

Model:TLPA18G40G-35-31
Power Amplifier
18-40GHz,Gain:35dB,Psat:31dBm
Feature:

- Ultra Wide Band: 18-40GHz
- Gain:35dB Min
- Psat Output Power:31dBm 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	18-40			GHz
增益 Gain	35	40		dB
增益平坦度 Gain Flatness		±3		dB
线性输出功率 Output P1dB	27	29		dBm
饱和输出功率 Output Psat		31		dBm
输入驻波 Input VSWR		2		:1
输出驻波 Output VSWR		2		:1
直流电压 DC Voltage		20		V DC
直流电流 DC Supply Current		2.2		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	2.92 Female/2.92 Female	
直流偏置 DC Bias	Solder Pin	
尺寸 Size	60*50*12	mm
重量 Weight	/	g

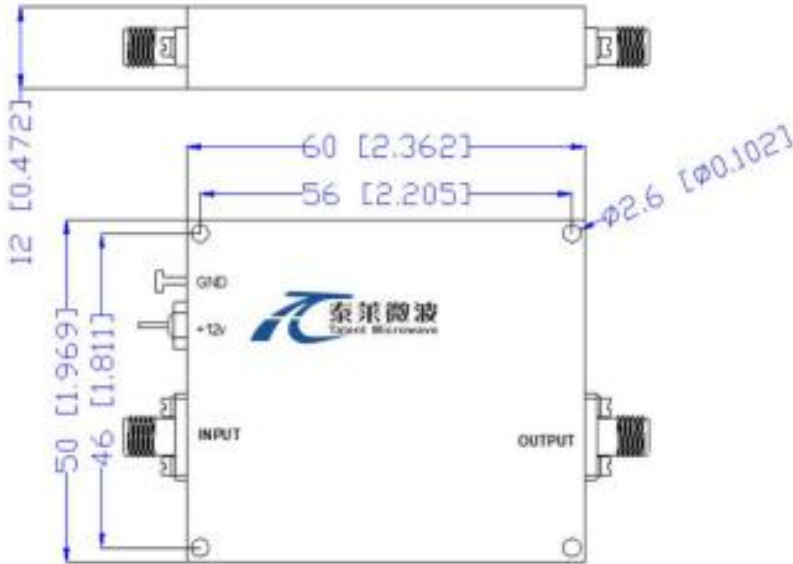
绝对最大值 Absolute Maximum Ratings:

参数Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	TBD
输入功率 RF Input Power	3dBm
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**



温度环境 Environmental Conditions:

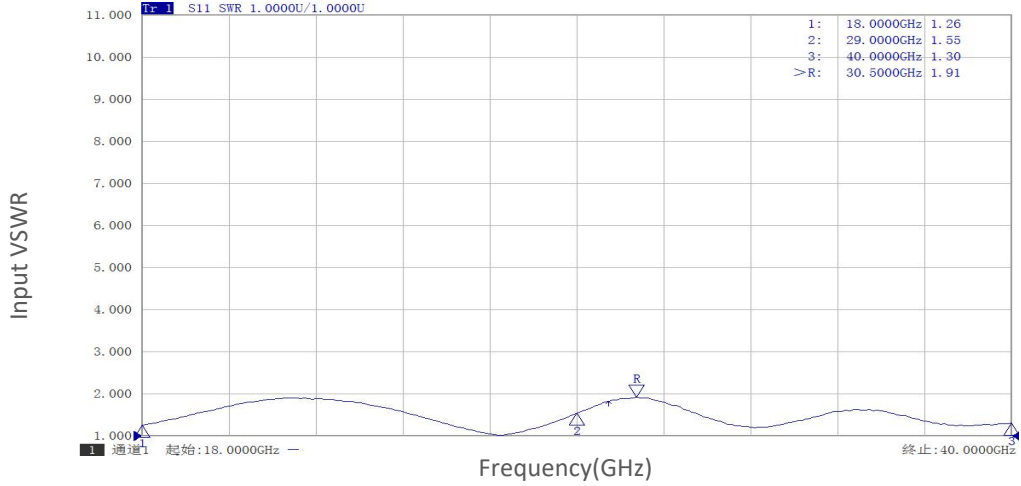
参数Parameter	Min	Typ	Max	单位Units
操作温度 Operating Temperature	-40		+85	°C
存储温度 Non-operating Temperature	-55		+125	°C
相对湿度 Relative humidity		95		%
海拔 Altitude	50,000			feet
震动 Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
冲击 Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

订货信息 Ordering Information:

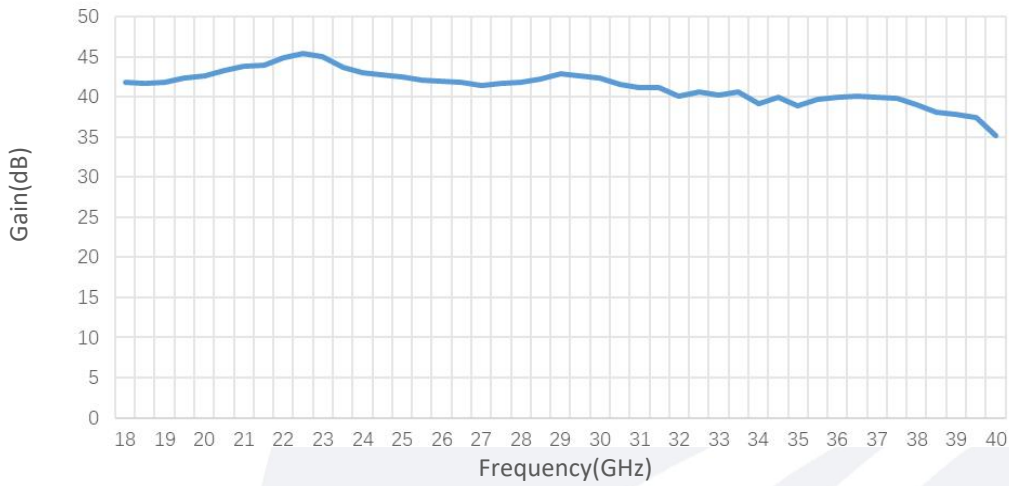
标准型号 Part Number	描述 Description	版本号Revision
TLPA18G40G-35-31	Power amplifier 18-40GHz,Gain:35dB,Psat:31dBm,+12V DC,Without Heatsink.	Rev.1.1
TLPA18G40G-35-31-HS	Power amplifier 18-40GHz,Gain:35dB,Psat:31dBm,+12V DC,With Heatsink.	Rev.1.1

典型曲线 Typical Performance Data:

