

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

- Wide Band: 1GHz-6GHz
- Gain: 45dB Min
- Psat Output Power: 33 dBm Min
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

电气特性 Electrical:

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P1dB	30	31		dBm
饱和输出功率Psat	33	34		dBm
谐波抑制@Pout=30dBm		-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		0.7	1.5	A
阻抗 Impedance	50			Ohms

机械特性 Mechanical :

参数Parameter	指标 Value	单位Units
输入输出接口Input /Output Connector	SMA Female	
直流偏置 Bias	Solder Pin	
尺寸 Size	100X50X15	mm
重量 Weight	150	g

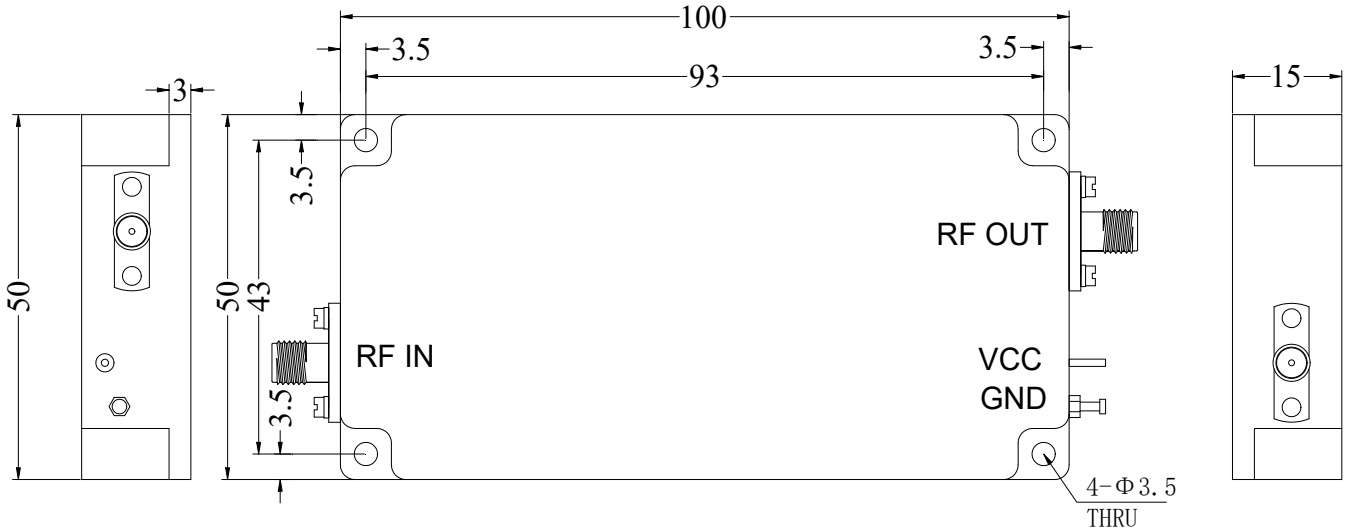

 Available 220V System
 Benchtop Amplifier

绝对最大值 Absolute Maximum Ratings:

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

外形尺寸 Outline Drawing:

Unit: mm



***Heat Sink Required During Operation



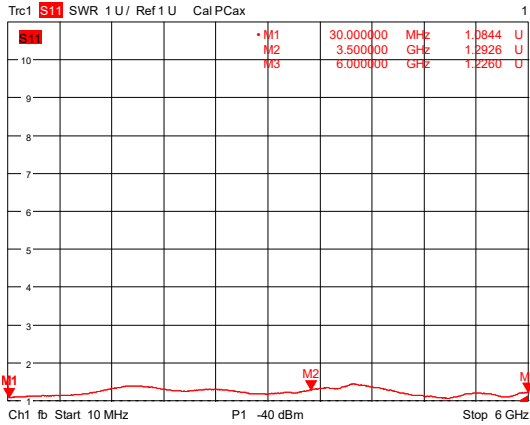
OBSERVE PRECAUTIONS
ELECTROSTATIC SENSITIVE
DEVICES

温度环境 Environmental Conditions:

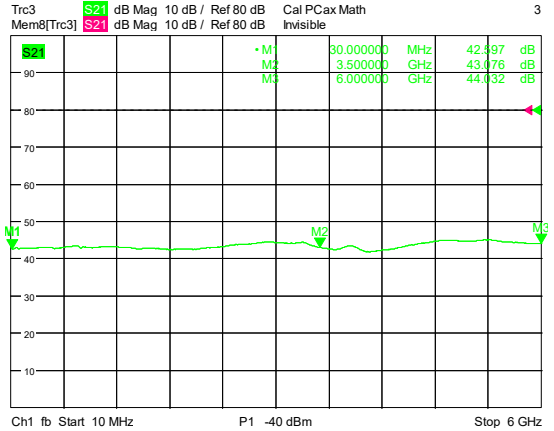
参数Parameter	Min.	Typ.	Max.	单位Units
操作温度 Operating Temperature	-45		+85	°C
存储温度 Non-operating Temperature	-55		+125	°C
相对湿度 Relative humidity		95		%
海拔 Altitude	30,000			feet
震动 Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
冲击 Shock(non operating)	20G for 11msc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

