

**Model:TLPA18G40G-38-27**
**Power Amplifier**  
**18-40GHz,Gain:38dB,Psat:27dBm**
**Feature:**

- Ultra Wide Band: 18-40GHz
- Gain:38dB Min
- Psat Output Power:27dBm 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	18-40			GHz
增益 Gain	38	43		dB
增益平坦度 Gain Flatness		±2.5		dB
线性输出功率 Output P1dB		27		dBm
饱和输出功率 Output Psat	27	28		dBm
输入驻波 Input VSWR		2		:1
输出驻波 Output VSWR		2		:1
直流电压 DC Voltage		+12		V DC
直流电流 DC Supply Current		800		mA
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

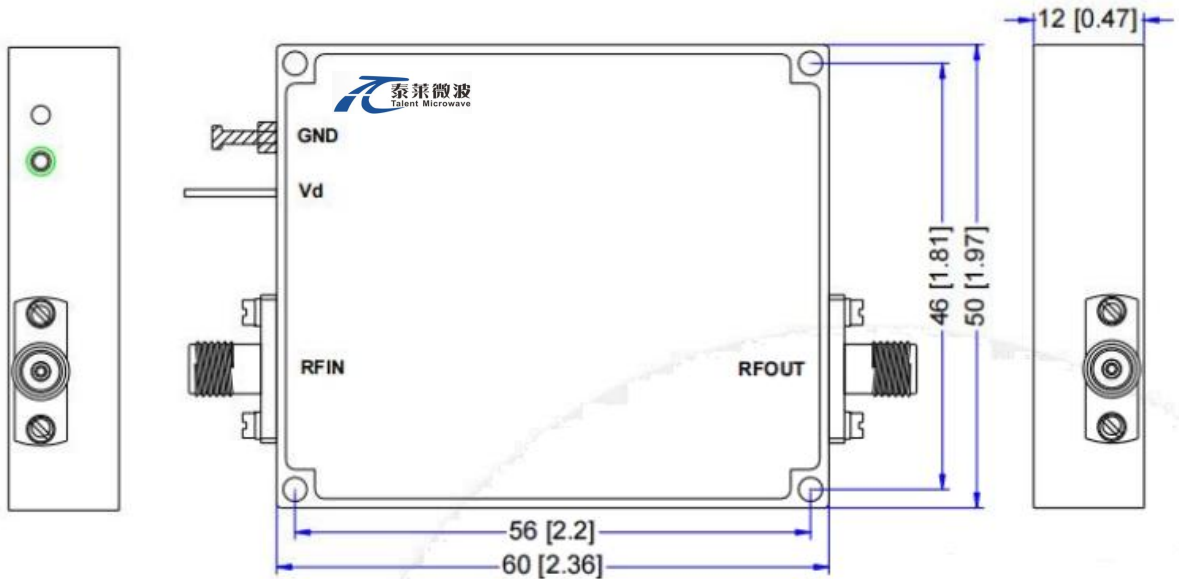
**绝对最大值 Absolute Maximum Ratings:**

参数Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	+15 V
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



温度环境 Environmental Conditions:

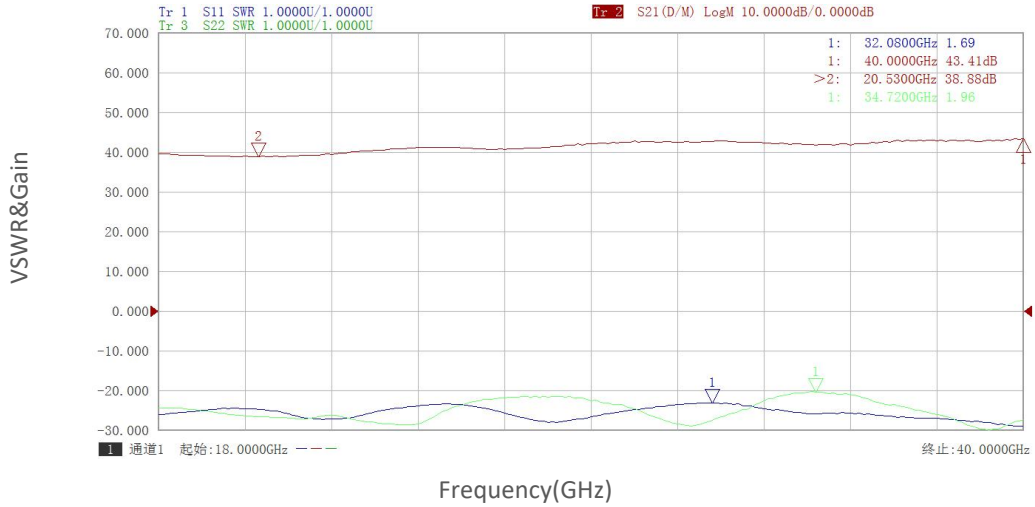
参数Parameter	Min	Typ	Max	单位Units
操作温度 Operating Temperature	-40		+75	°C
存储温度 Non-operating Temperature	-55		+125	°C
相对湿度 Relative humidity		95		%
海拔 Altitude	30,000			feet
震动 Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
冲击 Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

