

**Model:TLPA6G18G-47-48**
**Power Amplifier**  
**6-18GHz,Gain:47dB,Psat:48dBm**
**Feature:**

- Ultra Wide Band: 6-18GHz
- Gain:47dB Min
- Psat Output Power: 48dBm 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	6-18			GHz
增益 Gain	47			dB
增益平坦度 Gain Flatness		±3.5		dB
饱和输出功率 Output Psat	47	48		dBm
杂散 Spurious@Pout=47dBm			-50	dBc
谐波 Harmonics@Pout=47dBm		-13		dBc
输入驻波 Input VSWR			2.0	:1
直流电压 DC Voltage		+28		V DC
功耗 Power Consumption		800		W
阻抗 Impedance	50			Ohms

**机械特性 Mechanical Specifications:**

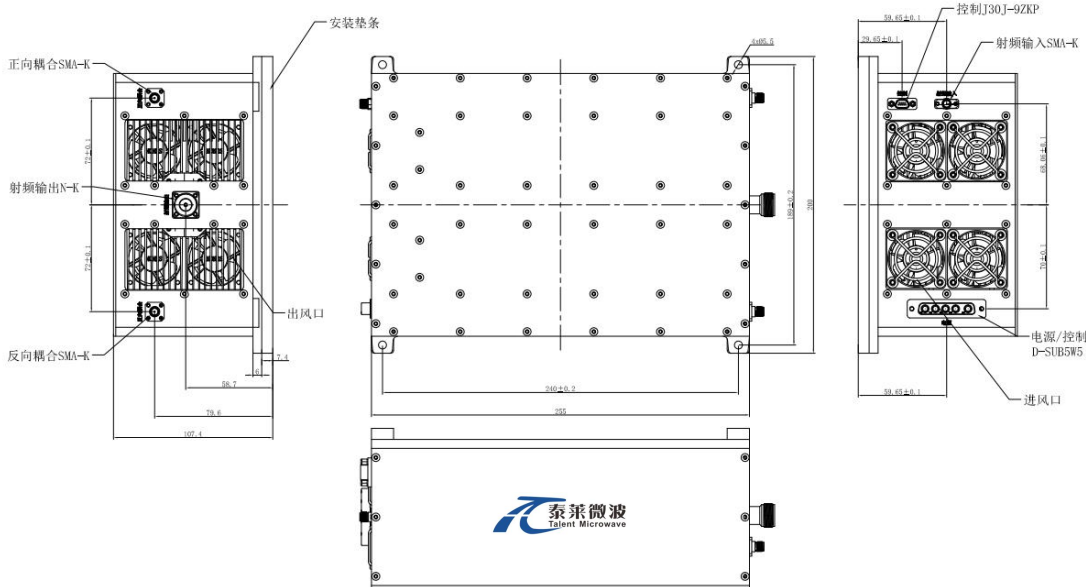
参数Parameter	指标 Value	单位Units
输入输出接口 Input /Output Connector	SMA Female/SMA Female	
直流偏置 DC Bias	D-SUB9W2	
尺寸 Size	255*200*107.4	mm
重量 Weight	500	g

**绝对最大值 Absolute Maximum Ratings:**

参数Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	+30V
输入功率 RF Input Power	10dBm
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V

外形尺寸Outline Drawing:

Unit: mm



OBSERVE PRECAUTIONS  
ELECTROSTATIC SENSITIVE  
DEVICES

SUB-9W2 Define	
引脚 Pin	功能 Function
A1	+28V
A2	GND
Pin1	TTL(high for open,low for close)
Pin2	Temperature Monitor
Pin3	Voltage Monitor
Pin4	Current Monitor
Pin5	Temperature Monitor
Pin6	Forward detection voltage
Pin7	Reverse detection voltage

### 温度环境 Environmental Conditions:

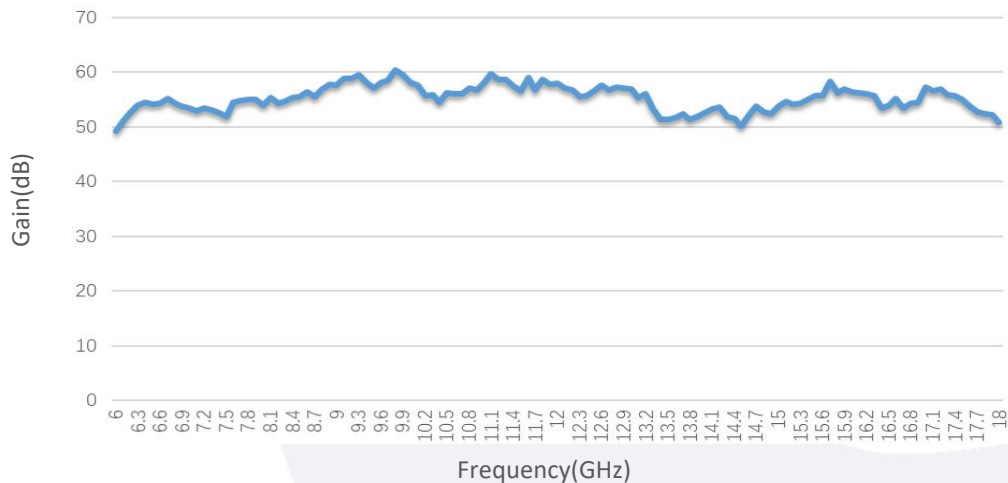
参数Parameter	Min	Typ	Max	单位Units
操作温度 Operating Temperature	0		+50	°C
存储温度 Non-operating Temperature	-20		+75	°C
相对湿度 Relative humidity		95		%
海拔 Altitude	50,000			feet
震动 Shock / Vibration(MIL-STD-810F)	20g,11ms,saw-tooth			
冲击 Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

