

Model: TLPA18G40G-40-37

**Solid State High Power Amplifier
18-40GHz, Gain: 40dB, Psat: 37dBm**

Feature:

- Ultra Wide Band: 18-40GHz
- Gain: 40dB
- Psat Output Power: 37dBm
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

电气特性 Electrical:

参数Parameter	Min.	Typ.	Max.	单位Units
频率范围 Frequency range	18-40			GHz
功率增益 Power Gain	40	45		dB
饱和输出功率 Output Psat	37			dBm
线性输出功率 Output P1dB	30	32		dBm
输入功率 Input Power			0	dBm
杂散 Spurious @ Pout=30dBm	50			dBc
输入驻波 Input VSWR		2.0		:1
直流电压 DC Voltage		+20	+24	V DC
功耗 Power Consumption			90	W
阻抗 Impedance	50			Ohms

机械特性 Mechanical:

参数Parameter	指标 Value	单位Units
输入输出接口 Input /Output Connector	2.92mm Female/2.92mm Female	
DC加电接口 DC Power Interface	J30J-9ZKP	
尺寸 Size	150*90*20	mm
重量 Weight	0.5	Kg

绝对最大值 Absolute Maximum Ratings:

参数Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	+ 24V
输入功率 RF Input Power	0 dBm
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V



外形尺寸 Outline Drawing:

Unit: mm(Inches)



J30J-9ZKP	
引脚 Pin #	功能 Function
1-5	+20V
6-9	GND



OBSERVE PRECAUTIONS
ELECTROSTATIC SENSITIVE
DEVICES

温度环境 Environmental Conditions:

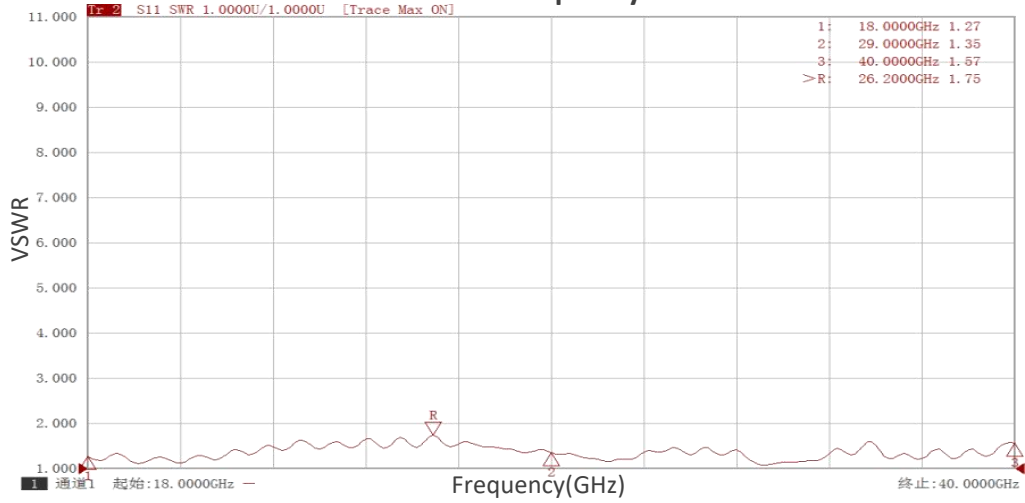
参数 Parameter	Min.	Typ.	Max.	单位 Units
操作温度 Operating Temperature	0		+40	°C
存储温度 Non-operating Temperature	-45		+65	°C
相对湿度 Relative humidity		95		%
海拔 Altitude	50,000			feet
震动 Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
冲击 Shock(non operating)	20G for 11msc half sin wave, 3 axis both directions			

订货信息 Ordering Information:

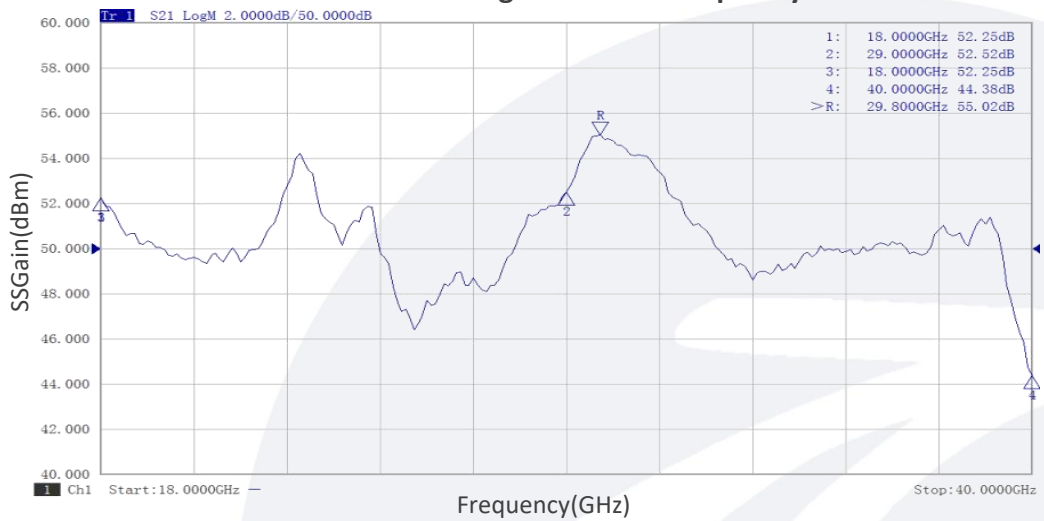
标准型号 Part Number	描述 Description	版本号 Revision
TLPA18G40G-40-37	Power amplifier 18-40GHz, Gain:40dB, Psat:37dBm, +20V DC, Without Heatsink	Rev.1.1
TLPA18G40G-40-37-HS	Power amplifier 18-40GHz, Gain:40dB, Psat:37dBm, +20V DC, With Heatsink	Rev.1.1

典型曲线 Typical Performance Data:

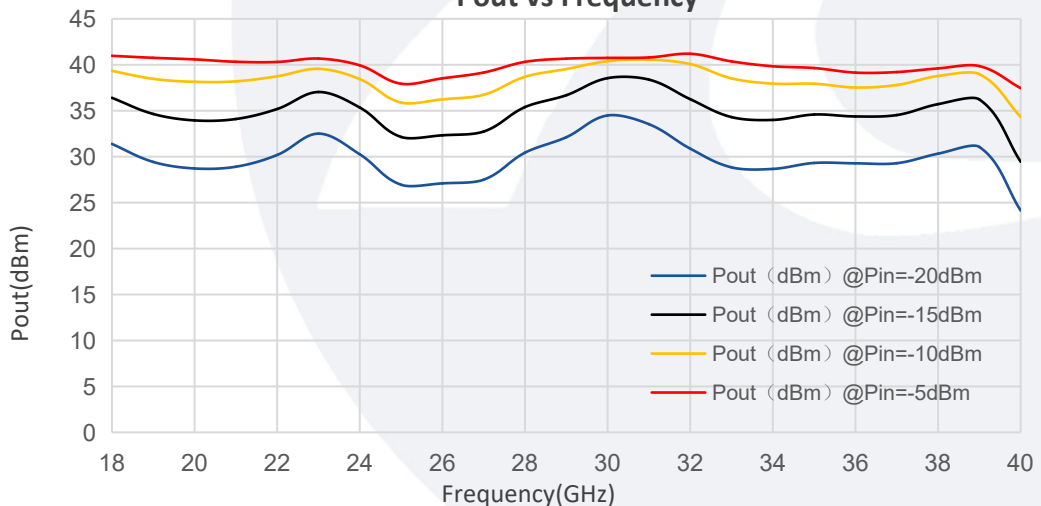
VSWR vs Frequency



Small Signal Gain vs Frequency

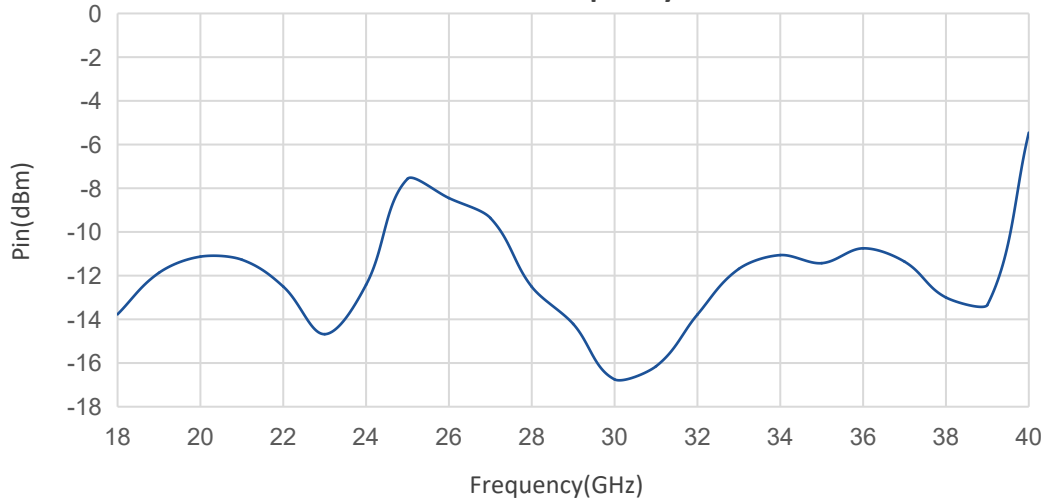


Pout vs Frequency

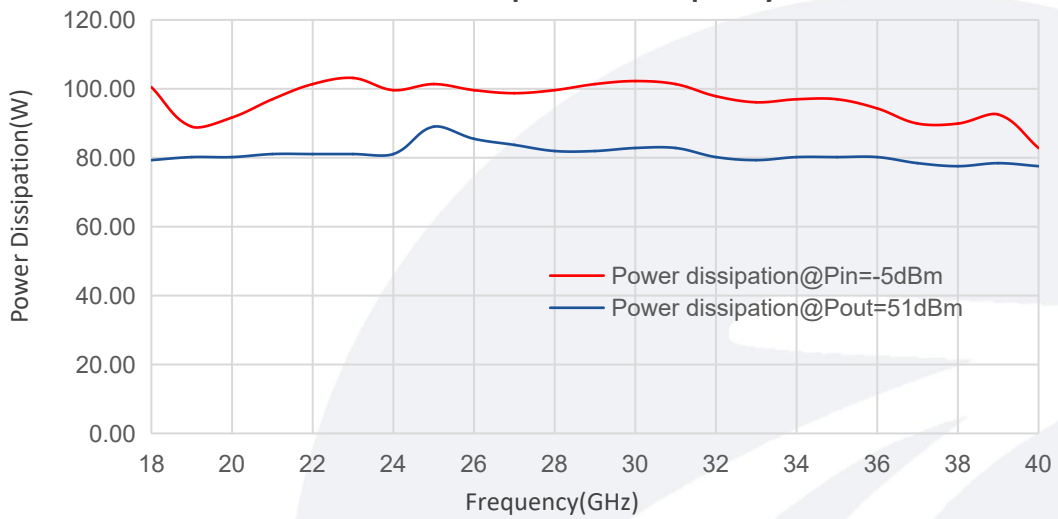


典型曲线 Typical Performance Data:

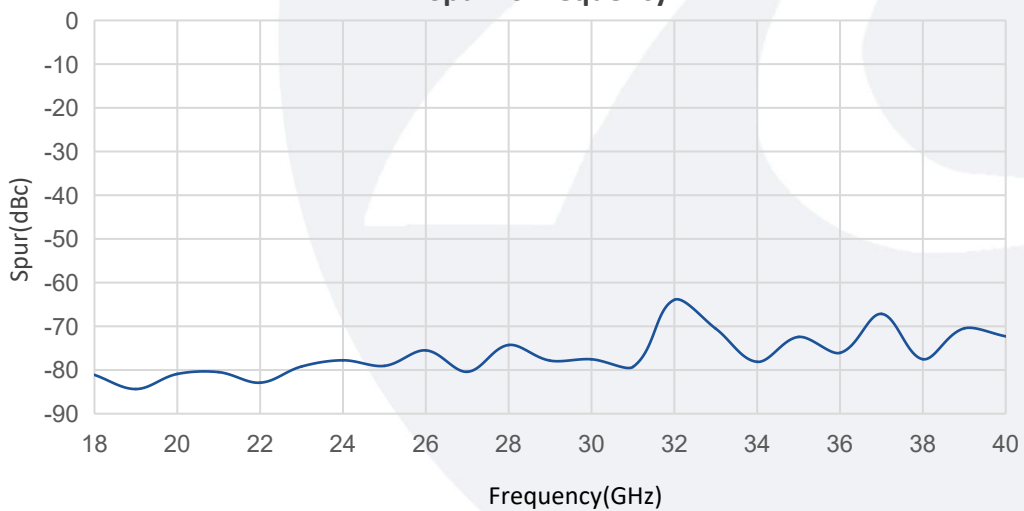
Pin vs Frequency



Power Dissipation vs Frequency

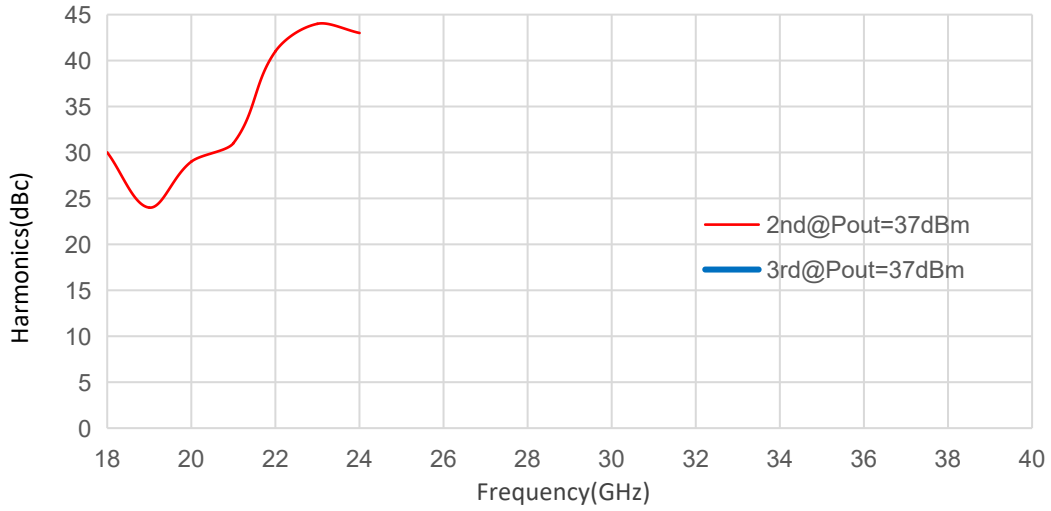


Spur vs Frequency

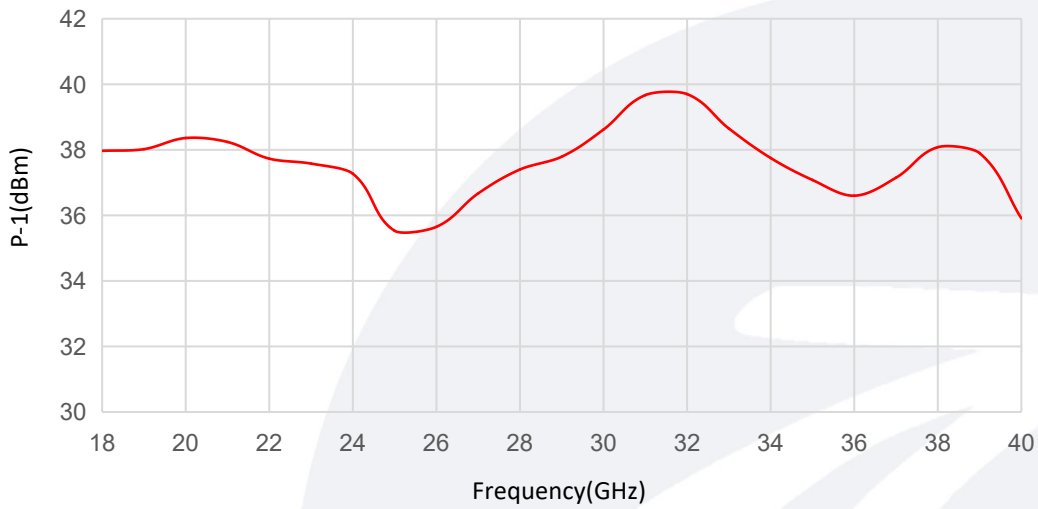


典型曲线 Typical Performance Data:

Harmonics vs Frequency



Output P1dB vs Frequency



Pout vs Pin

