

**Model:TLPA4G6G-40-41**
**Power Amplifier**  
**4GHz-6GHz,Gain:40dB,Psat:41dBm**
**Feature:**

- Ultra Wide Band: 4GHz-6GHz
- Gain: 40dB Min
- P1dB Output Power: 40 dBm Min
- 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	4-6			GHz
增益 Gain	40	42		dB
增益平坦度 Gain Flatness		±2dB	±3dB	dB
线性输出功率P1dB	40	40.5		dBm
饱和输出功率Psat	41	41.5		dBm
谐波抑制@Pout=40dBm			-15	dBc
输入驻波 Input VSWR		1.5	2.0	:1
直流电压 DC Voltage	26	28	30	V DC
直流电流 DC Supply Current		0.5	2	A
阻抗 Impedance	50			Ohms

**机械特性 Mechanical :**

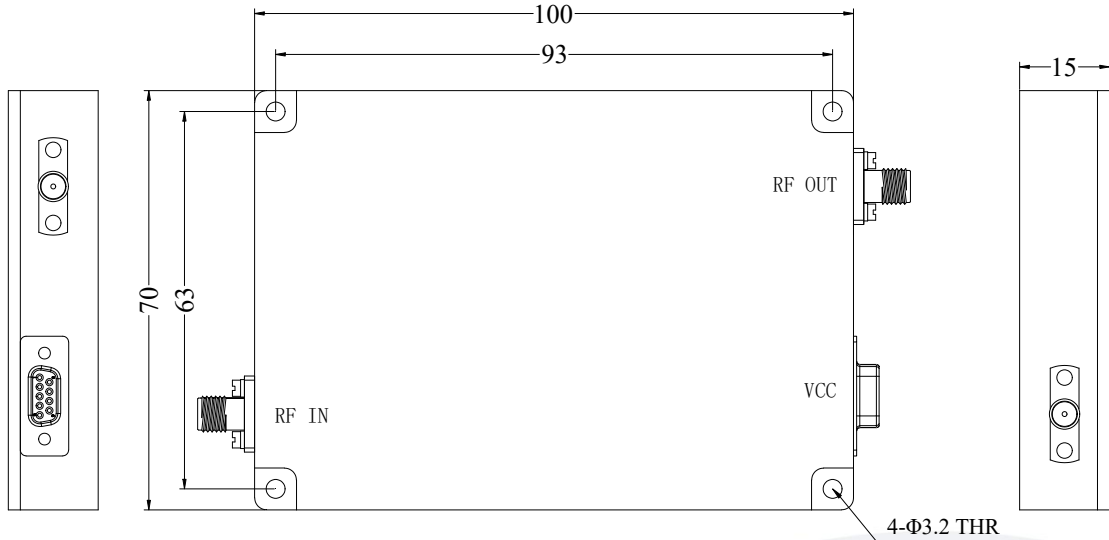
参数Parameter	指标 Value	单位 Units
输入输出接口Input /Output Connector	SMA Female	
直流偏置 Bias	Solder Pin	
尺寸 Size	100X86X40	mm
重量 Weight	250	g


**绝对最大值 Absolute Maximum Ratings:**

参数Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	30
输入功率 RF INPUT POWER	5 dBm
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V

外形尺寸 Outline Drawing:

Unit: mm



**\*\*\*Heat Sink Required During Operation**



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	-45		+85	°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:

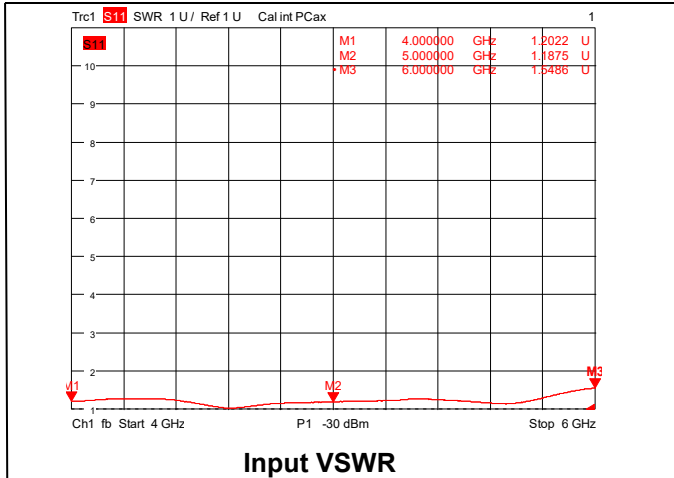
标准型号 Part Number	描述 Description	版本号Revision
TLPA4G6G-40-41	Power amplifier 4GHz-6GHz, Gain:40dB, Psat:41dBm, 28V DC, Without Heatsink	Rev.1.0
TLPA4G6G-40-41-HS	Power amplifier 4GHz-6GHz, Gain:40dB, Psat:41dBm, 28V DC, With Heatsink	Rev.1.0

直流供电连接器 J30J-9ZKW-J (配J30J-9TJL)

