

**Model:TLPA40G50G-33-33**
**Power Amplifier**  
**40-50GHz,Gain:33dB,Psat:33dBm**
**Feature:**

- Ultra Wide Band: 40-50GHz
- Gain: 33 dB Min
- Psat Output Power: 33 dBm 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	40-50			GHz
小信号增益 Small Signal Gain	33			dB
饱和输出功率 Output Psat	33	34		dBm
杂散 Supurious			-50	dBc
输入驻波 VSWR		3		:1
输入功率 Input Power		0	5	dBm
直流电压 DC Voltage		+18	+20	V DC
电流 Current	2.5A@Max			A
阻抗 Impedance	50			Ohms

**机械特性 Mechanical Specifications:**

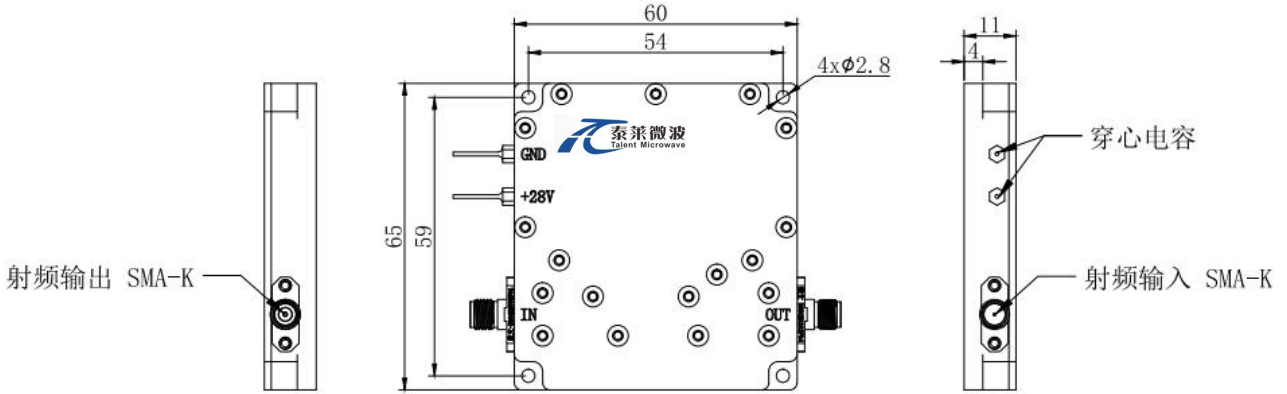
参数Parameter	指标 Value	单位Units
输入/输出接口 Input /Output Connector	2.4 Female/2.4 Female	
直流偏置 DC Bias	Solder Pin	
尺寸 Size	60*65*11	mm
重量 Weight	300	g

**绝对最大值 Absolute Maximum Ratings:**

参数Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	+20 V
输入功率 RF Input Power	+5 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



温度环境 Environmental Conditions:

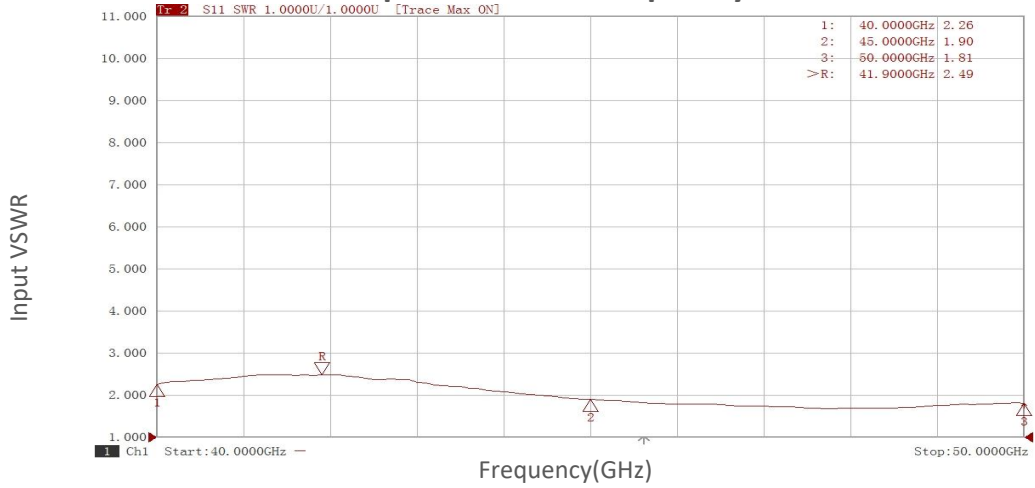
参数Parameter	Min	Typ	Max	单位Units
操作温度 Operating Temperature	-40		+75	°C
存储温度 Non-operating Temperature	-55		+125	°C
相对湿度 Relative humidity		95		%
海拔 Altitude	30,000			feet
震动 Shock / Vibration(MIL-STD-810F)	20g,11ms,saw-tooth			
冲击 Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

