

Model: TLPA0.5G6G-40-40-A
Power Amplifier
0.5-6GHz, Gain: 40dB, Psat: 40dBm
Feature:

- Ultra Wide Band: 0.5-6GHz
- Gain: 40dB Min
- Psat Output Power: 40dBm 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	0.5-6			GHz
增益 Gain	40	43		dB
增益平坦度 Gain Flatness		±2.5	±3.5	dB
线性输出功率 Output P1dB	37	38		dBm
饱和输出功率 Output Psat	40			dBm
杂散 Spurious		-60		dBc
谐波 Harmonics		-15	-11	dBc
输入驻波 Input VSWR		1.5	2.5	:1
直流电压 DC Voltage		+30		V DC
直流电流 DC Supply Current		0.5	2	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	125*95*12	mm
重量 Weight	/	g

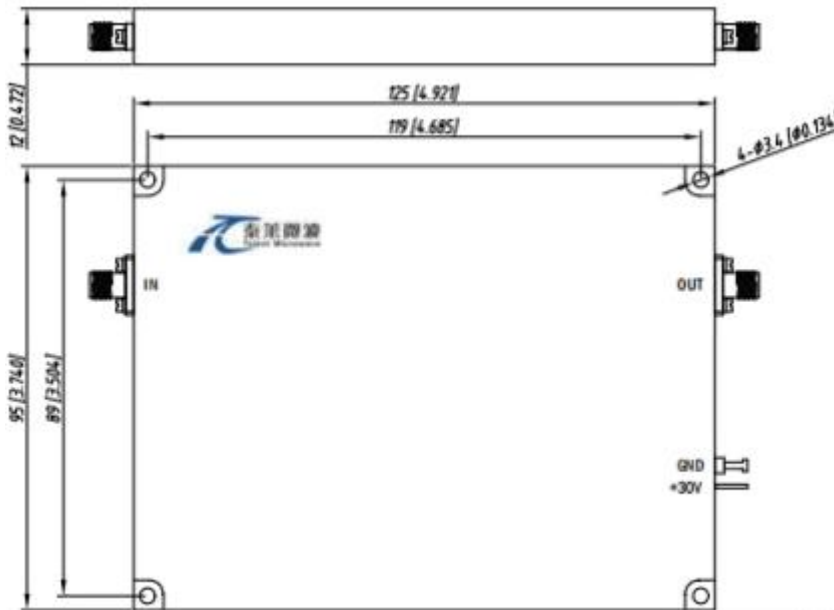
绝对最大值 Absolute Maximum Ratings:

参数Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	+32V
输入功率 RF Input Power	8dBm
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**



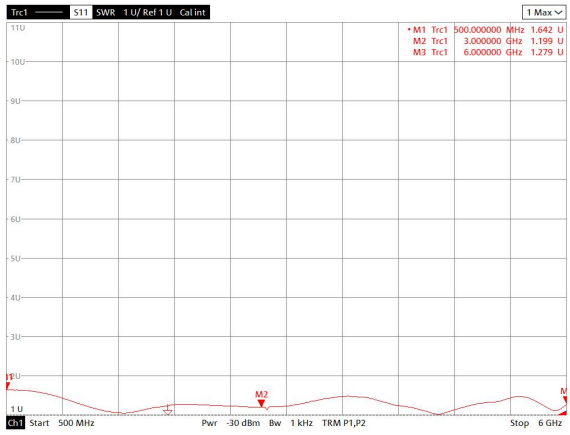
OBSERVE PRECAUTIONS
ELECTROSTATIC SENSITIVE
DEVICES

温度环境 Environmental Conditions:

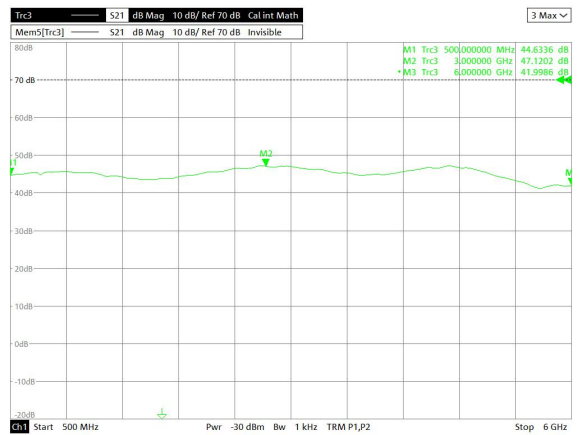
参数Parameter	Min	Typ	Max	单位Units
操作温度 Operating Temperature	-30		+70	°C
存储温度 Non-operating Temperature	-45		+85	°C
相对湿度 Relative humidity		95		%
海拔 Altitude	50,000			feet
震动 Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
冲击 Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

订货信息 Ordering Information:

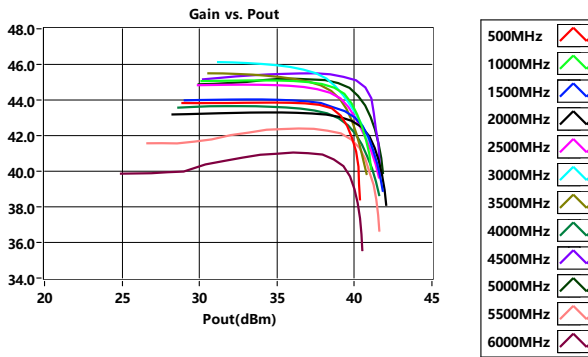
标准型号 Part Number	描述 Description	版本号Revision
TLPA0.5G6G-40-40-A	Power amplifier 0.5-6GHz, Gain:40dB, Psat:40dBm, +30V DC, Without Heatsink.	Rev.1.0
TLPA0.5G6G-40-40-A-HS	Power amplifier 0.5-6GHz, Gain:40dB, Psat:40dBm, +30V DC, With Heatsink.	Rev.1.0



