

Model:TLPA1G6G-45-33
Power Amplifier
1-6GHz, Gain:45dB, Psat:33dBm
Feature:

- Ultra Wide Band:1-6GHz
- Gain:45dB Min
- Psat Output Power:33dBm 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	1-6			GHz
增益 Gain	45	47		dB
增益平坦度 Gain Flatness		±3	±4	dB
线性输出功率 Output P1dB	30	31		dBm
饱和输出功率 Output Psat	33	34		dBm
谐波 Harmonics		-15		dBc
输入驻波 Input VSWR		1.5	2	:1
直流电压 DC Voltage		+15	+16	V DC
直流电流 DC Supply Current		0.7	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	100*50*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	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**



OBSERVE PRECAUTIONS
ELECTROSTATIC SENSITIVE
DEVICES

温度环境 Environmental Conditions:

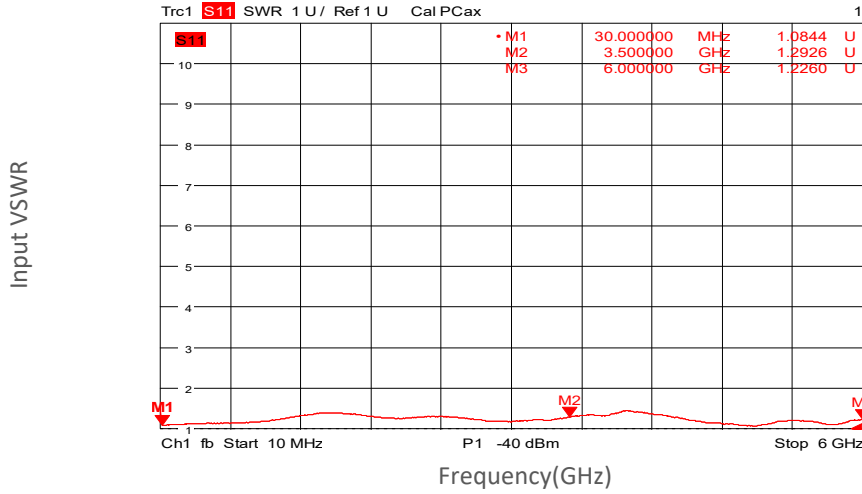
参数Parameter	Min	Typ	Max	单位Units
操作温度 Operating Temperature	-45		+85	°C
存储温度 Non-operating Temperature	-55		+125	°C
相对湿度 Relative humidity		95		%
海拔 Altitude	30,000			feet
震动 Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
冲击 Shock(non operating)	20G for 11msc half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

订货信息 Ordering Information:

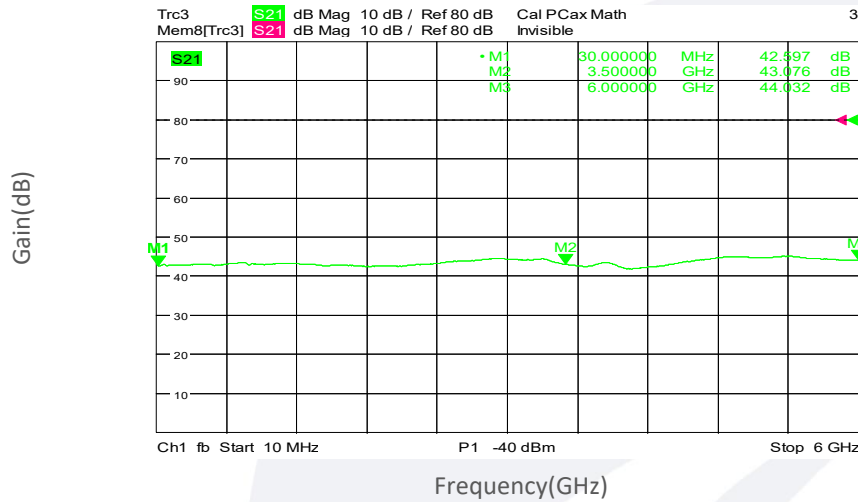
标准型号 Part Number	描述 Description	版本号Revision
TLPA1G6G-45-33	Power amplifier 1-6GHz,Gain:45dB,Psat:33dBm,+15V DC,Without Heatsink.	Rev.1.1
TLPA1G6G-45-33-HS	Power amplifier 1-6GHz,Gain:45dB,Psat:33dBm,+15V DC,With Heatsink.	Rev.1.1

典型曲线 Typical Performance Data:

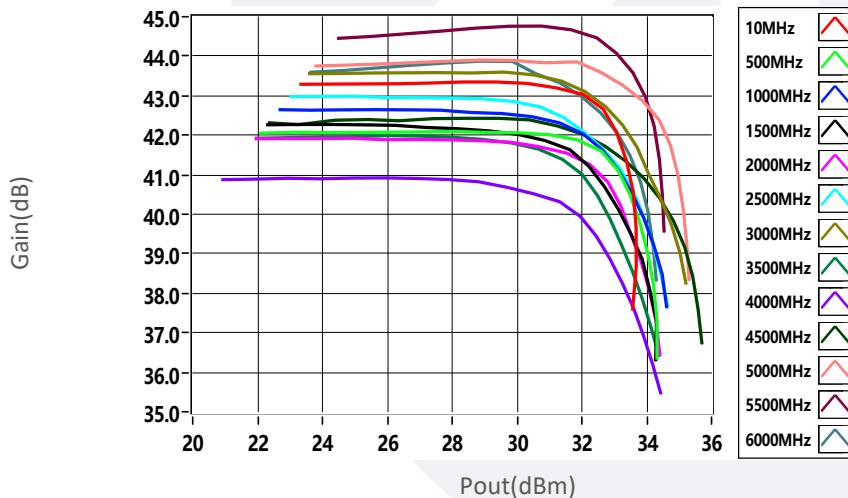
Input VSWR vs Frequency



Gain vs Frequency

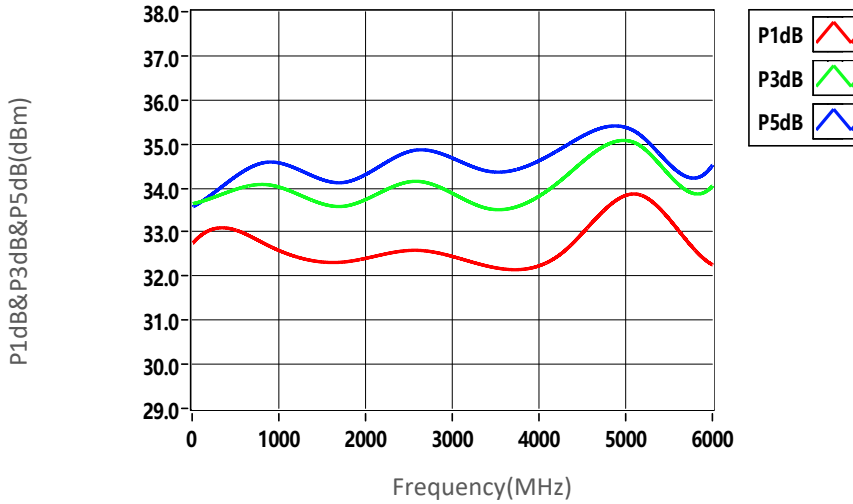


Gain vs Output Power

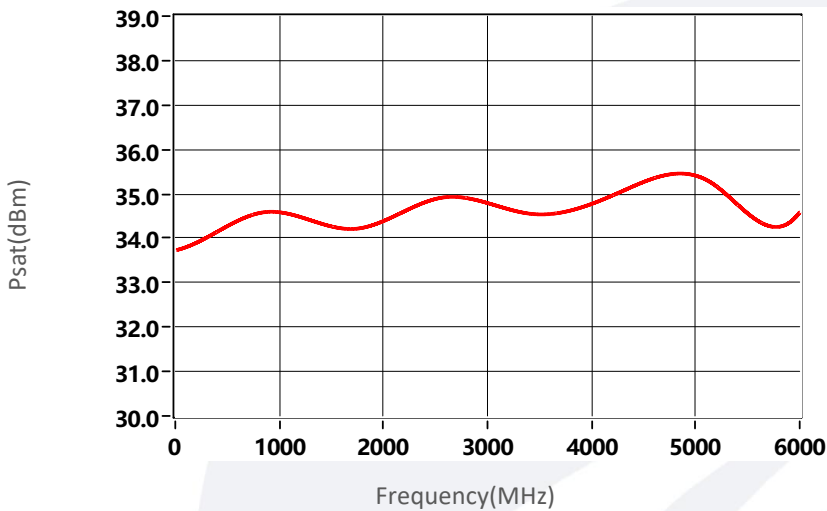


典型曲线 Typical Performance Data:

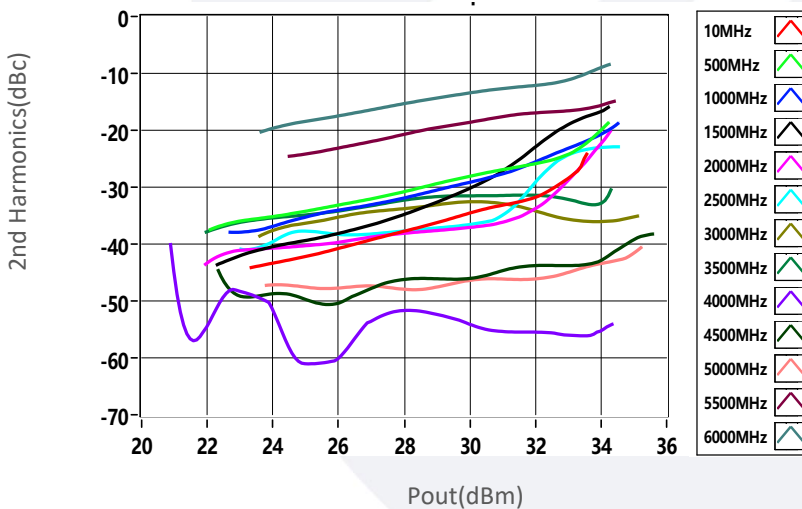
P1dB&P3dB&P5dB vs Frequency



Psat vs Frequency



2nd Harmonics vs Output Power



典型曲线 Typical Performance Data:

3rd Harmonics vs Output Power

