

**Model: TLPA18G40G-40-40**
**Solid State High Power Amplifier  
 18-40GHz, Gain: 40dB, Psat: 40dBm**
**Feature:**

- Ultra Wide Band: 18-40GHz
- Gain: 40dB
- Psat Output Power: 40dBm
- 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			dB
饱和输出功率 Output Psat	40	41		dBm
输入功率 Input Power		0	10	dBm
杂散 Spurious @ Pout=40dBm	50			dBc
谐波 Harmonics @ Pout=40dBm	15			dBc
输入驻波 Input VSWR		2.0	2.5	:1
直流电压 DC Voltage		+18	+19	V DC
电流 Current		11		A
阻抗 Impedance	50			Ohms

**机械特性 Mechanical :**

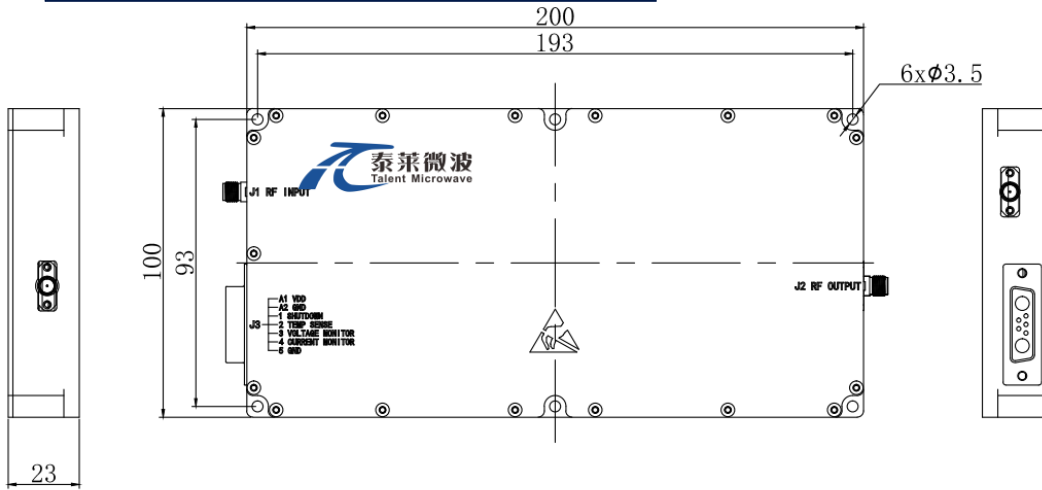
参数Parameter	指标 Value	单位Units
输入输出接口 Input /Output Connector	2.92mm Female/2.92mm Female	
DC加电接口 DC Power Interface	SUB-7W2	
尺寸 Size	200*100*23	mm
重量 Weight	<3	Kg

**绝对最大值 Absolute Maximum Ratings:**

参数Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	19 V
输入功率 RF INPUT POWER	10 dBm
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V

**外形尺寸 Outline Drawing:**

Unit: mm(Inches)



SUB-7W2 Define	
引脚 Pin #	功能 Function
A1	+18V
A2	GND
PIN1	TTL ( high for open, low for close)
PIN2	Current Monitor
PIN3	Temperature Monitor
PIN4,5	GND



OBSERVE PRECAUTIONS  
ELECTROSTATIC SENSITIVE  
DEVICES

**温度环境 Environmental Conditions:**

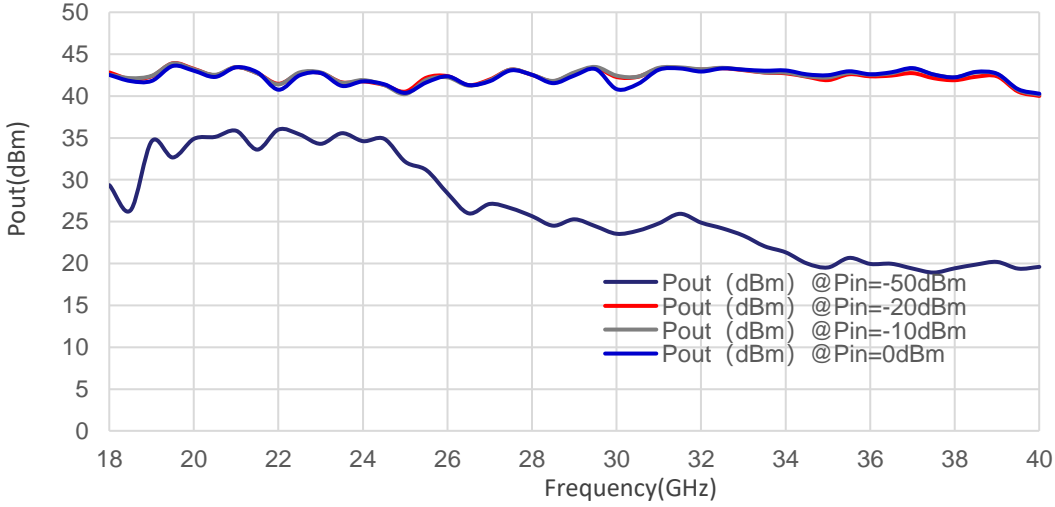
参数 Parameter	Min.	Typ.	Max.	单位 Units
操作温度 Operating Temperature	0		+40	°C
存储温度 Non-operating Temperature	-45		+65	°C
相对湿度 Relative humidity		95		%
海拔 Altitude	50,000			feet
震动 Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
冲击 Shock(non operating)	20G for 11msc 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-40-40	Power amplifier 18-40GHz, Gain:40dB, Psat:40dBm, +20V DC, Without Heatsink	Rev.1.1
TLPA18G40G-40-40-HS	Power amplifier 18-40GHz, Gain:40dB, Psat:40dBm, +20V DC, With Heatsink	Rev.1.1