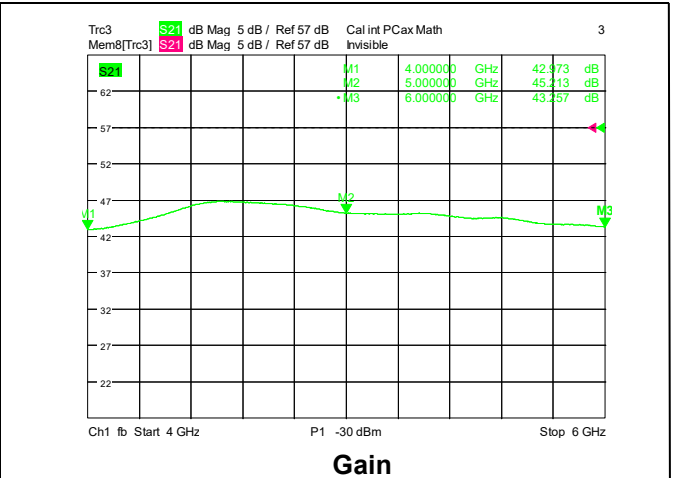
引脚编号	标识	类型	功能详细说明
1	功放使能	输入	高电平（或悬空）打开功放，短接到地关闭功放。
2	GND	输入	供电负极
3	GND	输入	供电负极
4	GND	输入	供电负极
5	GND	输入	供电负极
6	+28V	输入	供电正极 +26.0-30.0VDC
7	+28V	输入	供电正极 +26.0-30.0VDC
8	+28V	输入	供电正极 +26.0-30.0VDC
9	+28V	输入	供电正极 +26.0-30.0VDC

备注：TTL为5V

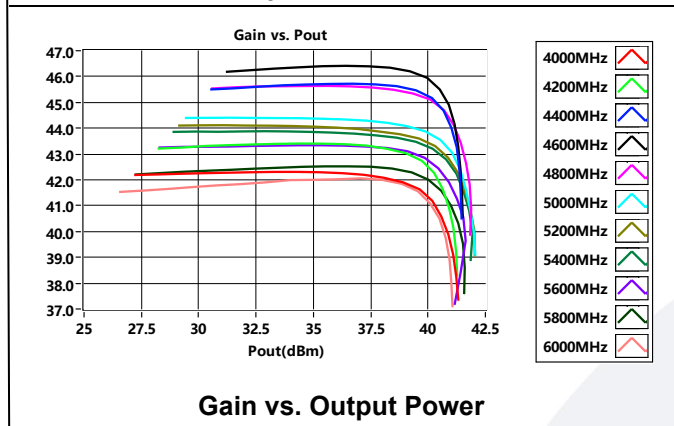
SUB-2W2 Define	
引脚Pin#	功能Function
A1	+24V
A2	GND
PIN1	TTL(high for open,low for close)
PIN2	Current Monitor
PIN3	Temperature Monitor
PIN4	0.5dB Attenuation
PIN5	1dB Attenuation
PIN6	2dB Attenuation
PIN7	4dB Attenuation
PIN8	8dB Attenuation
PIN9	16dB Attenuation
PIN10-15	GND