订货信息 Ordering Information:

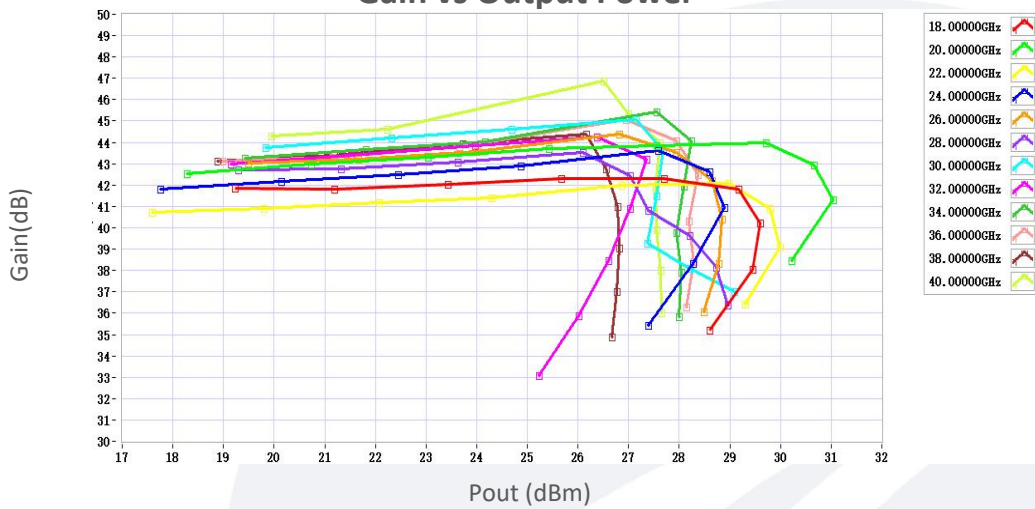
标准型号 Part Number	描述 Description	版本号Revision
TLPA18G40G-38-27	Power amplifier 18-40GHz,Gain:38dB,Psat:27dBm,+12V DC,Without Heatsink.	Rev.1.1
TLPA18G40G-38-27-HS	Power amplifier 18-40GHz,Gain:38dB,Psat:27dBm,+12V DC,With Heatsink.	Rev.1.1

典型曲线 Typical Performance Data:

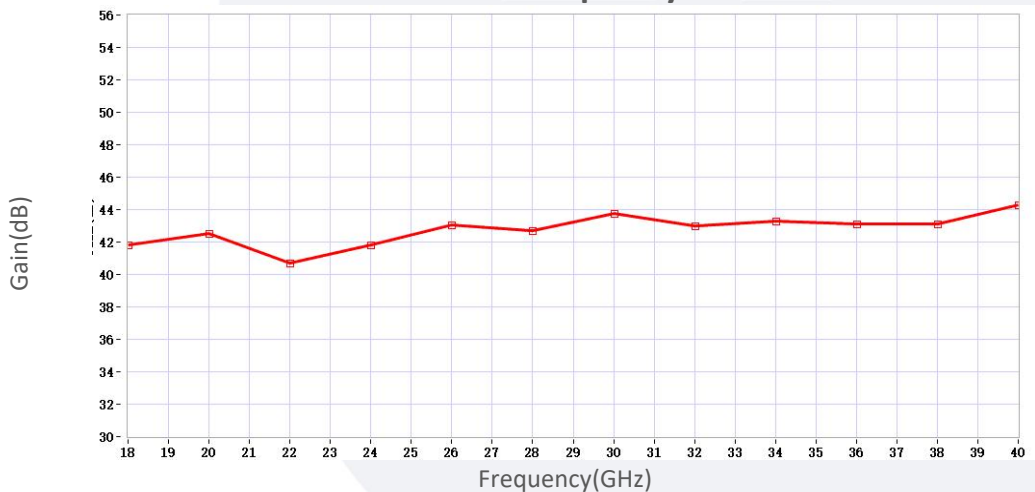
**VSWR&Gain vs Frequency**



**Gain vs Output Power**



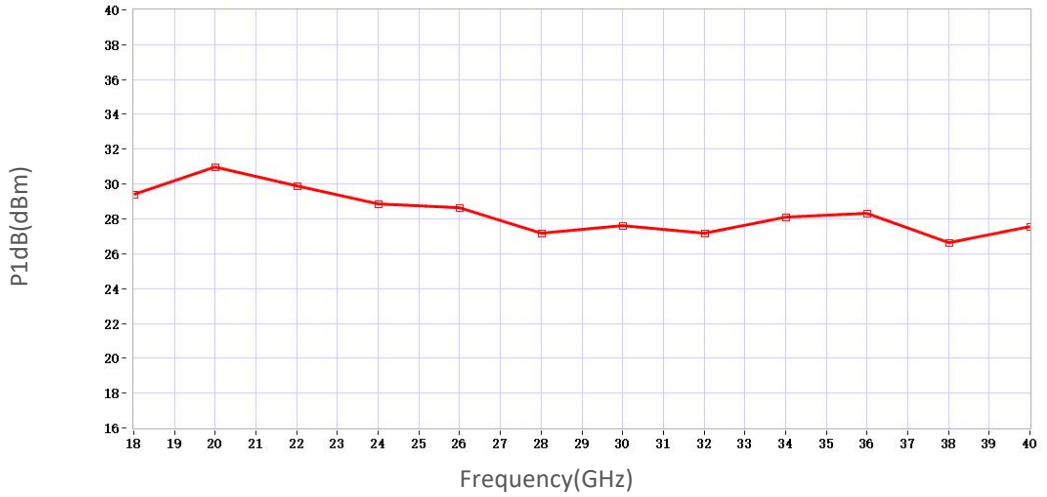
**Gain vs Frequency**



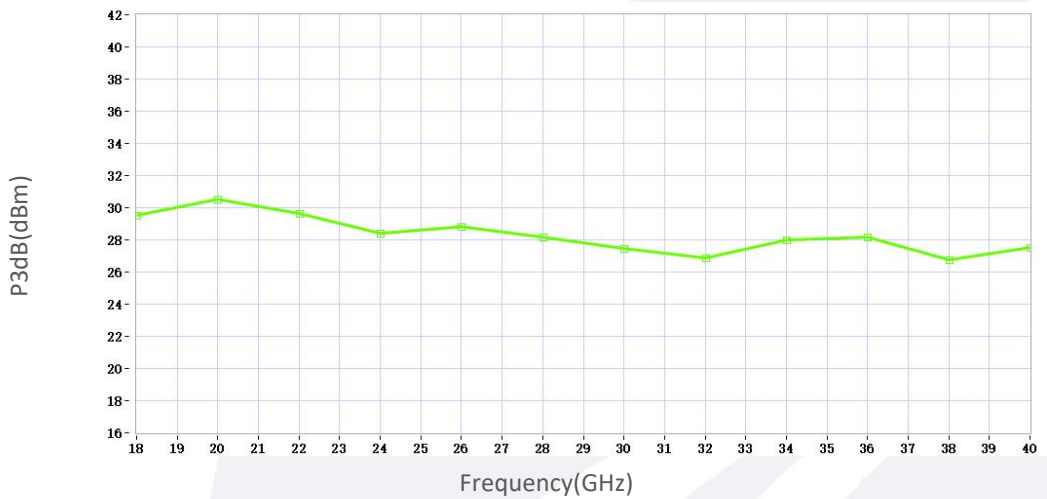
Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

典型曲线 Typical Performance Data:

**P1dB vs Frequency**



**P3dB 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.