

**Model:TLPA1G8G-40-40**
**Power Amplifier**  
**1-8GHz,Gain:40dB,Psat:40dBm**
**Feature:**

- Ultra Wide Band: 1-8GHz
- 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	1-8			GHz
增益 Gain	40			dB
增益平坦度 Gain Flatness		±3		dB
饱和输出功率 Output Psat	40			dBm
杂散 Spurious@Psat			-50	dBc
谐波 Harmonics@Psat			-10	dBc
输入驻波 Input VSWR			2	:1
直流电压 DC Voltage		+28		V DC
直流电流 DC Supply Current			4.5	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	
DC加电接口 DC Power Interface	J30J-9ZKP	
尺寸 Size	150*90*20	mm
重量 Weight	500	g

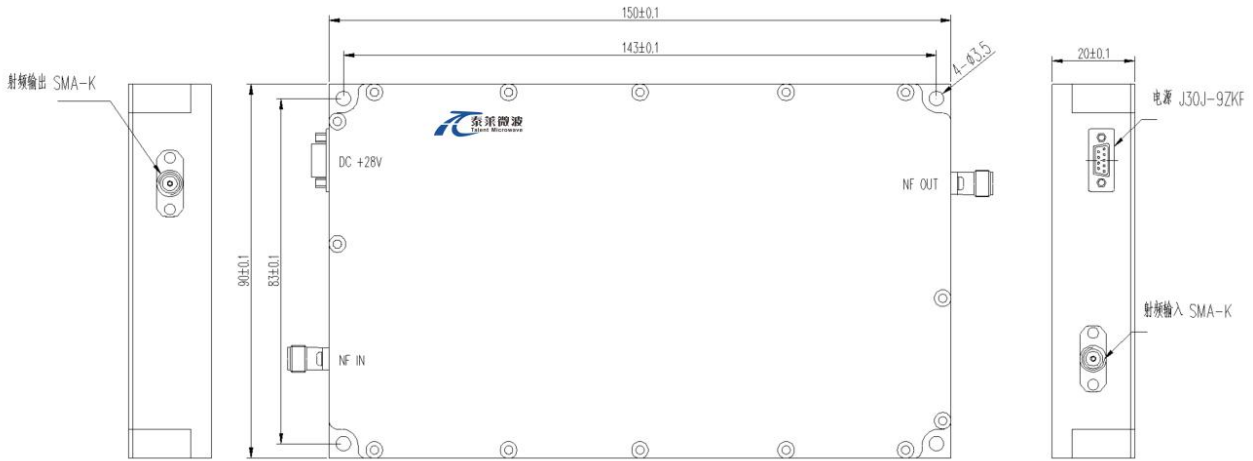
**绝对最大值 Absolute Maximum Ratings:**

参数Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	TBD
输入功率 RF Input Power	10dBm
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**

J30J-9ZKP Define	
引脚 Pin	功能 Function
1-5	+28V
6-9	GND



温度环境 Environmental Conditions:

参数 Parameter	Min	Typ	Max	单位 Units
操作温度 Operating Temperature*	-40		+60	°C
存储温度 Non-operating Temperature*	-50		+70	°C
相对湿度 Relative humidity		95		%
海拔 Altitude	10,000			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			