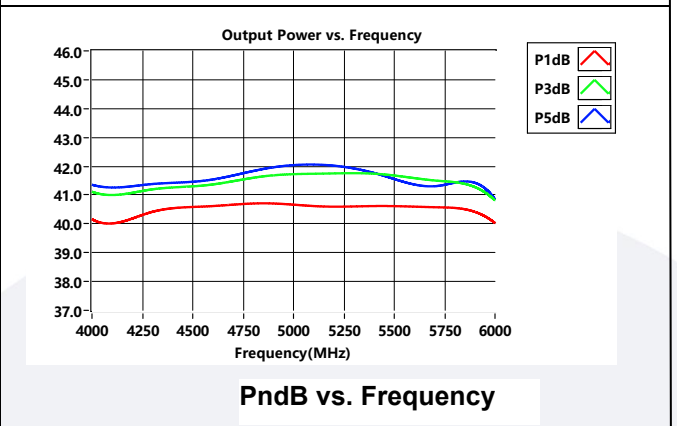
**Input VSWR**



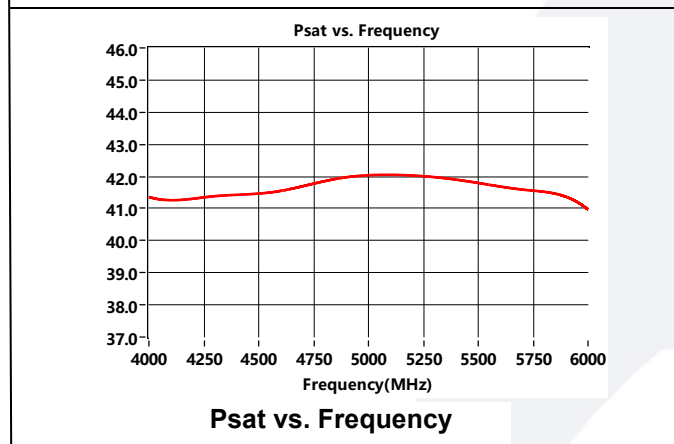
**Gain**



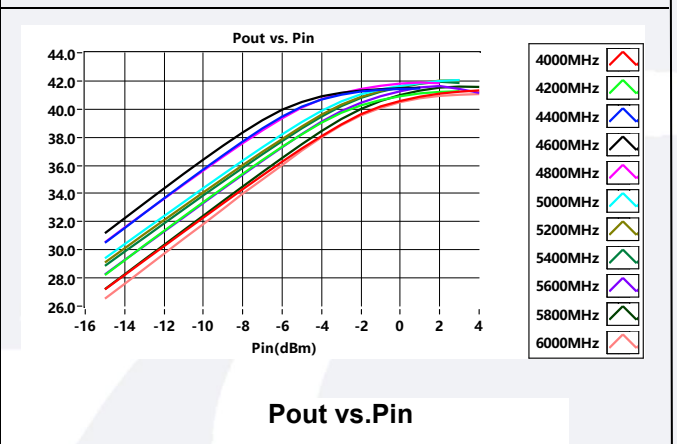
**Gain vs. Output Power**



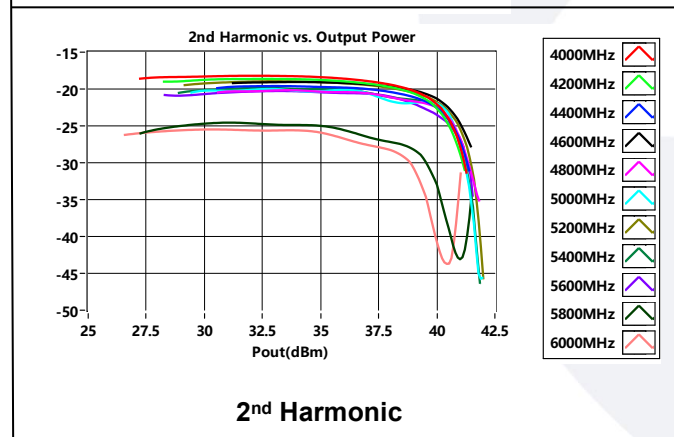
**PndB vs. Frequency**



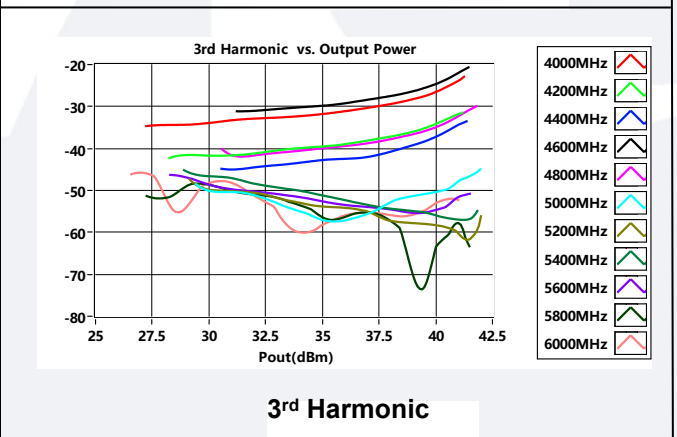
**Psat vs. Frequency**



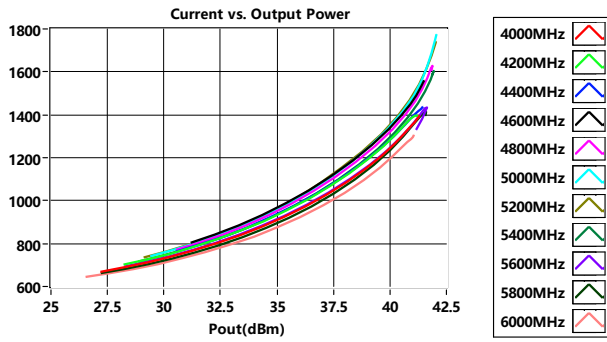
**Pout vs. Pin**



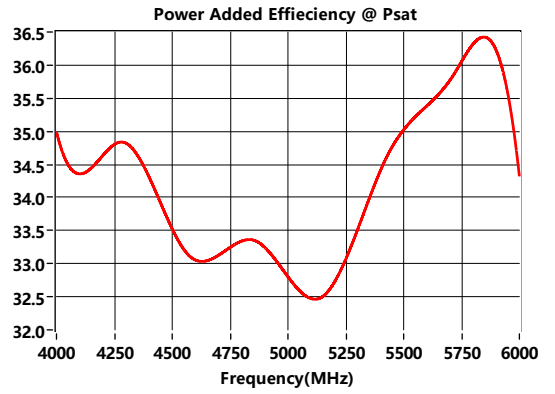
**2nd Harmonic**



**3rd Harmonic**



**Current VS. Output Power**



**PAE vs. Frequency**