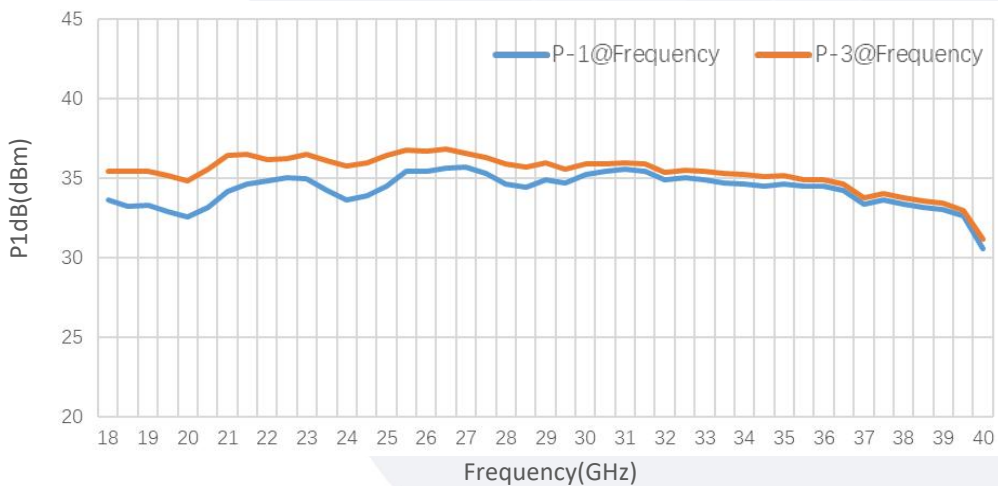
Input VSWR vs Frequency



Small Signal Gain vs Frequency



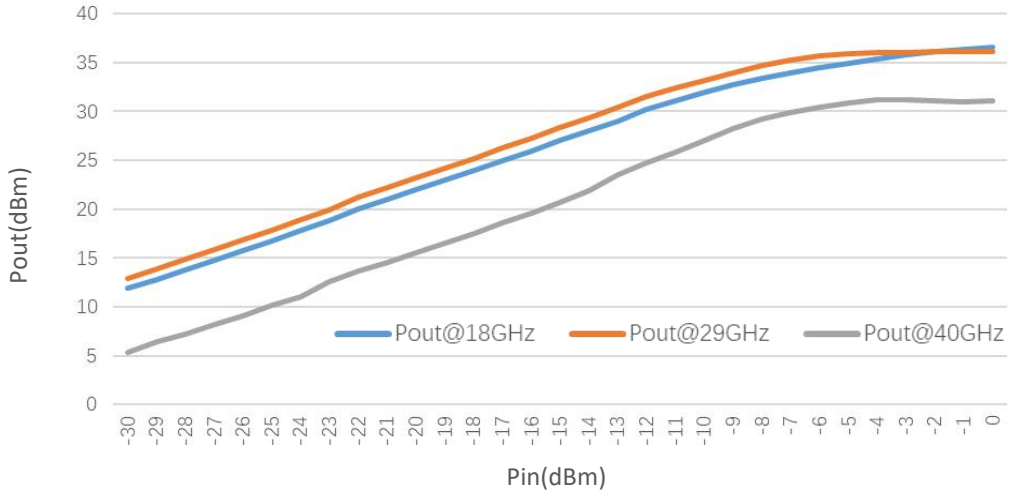
P1dB vs Frequency



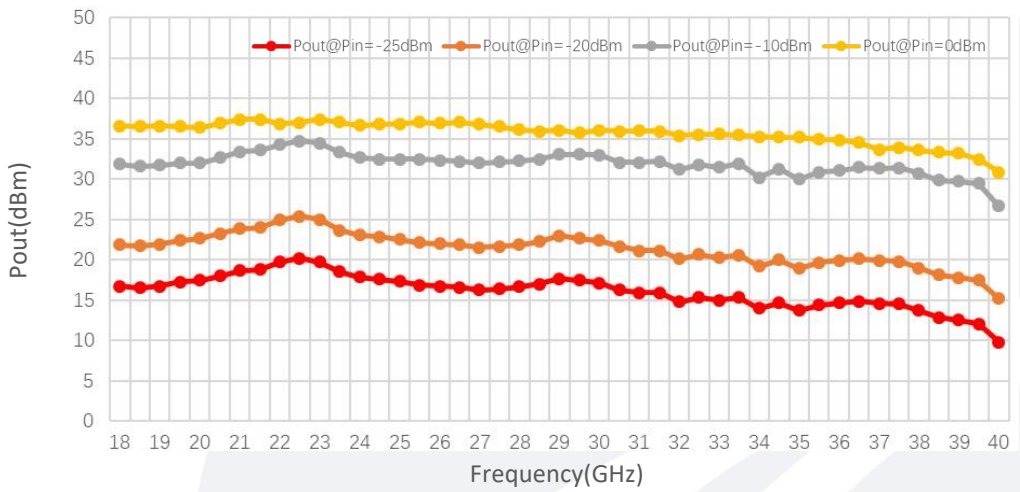
Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

典型曲线 Typical Performance Data:

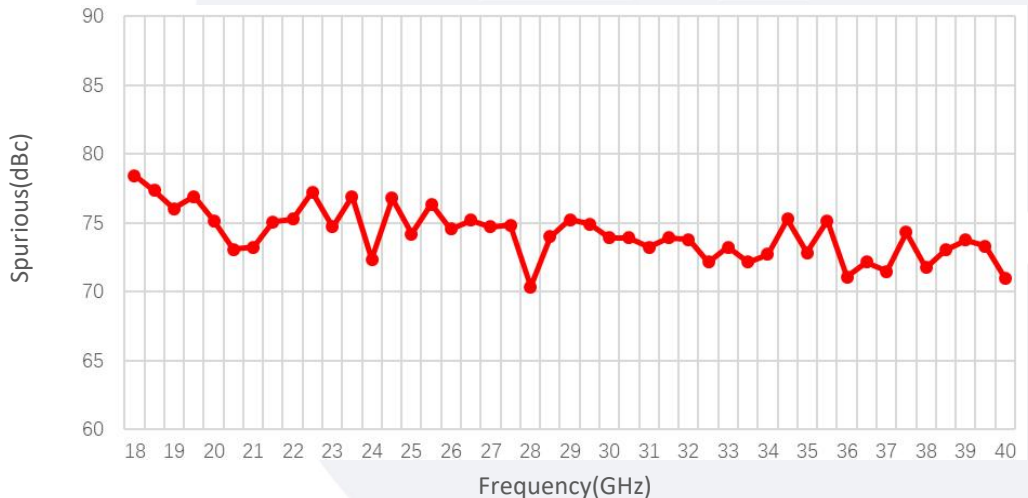
Pout@Pin



Pout@Equal_Pin



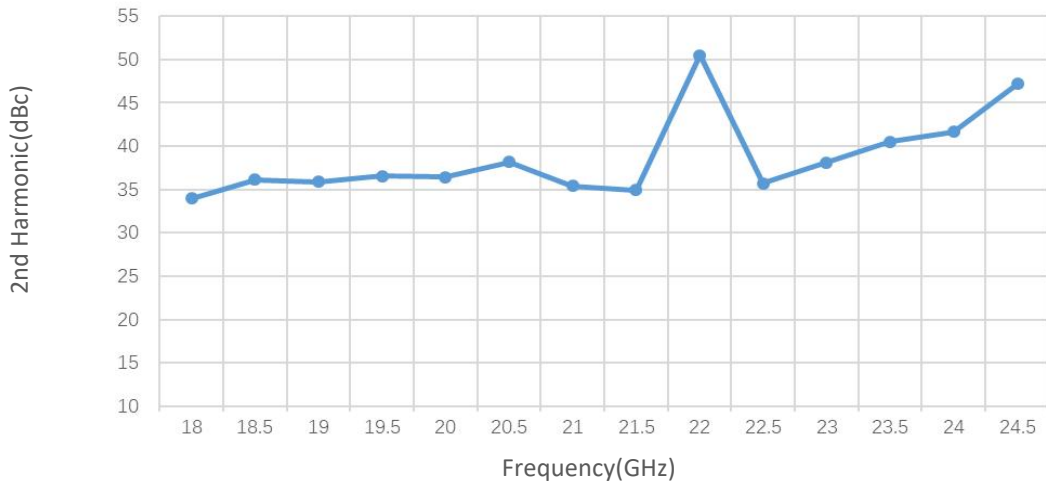
Spurious vs Frequency



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典型曲线 Typical Performance Data:

2nd Harmonic vs Frequency



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