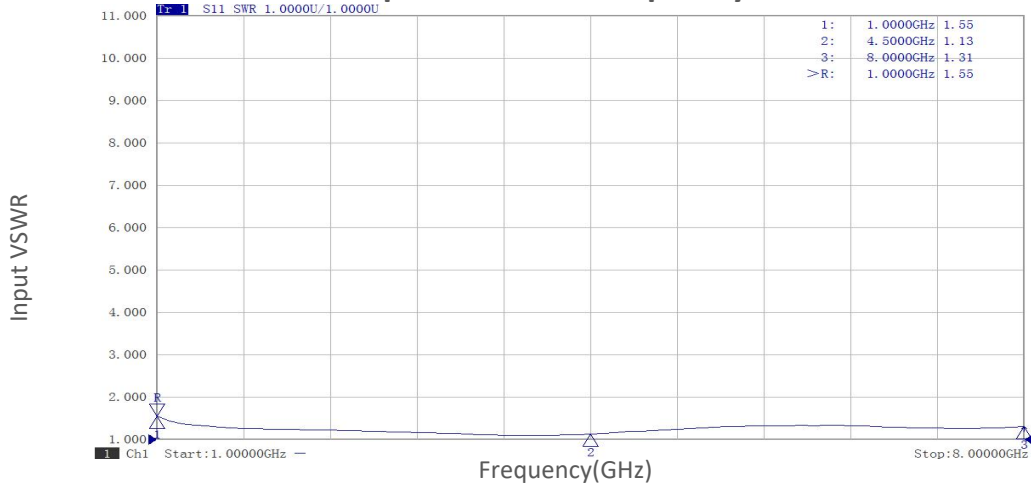
\*Note: For a wider temperature range, please consult the manufacturer.

订货信息 Ordering Information:

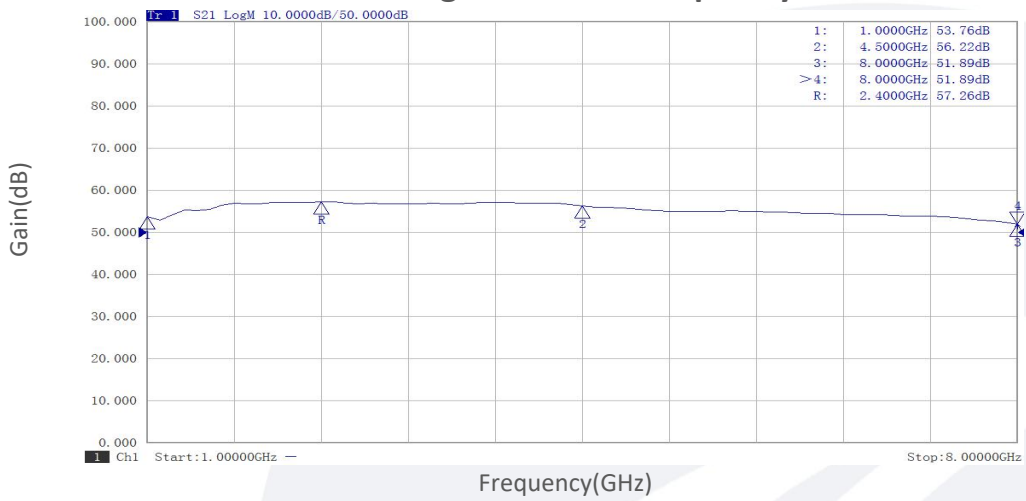
标准型号 Part Number	描述 Description	版本号 Revision
TLPA1G8G-40-40	Power amplifier 1-8GHz,Gain:40dB,Psat:40dBm,+28V DC,Without Heatsink.	Rev.1.1
TLPA1G8G-40-40-HS	Power amplifier 1-8GHz,Gain:40dB,Psat:40dBm,+28V DC,With Heatsink.	Rev.1.1

典型曲线 Typical Performance Data:

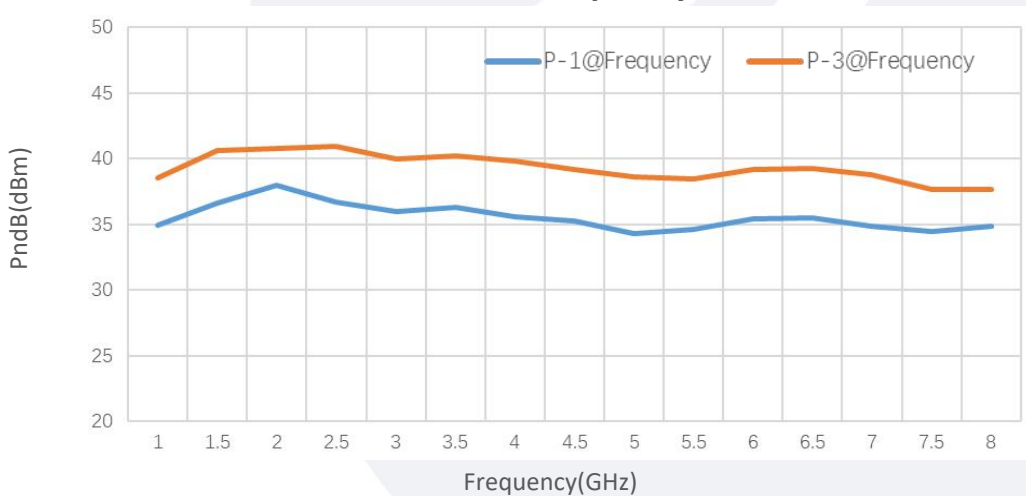
Input VSWR vs Frequency



Small Signal Gain vs Frequency



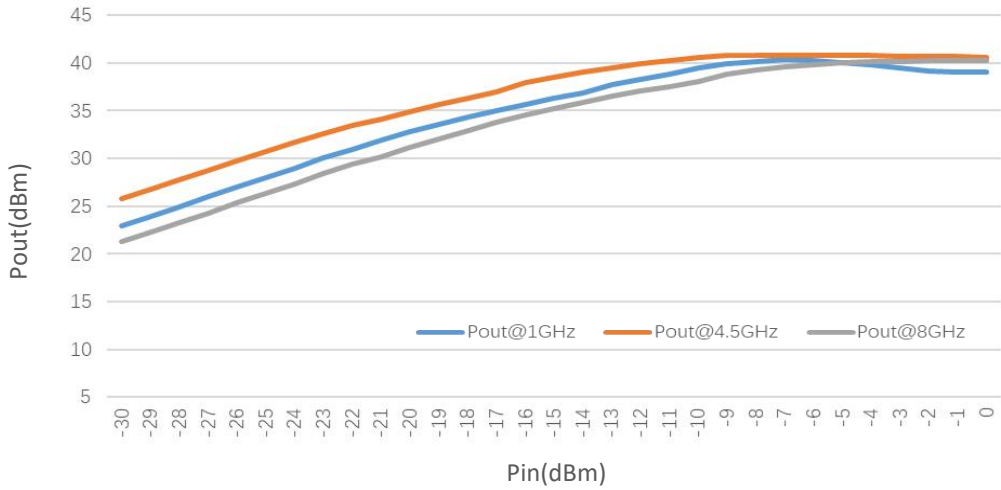
PndB vs Frequency



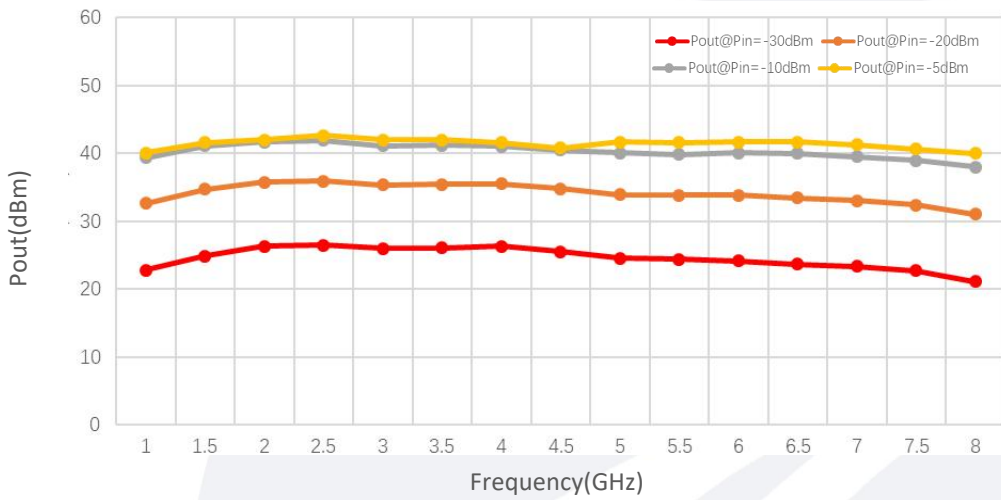
Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

