

Model:TLPA10M2G-30-30

Power Amplifier
10MHz-2GHz,Gain:30dB,Psat:30dBm

Feature:

- Ultra Wide Band: 10MHz-2GHz
- Gain: 30dB Min
- Psat Output Power: 30 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	0.01-2			GHz
小信号增益 Small Signal Gain	30	32		dB
增益平坦度 Gain Flatness		±1	±2	dB
饱和输出功率 Output Psat	30	31		dBm
谐波抑制 Harmonics		-15		dBc
输入驻波 Input VSWR		1.5	2.0	:1
直流电压 DC Voltage		+15	+16	V DC
直流电流 DC Supply Current		0.5	1	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	120*70*15	mm
重量 Weight	150	g

绝对最大值 Absolute Maximum Ratings:

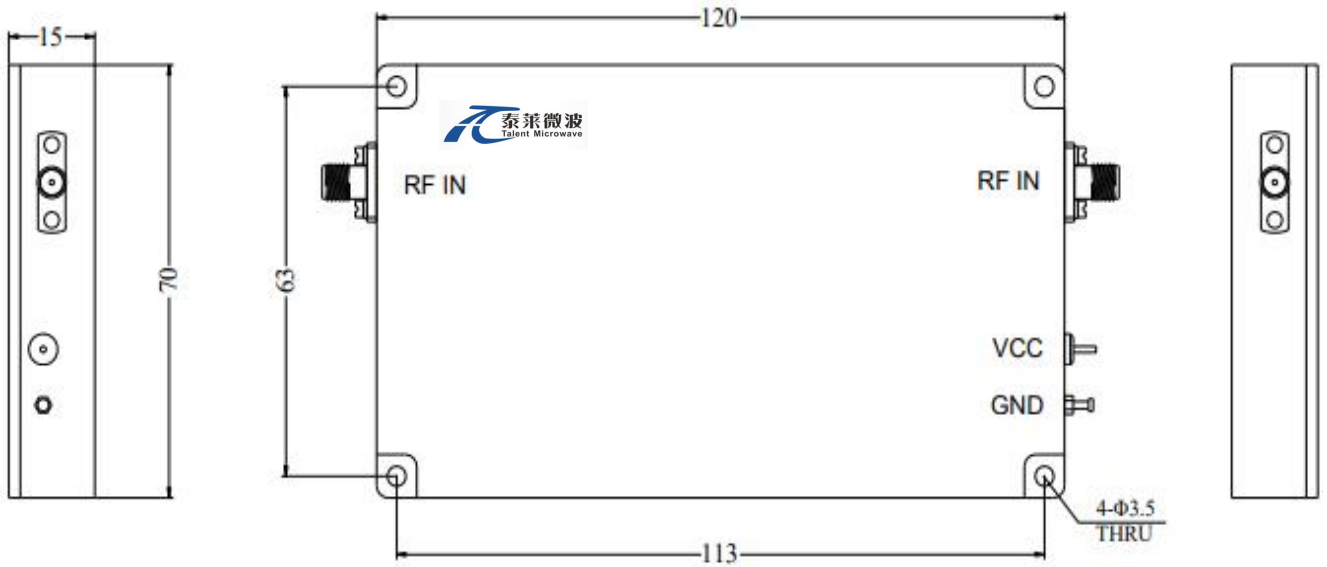
参数Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	+16V
输入功率 RF Input Power	10 dBm
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V



**Available 220V System
Benchtop Amplifier**

外形尺寸 Outline Drawing:

Unit: mm



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



温度环境 Environmental Conditions:

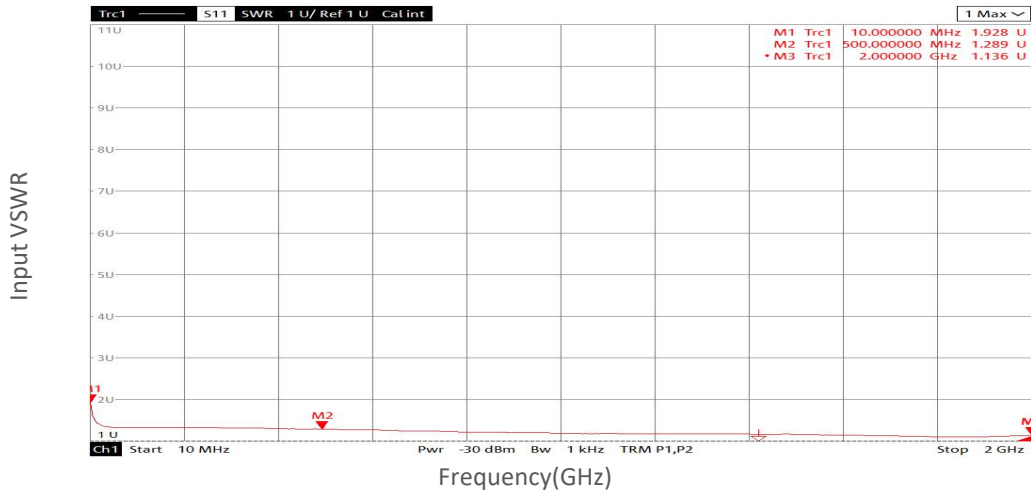
参数Parameter	Min	Typ	Max	单位Units
操作温度 Operating Temperature	-45		+85	°C
存储温度 Non-operating Temperature	-55		+125	°C
相对湿度 Relative humidity		95		%
海拔 Altitude	30,000			feet
震动 Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
冲击 Shock(non operating)	20G for 11msc half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

