

**Model:TLPA20M3G-38-28**
**Power Amplifier**
**20M-3GHz,Gain:38dB,P1dB:28dBm**
**Feature:**

- Ultra Wide Band: 0.02G-3GHz
- Gain: 35dB Min
- Psat Output Power: 28 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	0.02-3			GHz
增益 Gain	35	38		dB
增益平坦度 Gain Flatness			±3	dB
线性输出功率 Output P1dB	28			dBm
饱和输出功率 Output Psat	29			dBm
输入驻波 Input VSWR		1.5	2	:1
直流电压 DC Voltage		+12		V DC
直流电流 DC Supply Current		1000		mA
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	
直流偏置 DC Bias	Solder Pin	
尺寸 Size	120*80*22	mm
重量 Weight	200	g

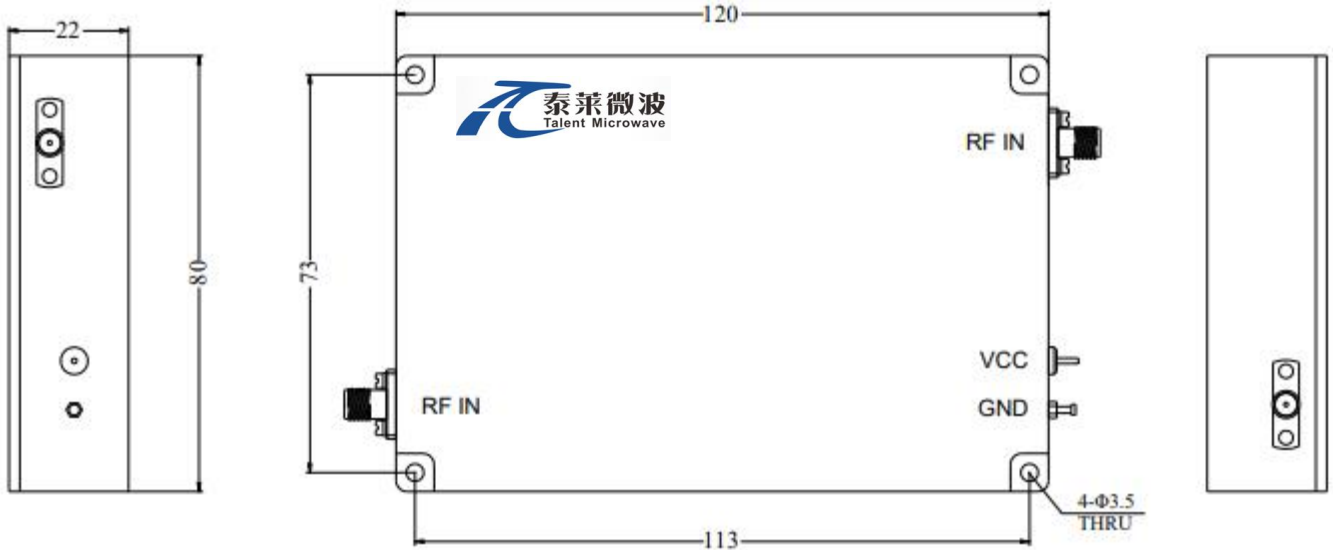
**绝对最大值 Absolute Maximum Ratings:**

参数Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	+15V
输入功率RF Input Power	0dBm
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:

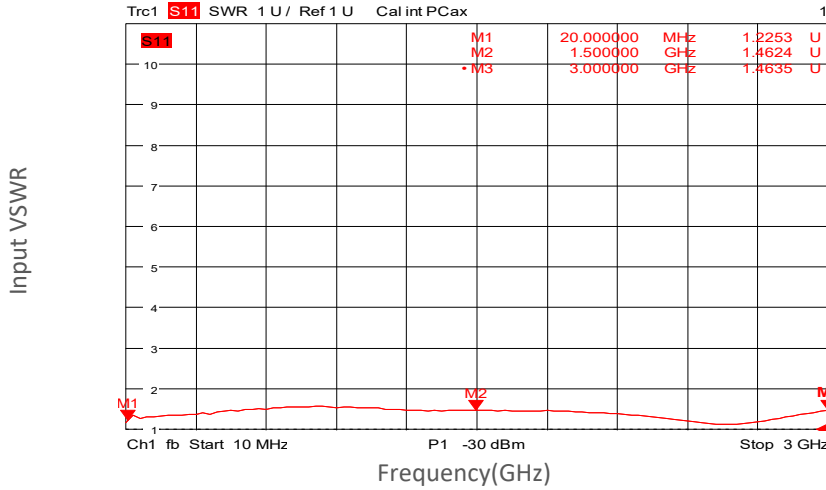
参数Parameter	Min	Typ	Max	单位Units
操作温度 Operating Temperature	-45		+85	°C
存储温度 Non-operating Temperature	-55		+125	°C
相对湿度 Relative humidity		95		%
海拔 Altitude	30,000			feet
震动 Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
冲击 Shock(non operating)	20G for 11msc half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