典型曲线 Typical Performance Data:

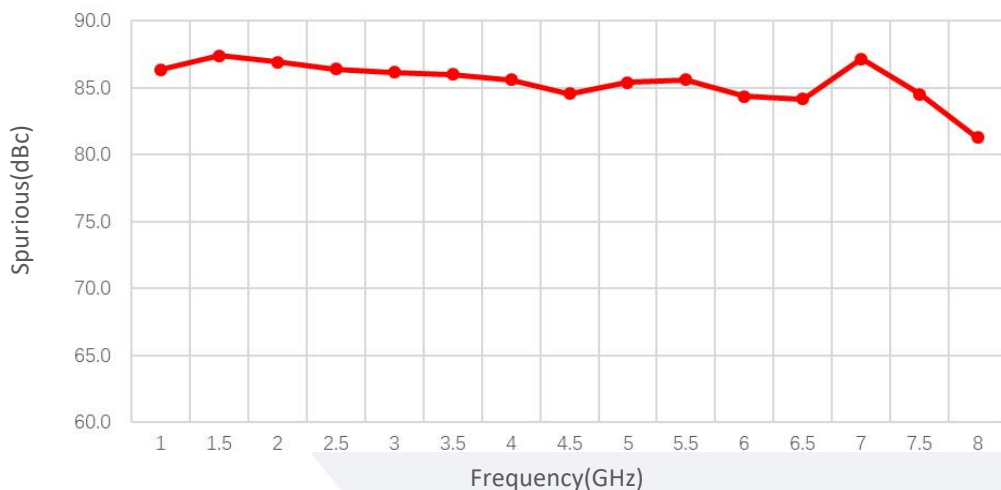
Pout@Pin



Pout@Equal\_Pin



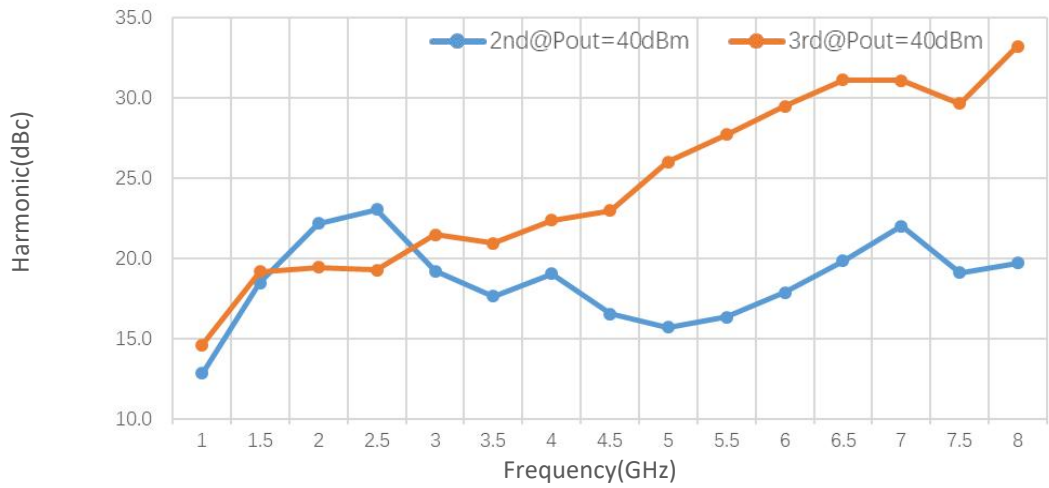
Spurious vs Frequency



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典型曲线 Typical Performance Data:

Harmonic vs Frequency



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