订货信息 Ordering Information:

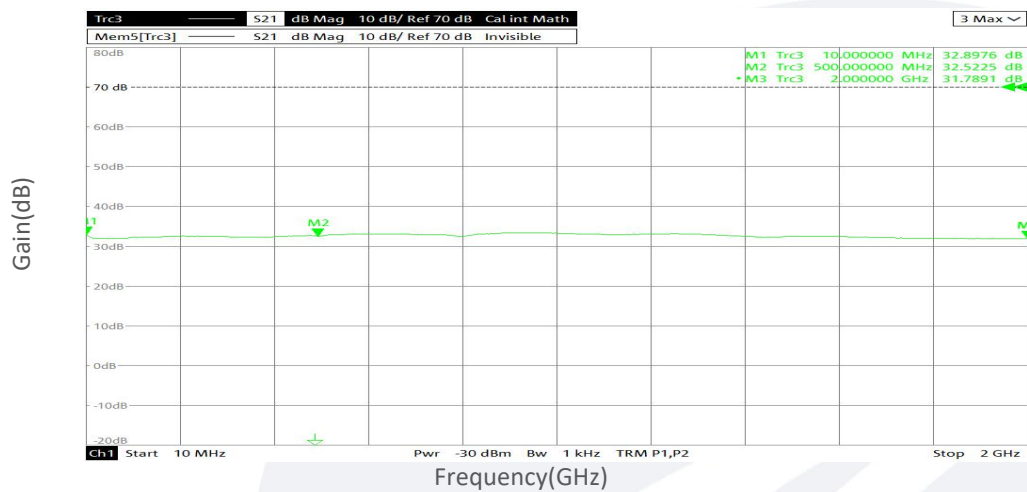
标准型号 Part Number	描述 Description	版本号Revision
TLPA10M2G-30-30	Power amplifier 10MHz-2GHz,Gain:30dB,Psat:30dBm,+15V DC, Without Heatsink	Rev.1.0
TLPA10M2G-30-30-HS	Power amplifier 10MHz-2GHz,Gain:30dB,Psat:30dBm,+15V DC, With Heatsink	Rev.1.0

典型曲线 Typical Performance Data:

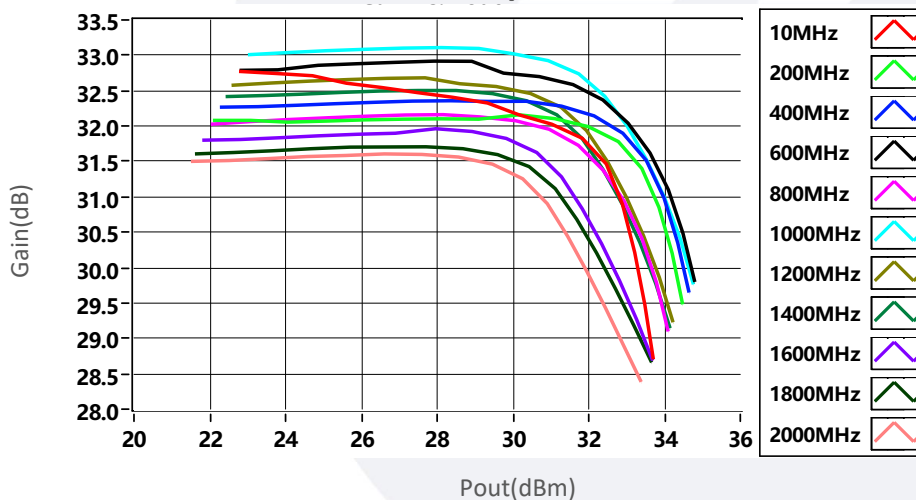
Input VSWR vs Frequency



Small Signal Gain vs Frequency



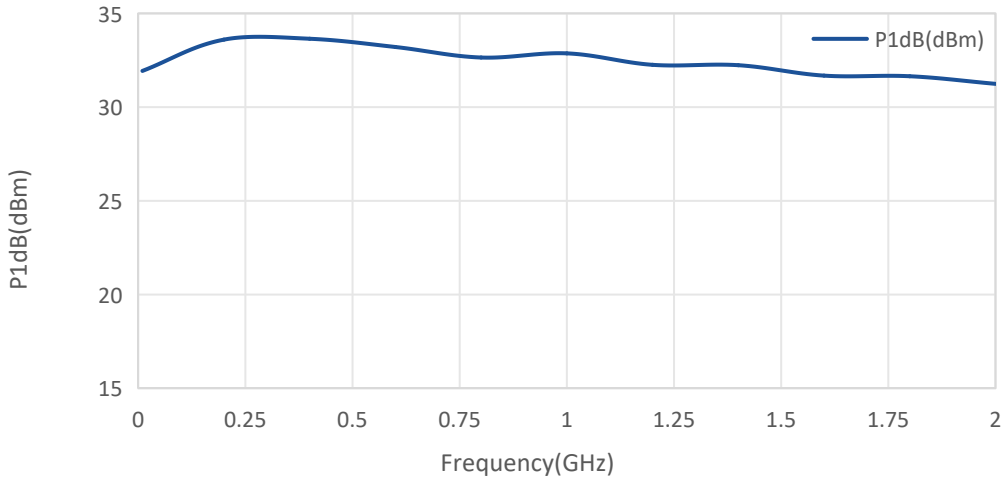
Gain vs Output Power



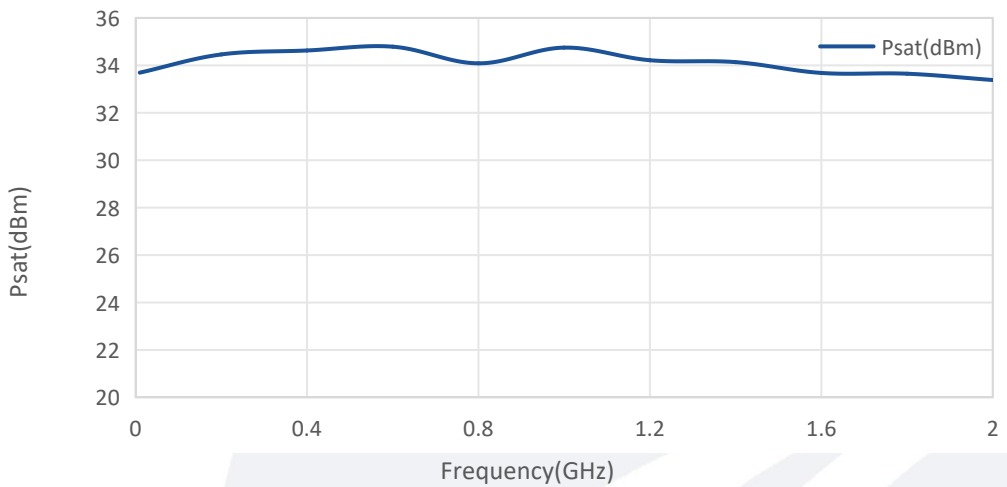
Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

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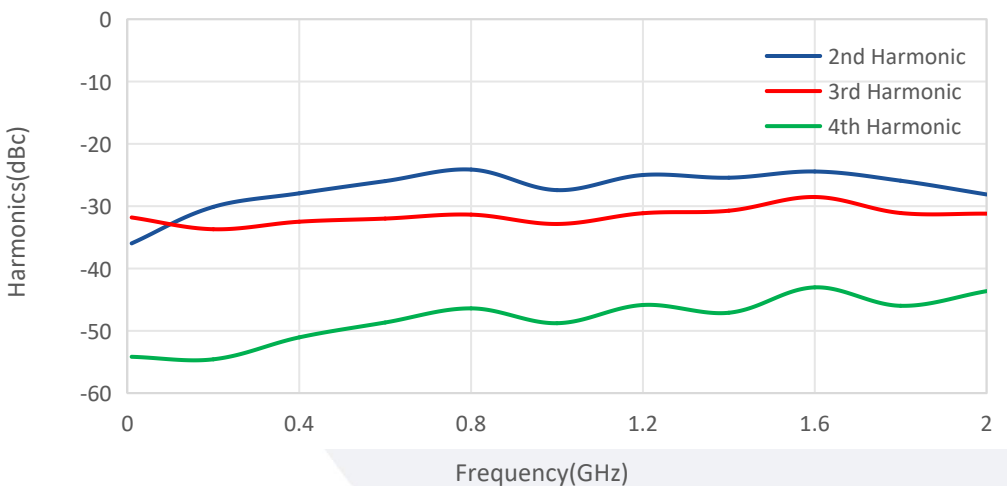
P1dB vs Frequency



Psat vs Frequency



Harmonics vs Frequency



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