### 订货信息 Ordering Information:

标准型号 Part Number	描述 Description	版本号Revision
TLPA6G18G-47-48	Power amplifier 6-18GHz,Gain:47dB,Psat:48dBm, +28V DC,Without Heatsink	Rev.1.1
TLPA6G18G-47-48-HS	Power amplifier 6-18GHz,Gain:47dB,Psat:48dBm, +28V DC,With Heatsink	Rev.1.1

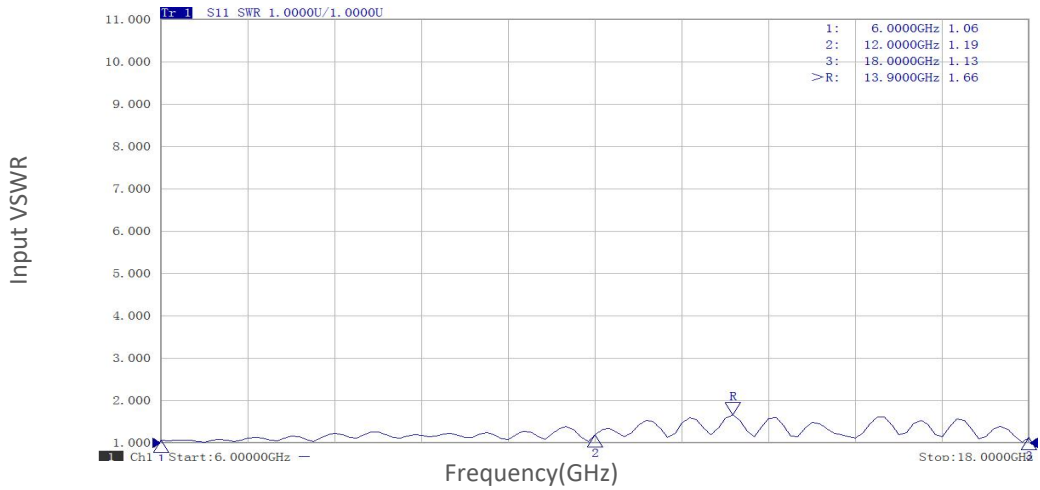
### 典型曲线 Typical Performance Data:

Gain vs Frequency

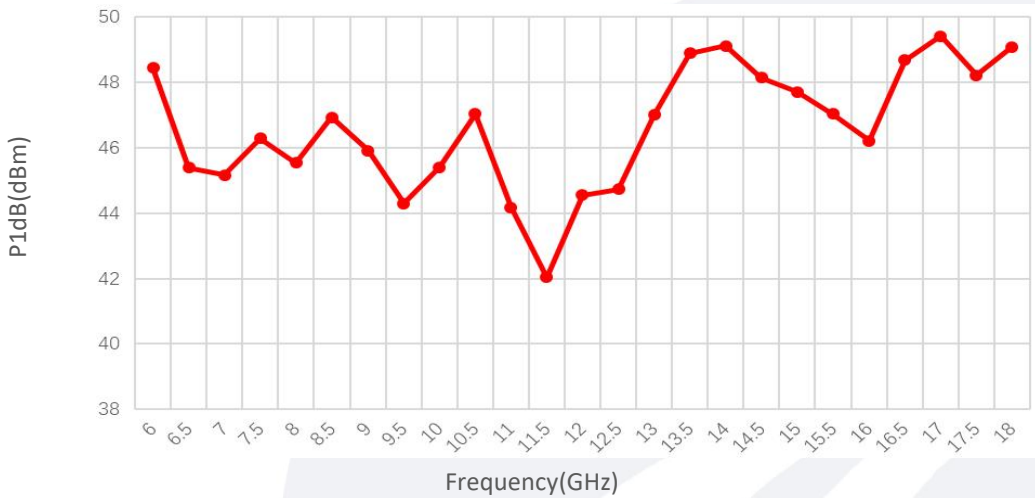


典型曲线 Typical Performance Data:

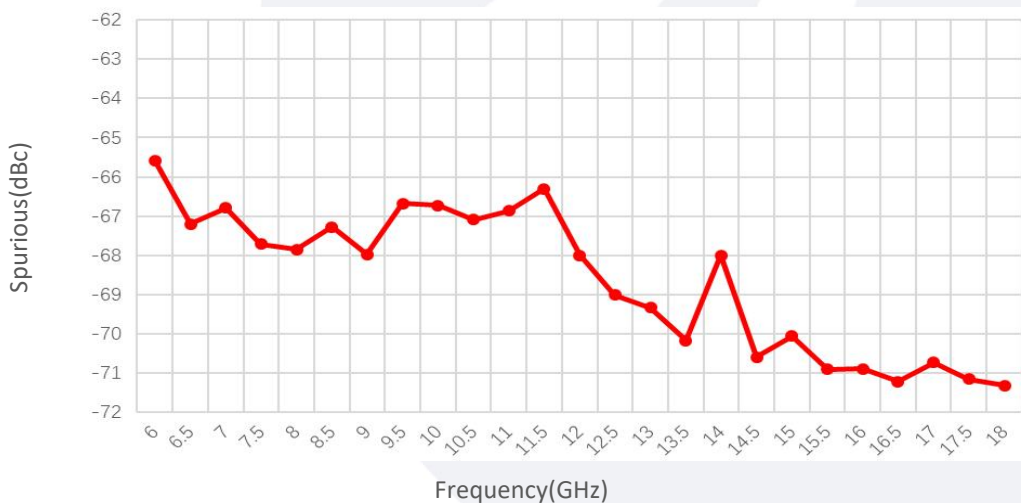
Input VSWR vs Frequency



P1dB vs Frequency

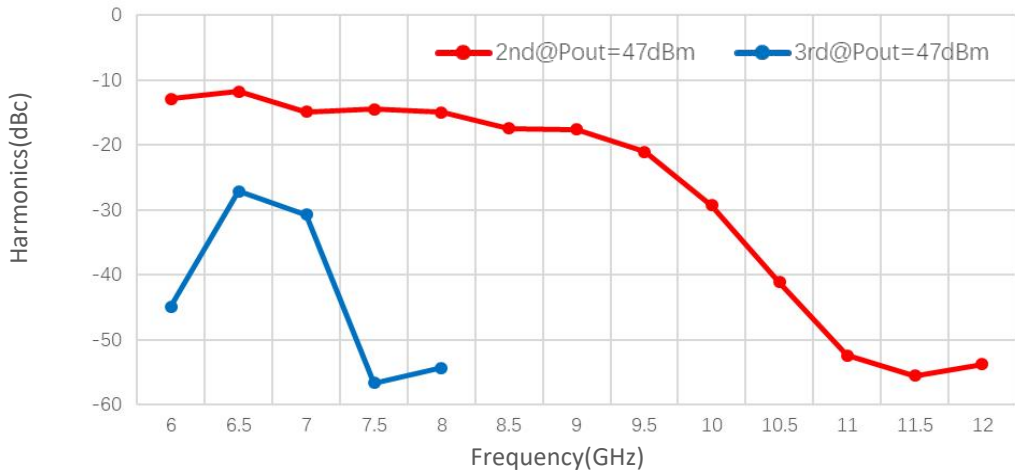


Spurious@Pout=47dBm

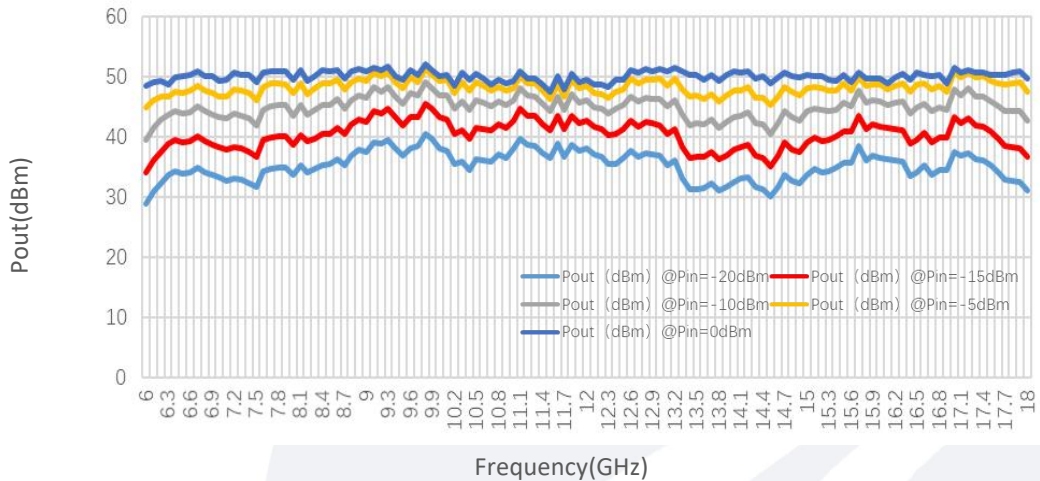


典型曲线 Typical Performance Data:

Harmonics@Pout=47dBm



Pout@Equal\_Pin



Pout@Pin