订货信息 Ordering Information:

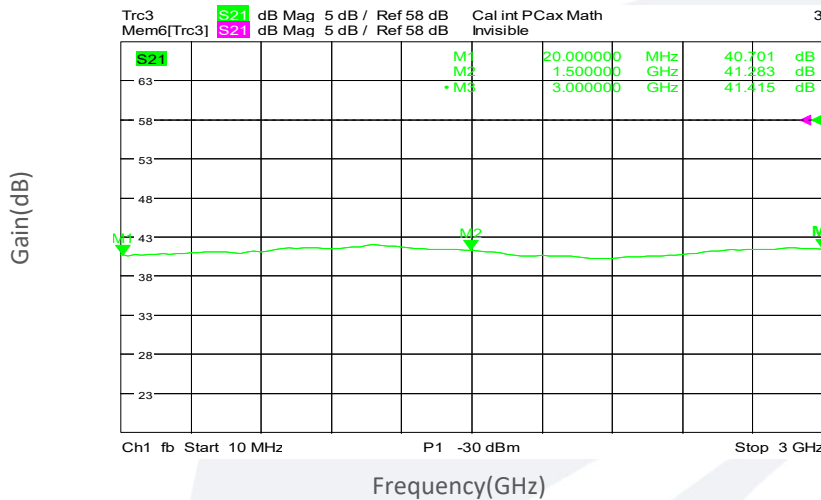
标准型号 Part Number	描述 Description	版本号Revision
TLPA20M3G-38-28	Power amplifier 20MHz-3GHz, Gain:38dB, P1dB:28dBm, +12V DC, Without Heatsink.	Rev.1.1
TLPA20M3G-38-28-HS	Power amplifier 20MHz-3GHz, Gain:38dB, P1dB:28dBm, +12V DC, With Heatsink.	Rev.1.1

典型曲线 Typical Performance Data:

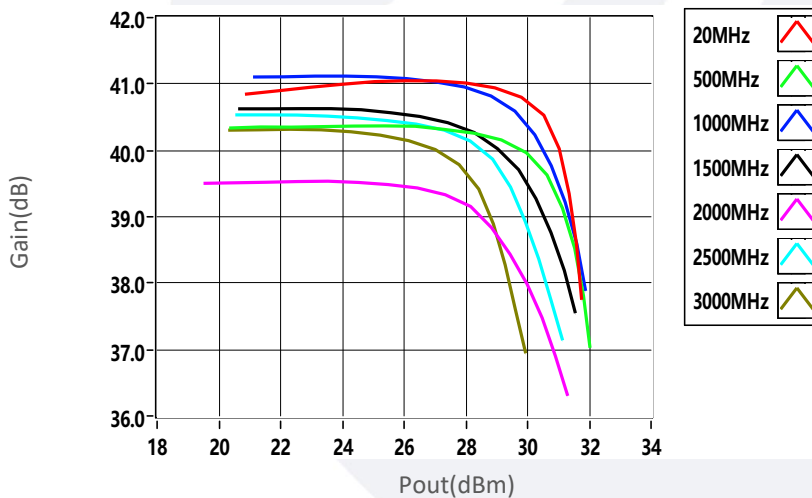
### Input VSWR vs Frequency



### Gain vs Frequency

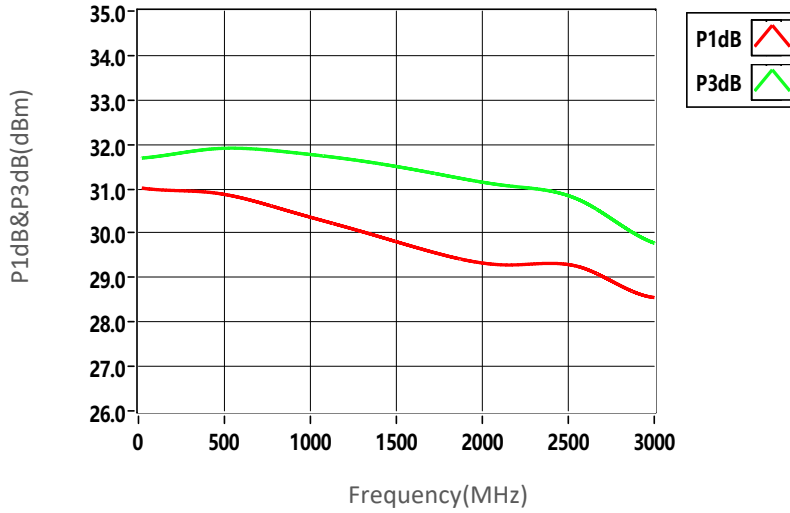


### Gain vs Output Power

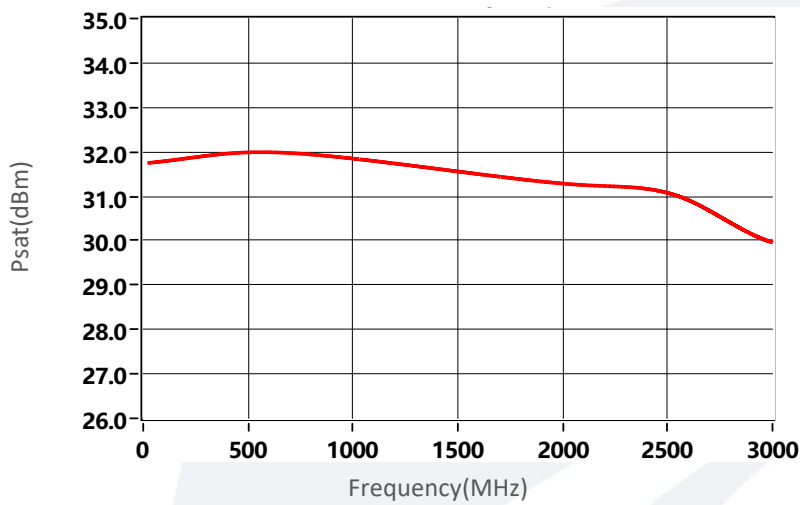


典型曲线 Typical Performance Data:

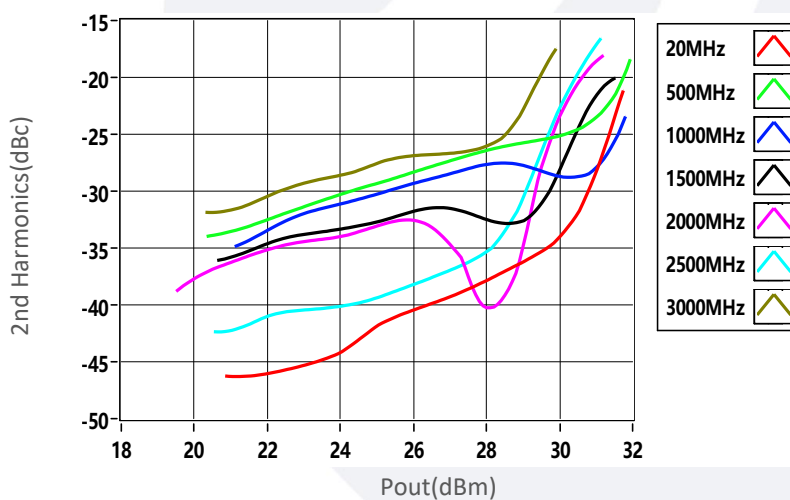
**P1dB&P3dB vs Frequency**



**Psat vs Frequency**



**2nd Harmonics vs Output Power**



典型曲线 Typical Performance Data:

3rd Harmonics vs Output Power