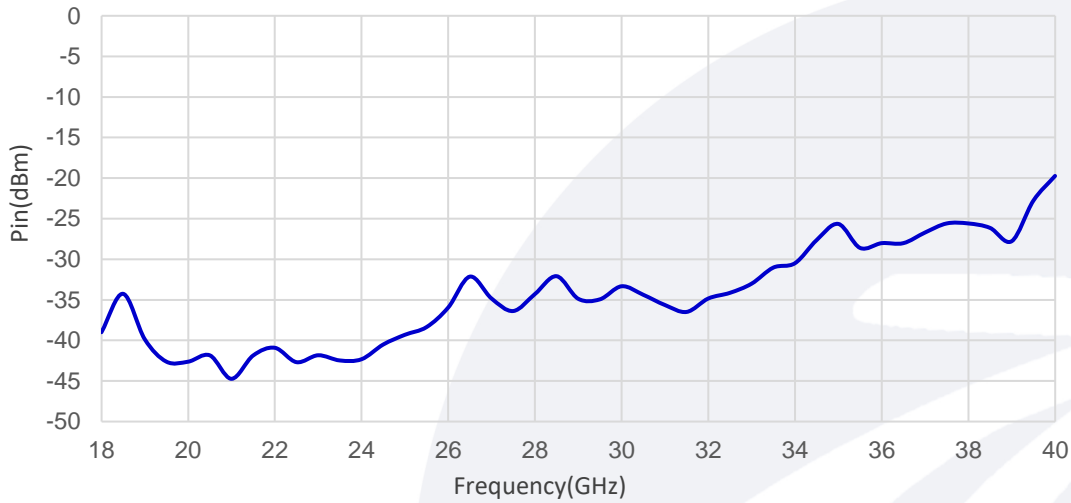
典型曲线 Typical Performance Data:

Pout vs Frequency

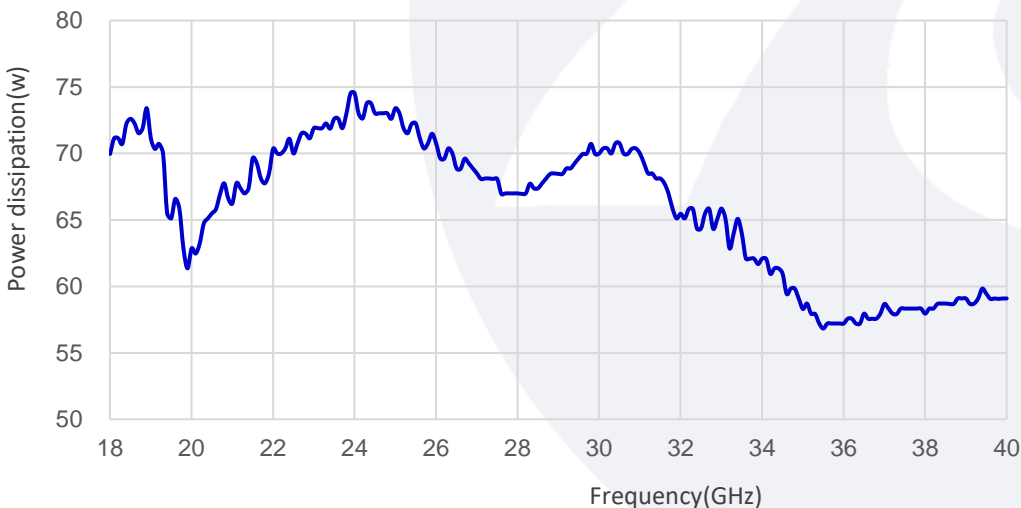


Pout=40.5dBm

Pin vs Frequency

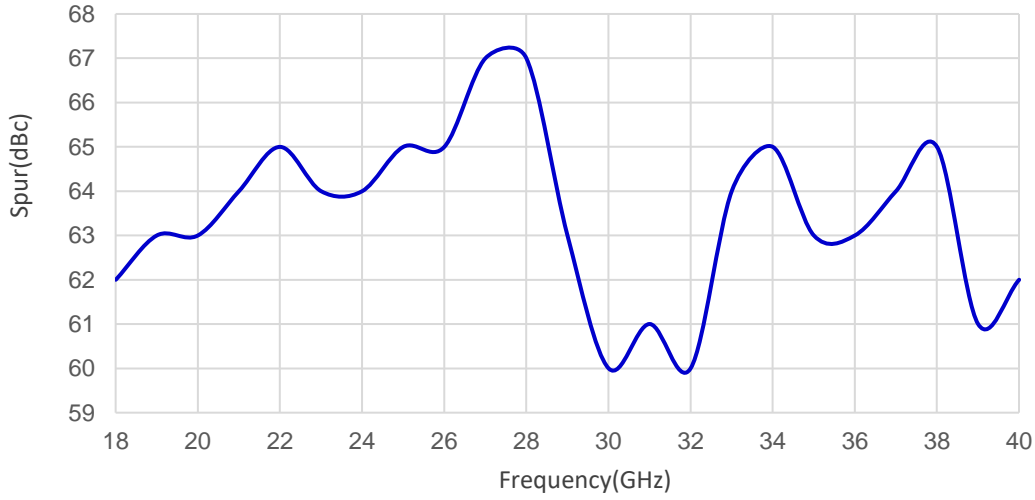


Power Dissipation vs Frequency



典型曲线 Typical Performance Data:

Spurious vs Frequency



Harmonic vs Frequency

