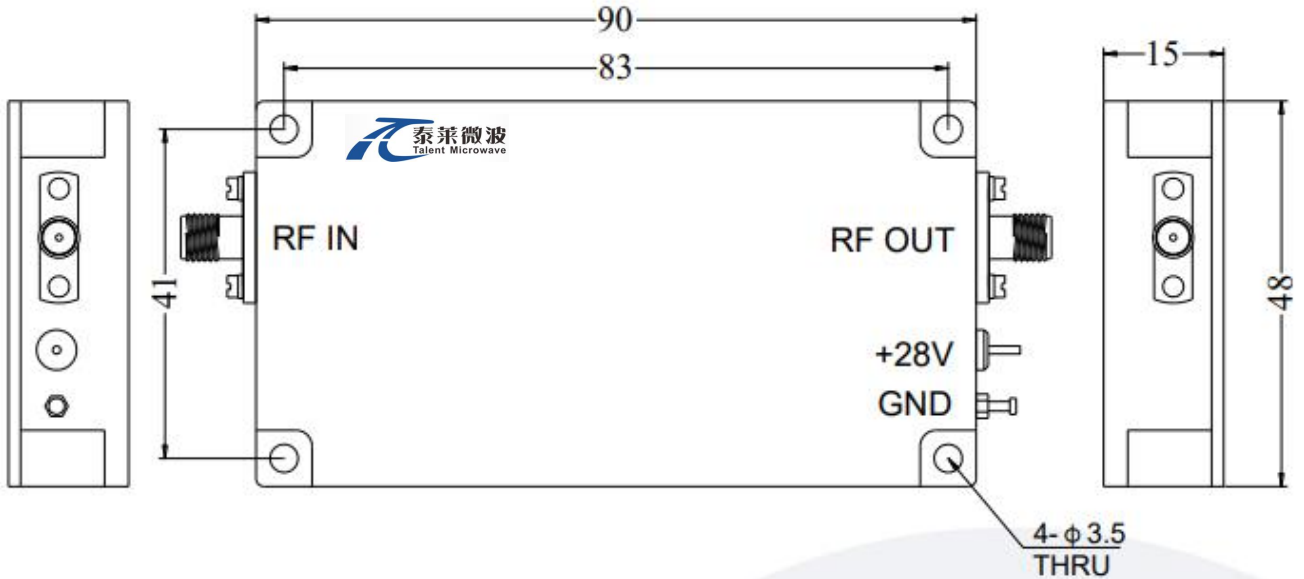
**绝对最大值 Absolute Maximum Ratings:**

参数Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	+30V
输入功率 RF Input Power	3dBm
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:

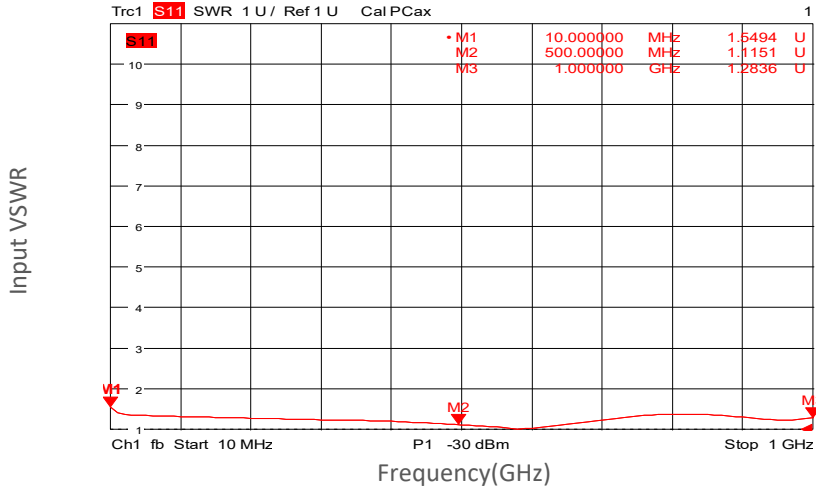
参数Parameter	Min	Typ	Max	单位Units
操作温度 Operating Temperature	-45		+85	°C
存储温度 Non-operating Temperature	-55		+125	°C
相对湿度 Relative humidity		95		%
海拔 Altitude	30,000			feet
震动 Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
冲击 Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