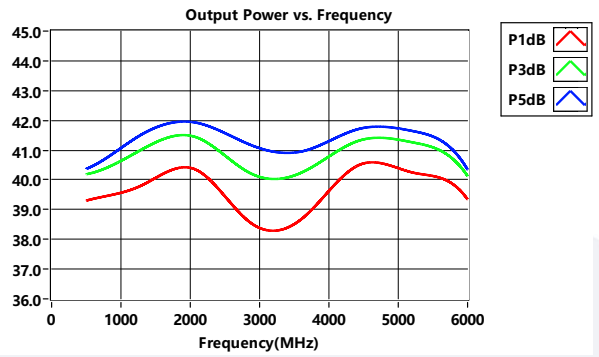
Input VSWR



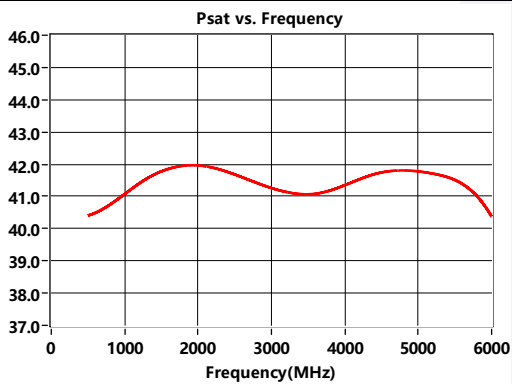
Gain



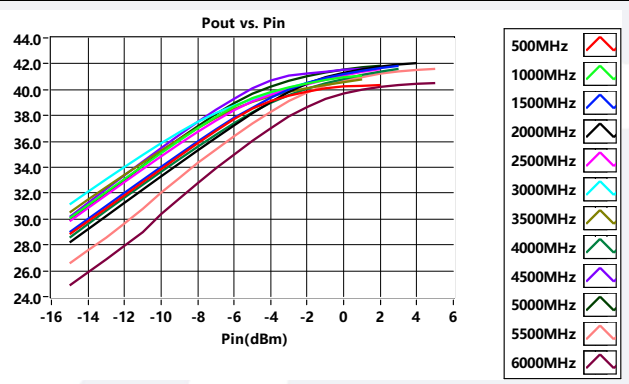
Gain vs. Output Power



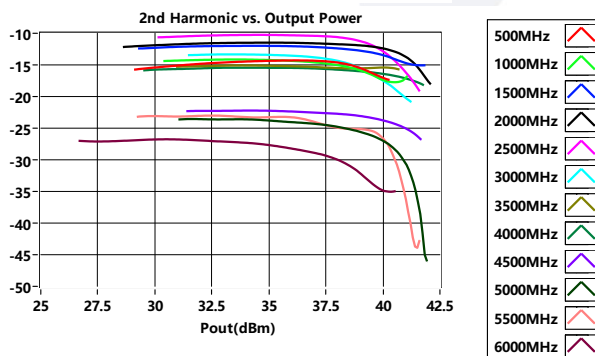
PndB vs. Frequency



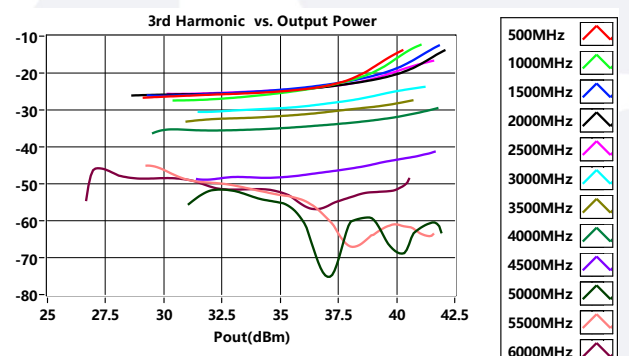
Psat vs. Frequency



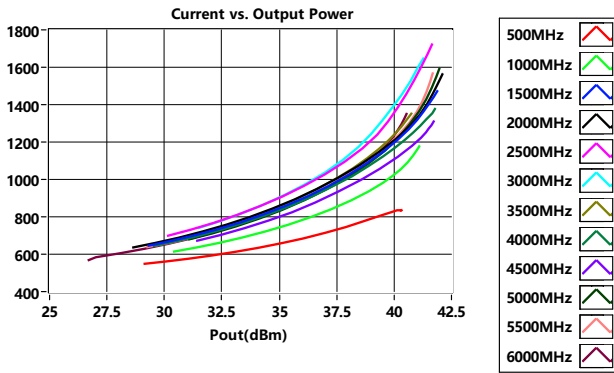
Pout vs. Pin



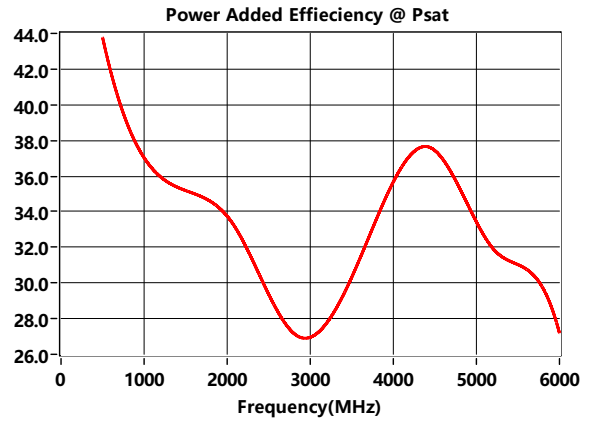
2nd Harmonic



3rd Harmonic



Current VS. Output Power



PAE vs. Frequency