订货信息 Ordering Information:

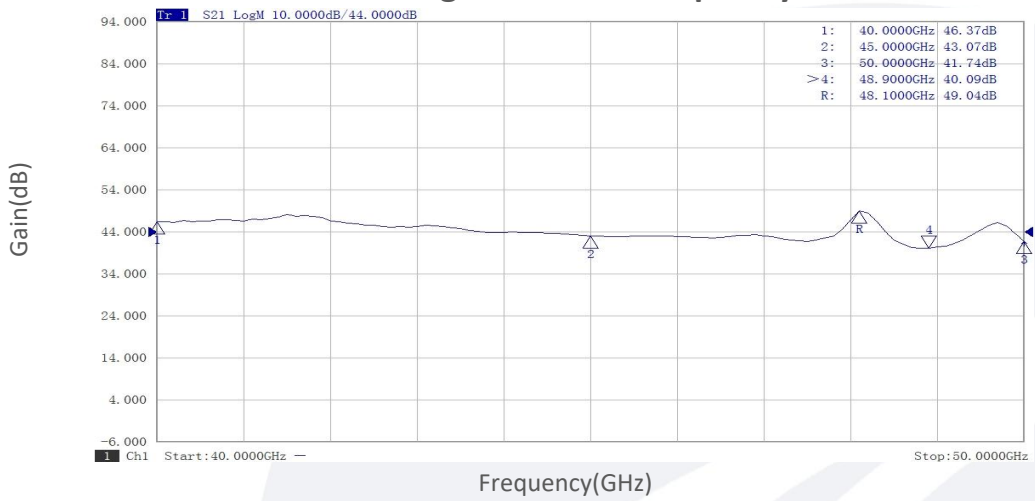
标准型号 Part Number	描述 Description	版本号Revision
TLPA40G50G-33-33	Power amplifier 40-50GHz,Gain:33dB,Psat:33dBm, +18V DC,Without Heatsink	Rev.1.1
TLPA40G50G-33-33-HS	Power amplifier 40-50GHz,Gain:33dB,Psat:33dBm, +18V DC,With Heatsink	Rev.1.1

典型曲线 Typical Performance Data:

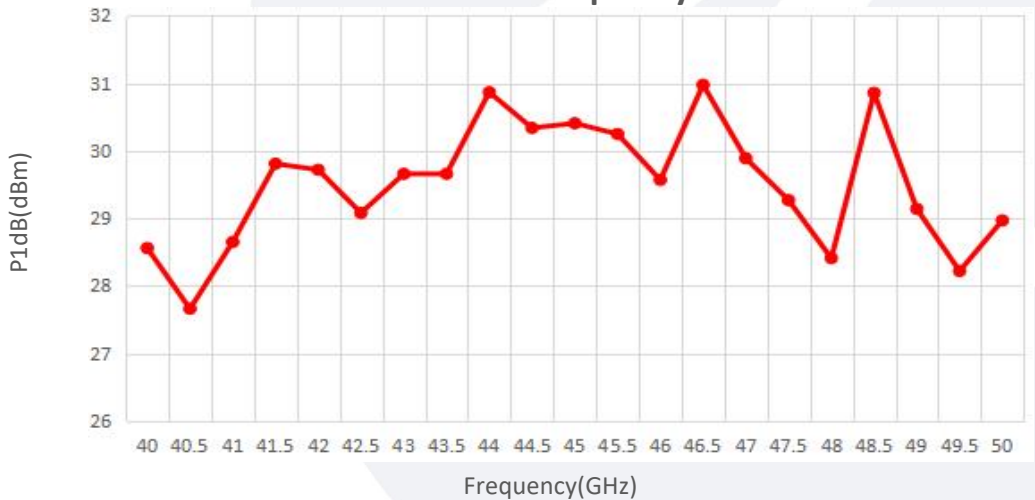
Input VSWR vs Frequency



Small Signal Gain vs Frequency



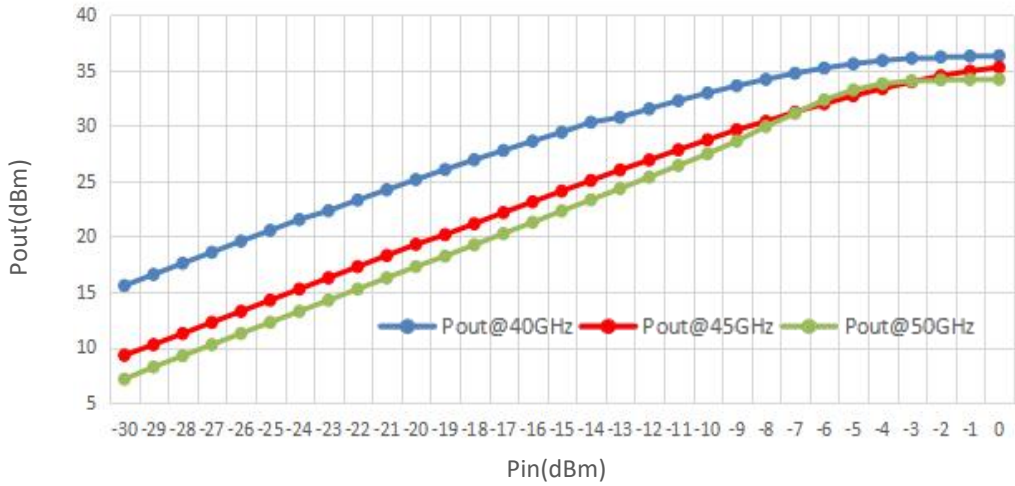
P1dB vs Frequency



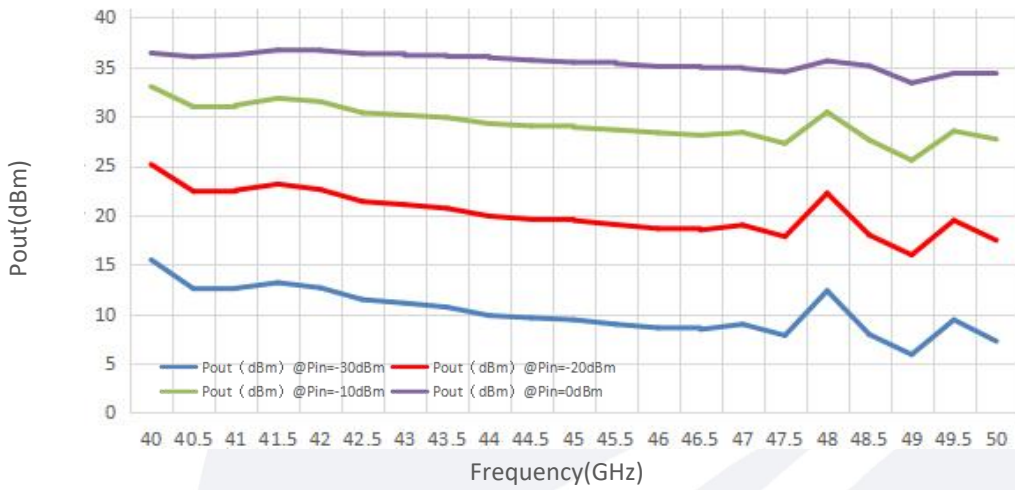
Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

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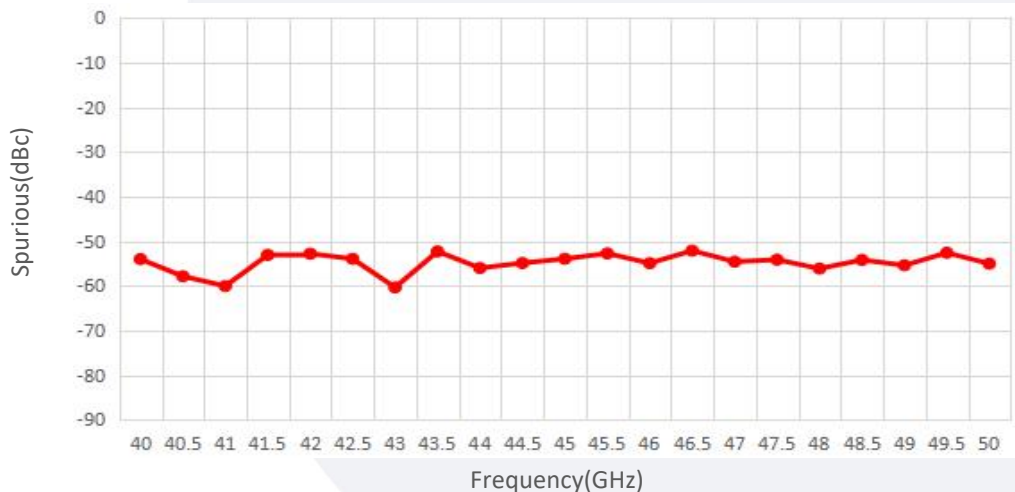
Pout@Pin



Pout@Equal\_Pin



Spurious vs Frequency



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