

**Model:TLPA0.5G6G-45-43**
**Power Amplifier**  
**0.5-6GHz,Gain:45dB,Psat:43dBm**
**Feature:**

- Ultra Wide Band: 0.5-6GHz
- Gain:45 dB Typ
- Psat Output Power: 43 dBm Typ
- 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	43	45		dB
增益平坦度 Gain Flatness		±3.5		dB
饱和输出功率 Output Psat	41	43		dBm
杂散 Spurious			-50	dBc
谐波 Harmonics			-10	dBc
输入驻波 Input VSWR			1.8	:1
直流电压 DC Voltage	+28			V DC
直流电流 DC Supply Current		3		A
阻抗 Impedance	50			Ohms

**机械特性 Mechanical Specifications:**

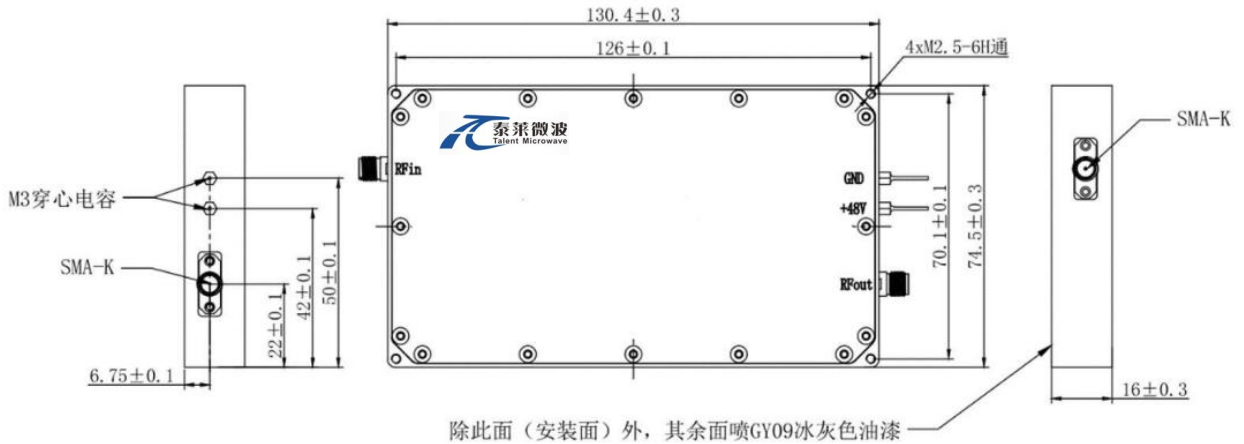
参数Parameter	指标 Value	单位Units
输入输出接口 Input /Output Connector	SMA Female/SMA Female	
直流偏置 DC Bias	Solder Pin	
尺寸 Size	130*74.5*16	mm
重量 Weight	/	g

**绝对最大值 Absolute Maximum Ratings:**

参数Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	+28V
输入功率 RF Input Power	10 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:

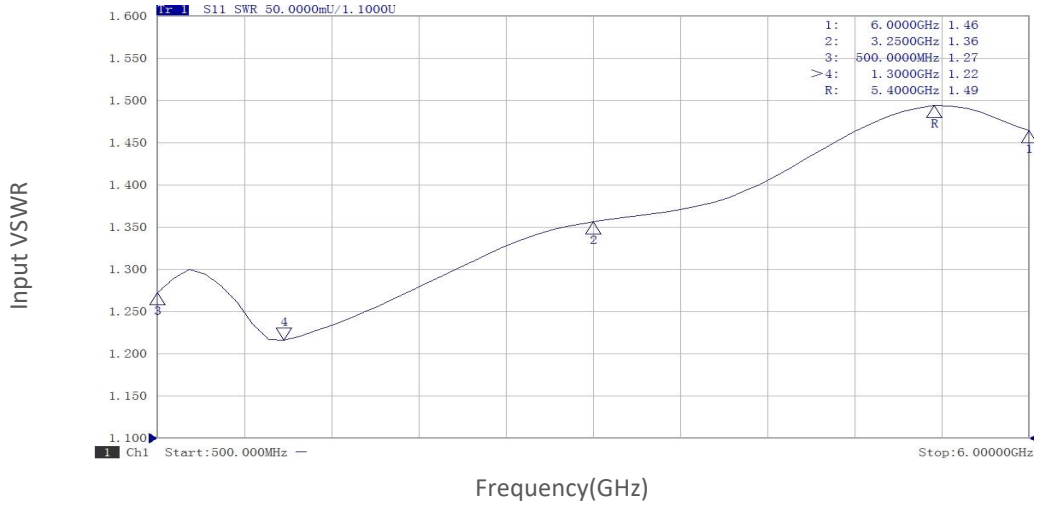
参数Parameter	Min	Typ	Max	单位Units
操作温度 Operating Temperature	-40		+75	°C
存储温度 Non-operating Temperature	-55		+125	°C
相对湿度 Relative humidity		95		%
海拔 Altitude	30,000			feet
震动 Shock / Vibration(MIL-STD-810F)	20g,11ms,saw-tooth			
冲击 Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