订货信息 Ordering Information:

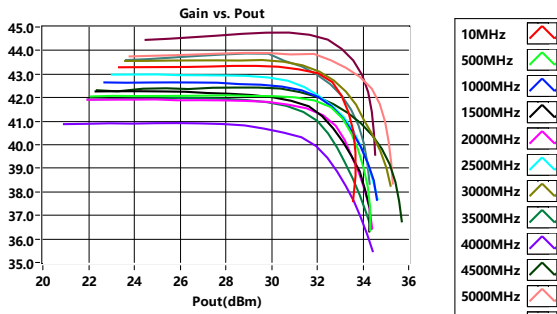
标准型号 Part Number	描述 Description	版本号Revision
TLPA16G-45-33	Power amplifier 1GHz-6GHz,Gain:45dB,Psat:33dBm, 15V DC,Without Heatsink	Rev.1.0
TLPA16G-45-33-HS	Power amplifier 1GHz-6GHz,Gain:45dB,Psat:33dBm, 15V DC,With Heatsink	Rev.1.0



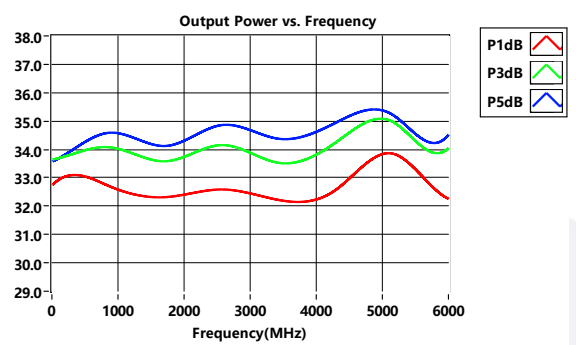
Input VSWR



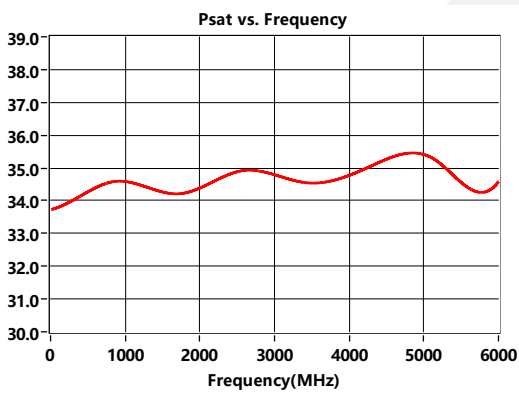
Gain



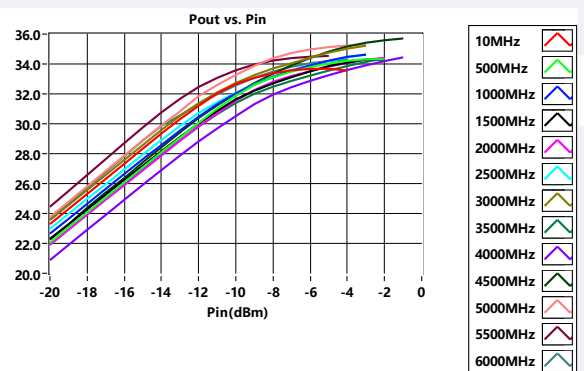
Gain vs. Output Power



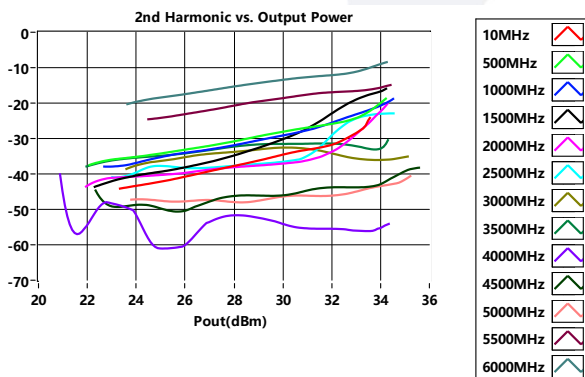
PndB vs. Frequency



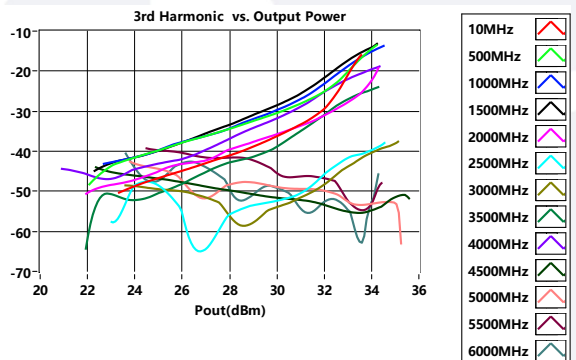
Psat vs. Frequency



Pout vs. Pin



2nd Harmonic



3rd Harmonic