订货信息 Ordering Information:

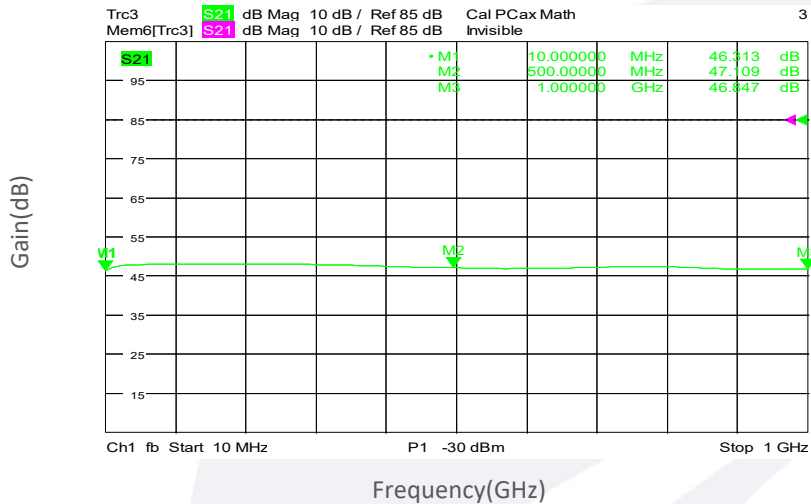
标准型号 Part Number	描述 Description	版本号Revision
TLPA10M1000M-39-39	Power amplifier 10-1000MHz,Gain:39dB,Psat:39dBm,+28V DC,Without Heatsink.	Rev.1.1
TLPA10M1000M-39-39-HS	Power amplifier 10-1000MHz,Gain:39dB,Psat:39dBm,+28V DC,With Heatsink.	Rev.1.1

典型曲线 Typical Performance Data:

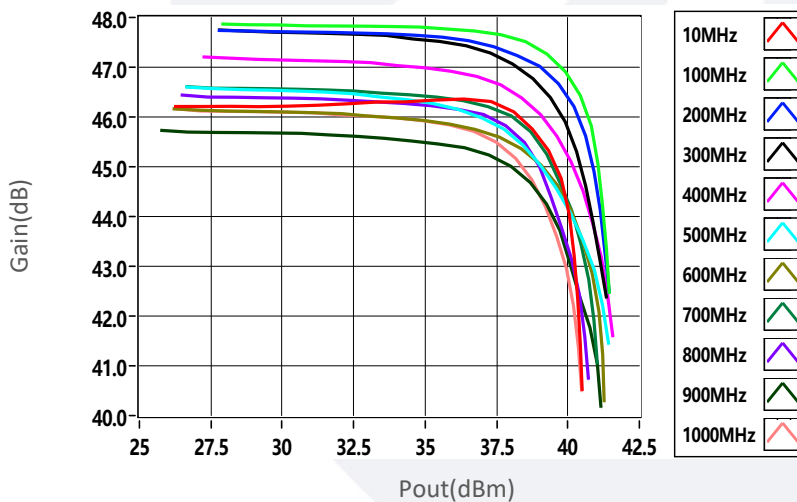
### Input VSWR vs Frequency



### Gain vs Frequency

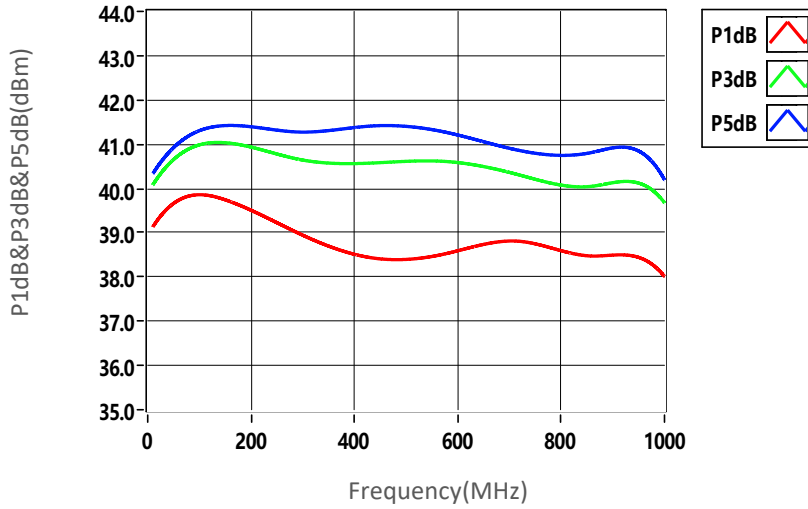


### Gain vs Output Power

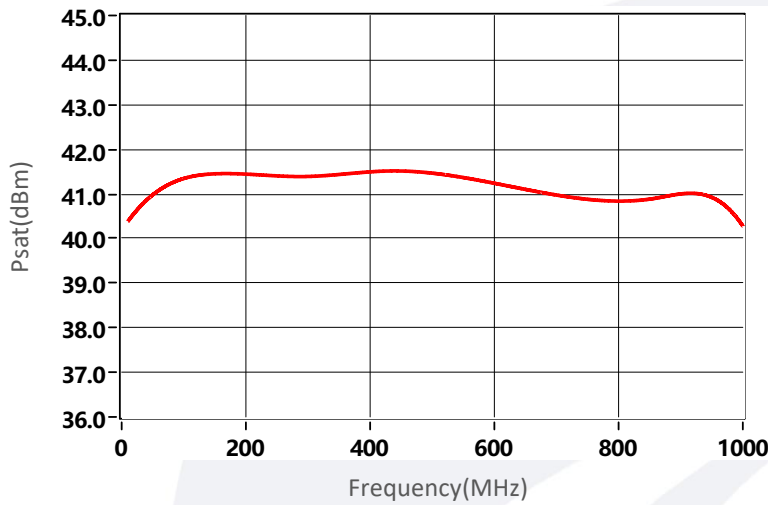


典型曲线 Typical Performance Data:

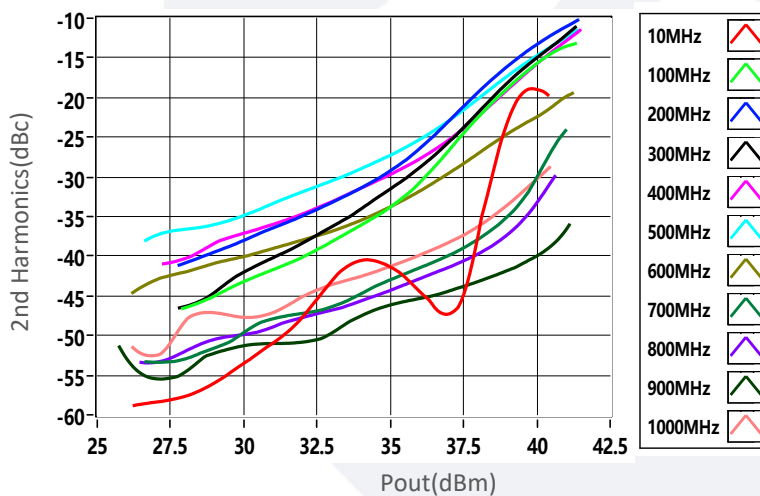
P1dB&P3dB&P5dB vs Frequency



Psat vs Frequency



2nd Harmonics vs Output Power



典型曲线 Typical Performance Data:

3rd Harmonics vs Output Power