订货信息 Ordering Information:

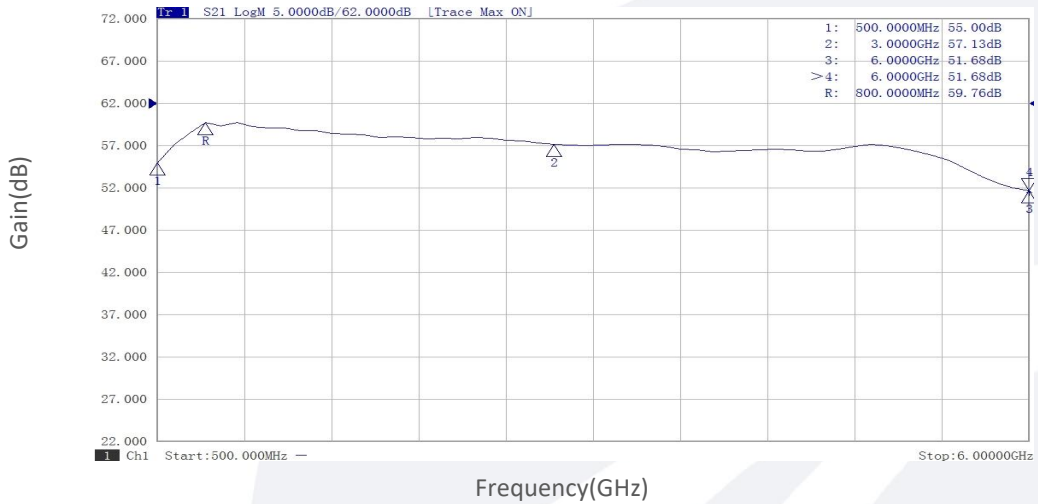
标准型号 Part Number	描述 Description	版本号Revision
TLPA0.5G6G-45-43	Power amplifier 0.5-6GHz,Gain:45dB,Psat:43dBm, +28V DC,Without Heatsink	Rev.1.1
TLPA0.5G6G-45-43-HS	Power amplifier 0.5-6GHz,Gain:45dB,Psat:43dBm, +28V DC,With Heatsink	Rev.1.1

典型曲线 Typical Performance Data:

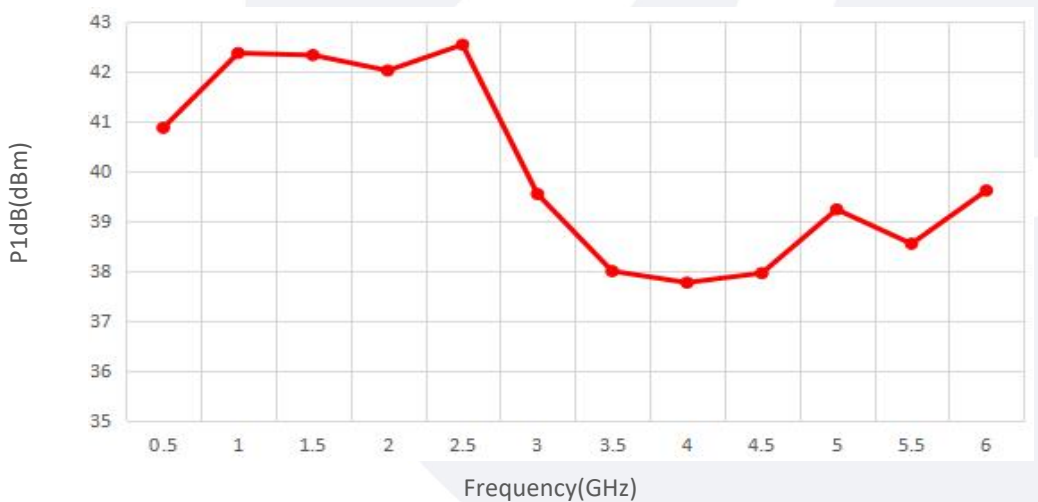
Input VSWR vs Frequency



Gain vs Frequency

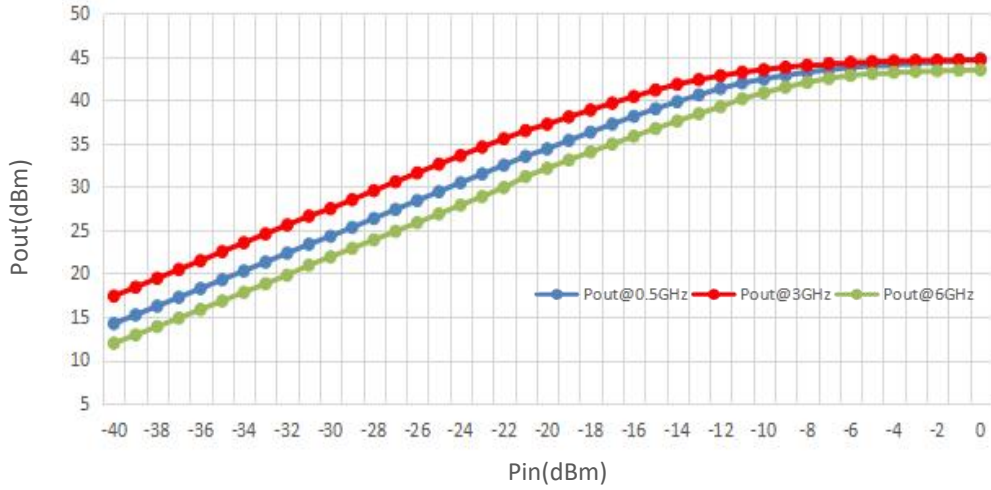


P1dB vs Frequency

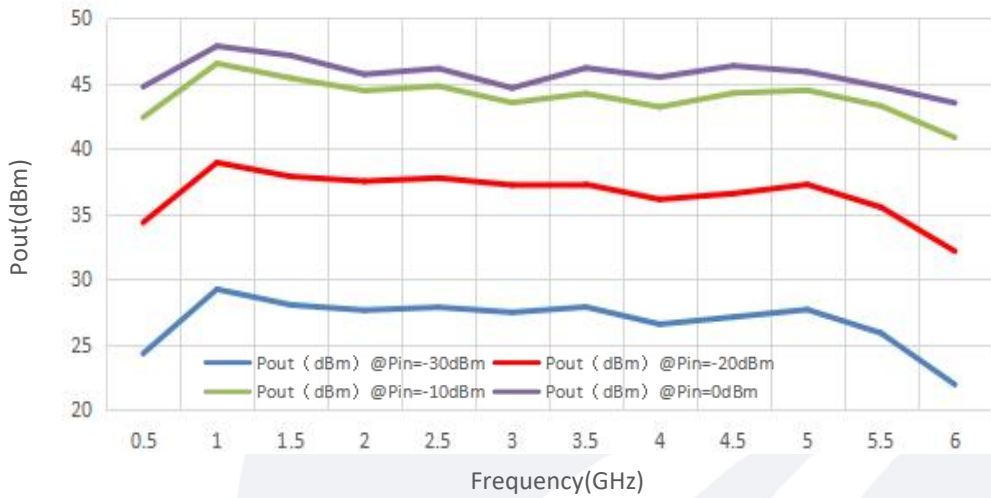


典型曲线 Typical Performance Data:

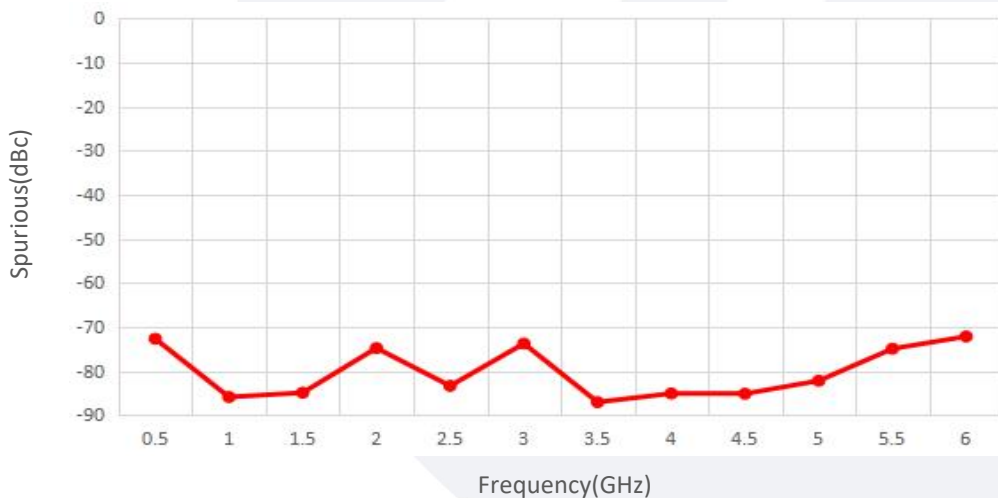
Pout@Pin



Pout@Equal\_Pin



Spurious vs Frequency



典型曲线 Typical Performance Data:

Harmonic vs Frequency

