

## 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
小信号增益 Small Signal 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:

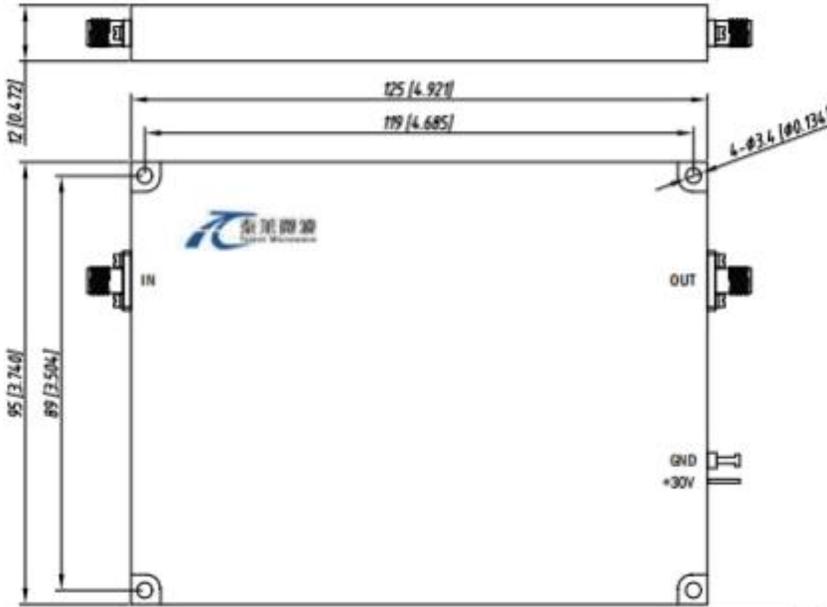
参数Parameter	指标 Value	单位Units
输入/输出接口 Input /Output Connector	SMA Female/SMA Female	
直流偏置 DC Bias	Solder Pin	
尺寸 Size	125*95*12	mm
重量 Weight	/	g

### 绝对最大值 Absolute Maximum Ratings:

参数Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	+32V



Unit: mm



### \*\*\*Heat Sink Required During Operation



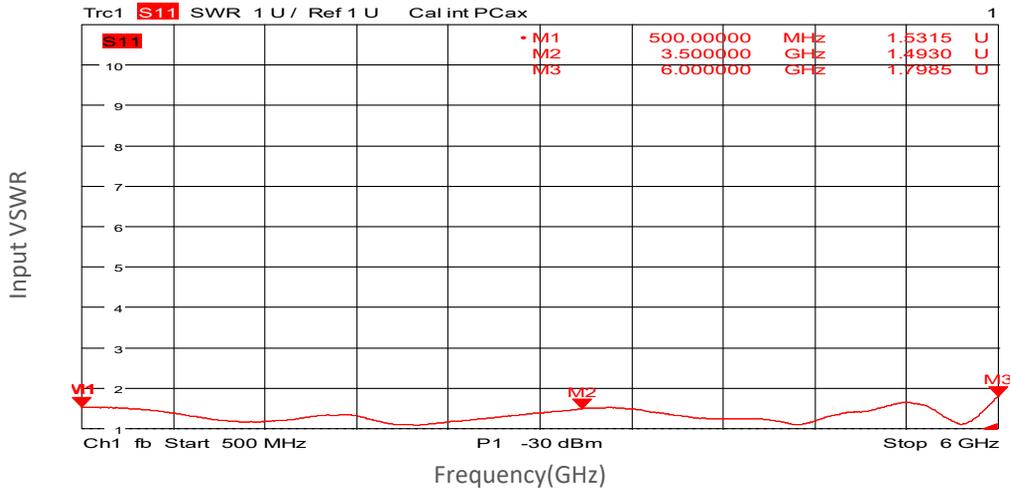
### 温度环境 Environmental Conditions:

参数Parameter	Min	Typ	Max	单位Units
操作温度 Operating Temperature	-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			

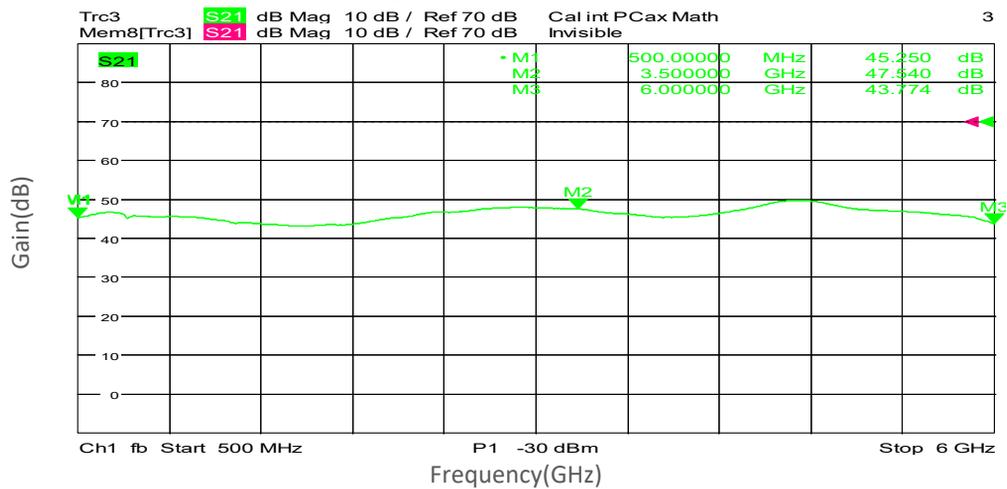
### 订货信息 Ordering Information:

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

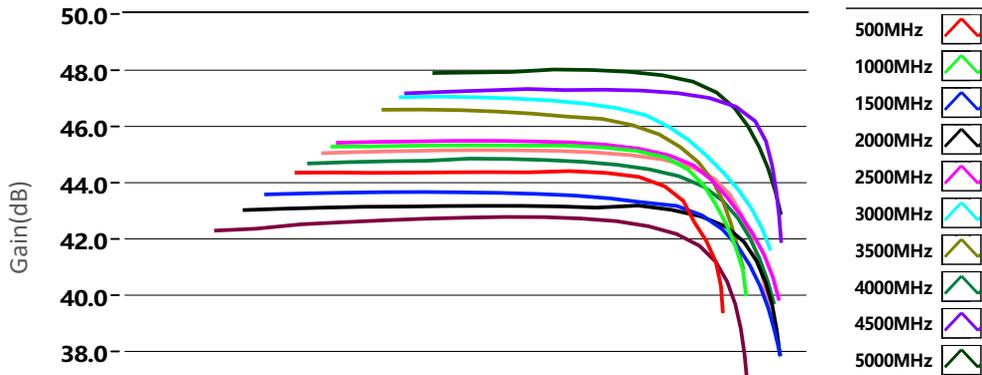
## Input VSWR vs Frequency



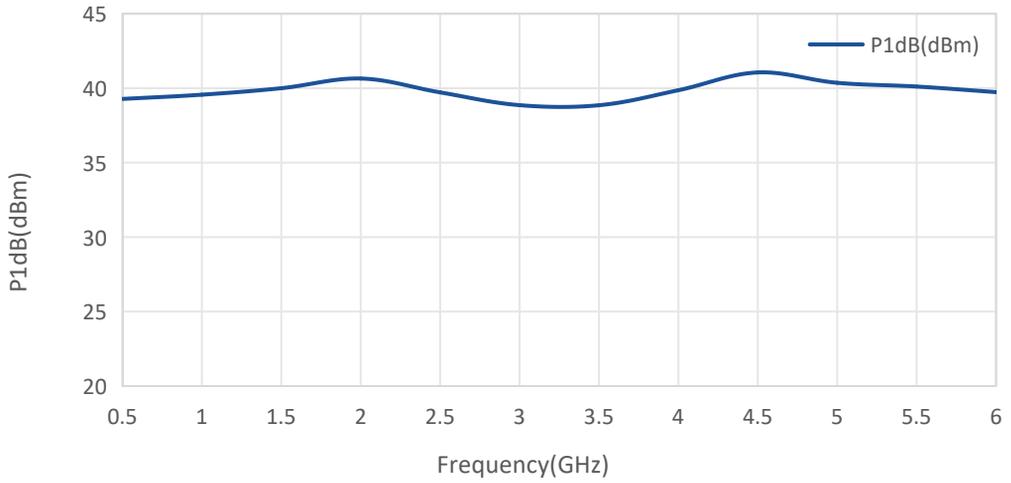
## Small Signal Gain vs Frequency



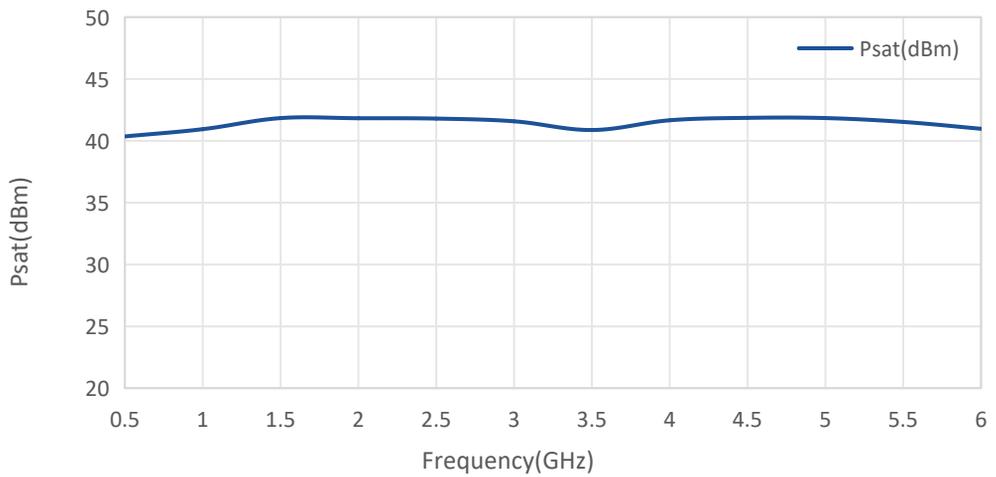
## Gain vs Output Power



### P1dB vs Frequency



### Psat vs Frequency



### Harmonics vs Frequency

