Turpanic Co, Ltd
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Power Amplifier

2-6GHz /45 dB Gain/47 dBm Psat TLPA2G6G-45-47

TURPA2G6G-4547 is a power amplifier with a typical small signal gain of 45 dB and a nominal Psat of 47 dBm across the frequency range of 2 to 6 GHz. The DC power requirement for the amplifier is +28 VDC/9 A. The input and output port configuration offers coax adapter structure with SMA Female.

Features:

- Ultra Wide Band: 2-6GHz
- Gain: 45dB Typ
- Output Power Psat: 47dBm Typ
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

Applications:

- Cellular
- PCN
- GSM
- ISM
- Lab Test

电气特性 Electrical Characteristics:

参数 Parameter	Min	Typ	Max	单位 Units
频率范围 Frequency range		2-6		GHz
增益Gain	43	45		dB
增益平坦度 Gain Flatness		±3		dB
线性输出功率 Output P1dB		45		dBm
饱和输出功率 Output Psat		47		dBm
谐波 Harmonics		-15	-13	dBc
输入驻波 Input VSWR		1.5	2.0	:1
直流电压 DC Voltage		+28		V DC
直流电流 DC Supply Current		9		A
阻抗 Impedance		50		Ohms

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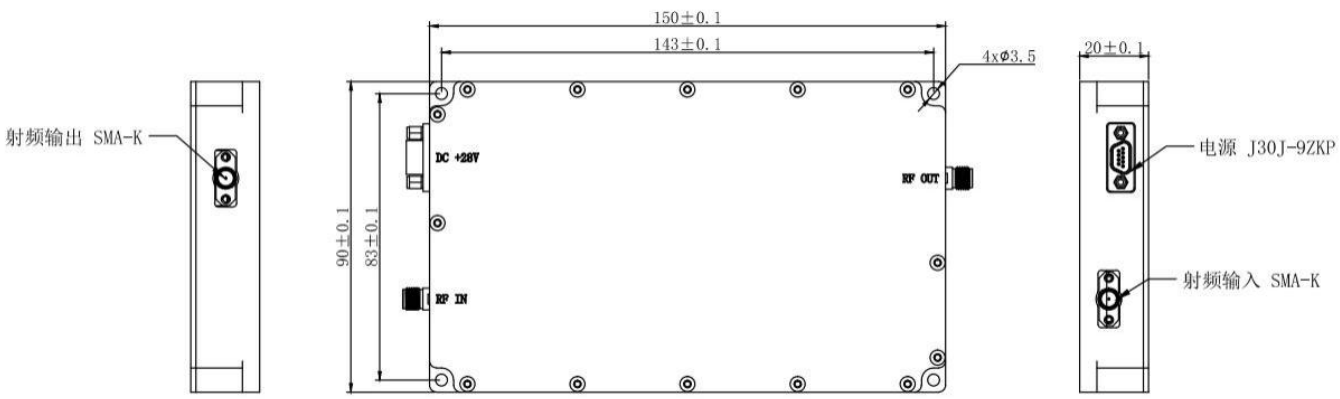
机械特性 Mechanical Specifications:

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	Solder Pin	
尺寸 Size	150*90*20	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	+28 V
输入功率 RF Input Power	5 dBm
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V

外形图 Outline Drawing: Unit:mm



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温度环境 Environmental Conditions:

参数 Parameter	Min	Typ	Max	单位 Units
操作温度 Operating Temperature*	-40		+75	℃
存储温度 Non-operating Temperature*	-55		+125	℃
相对湿度 Relative humidity		95		%
海拔 Altitude	50000			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			

*Note: For a wider temperature range, please consult the manufacturer.

订货信息 Ordering Information:

标准型号 Base Number	描述 Desciption	版本号 Revision
TURPA2G6G-4547	Power amplifier 2-6GHz,Gain:45dB,Psat:47dBm,+28V DC,Without Heatsink.	Rev.1.1
TURPA2G6G-4547 HS	Power amplifier 2-6GHz,Gain:45dB,Psat:47dBm,+28V DC,With Heatsink.	Rev.1.1

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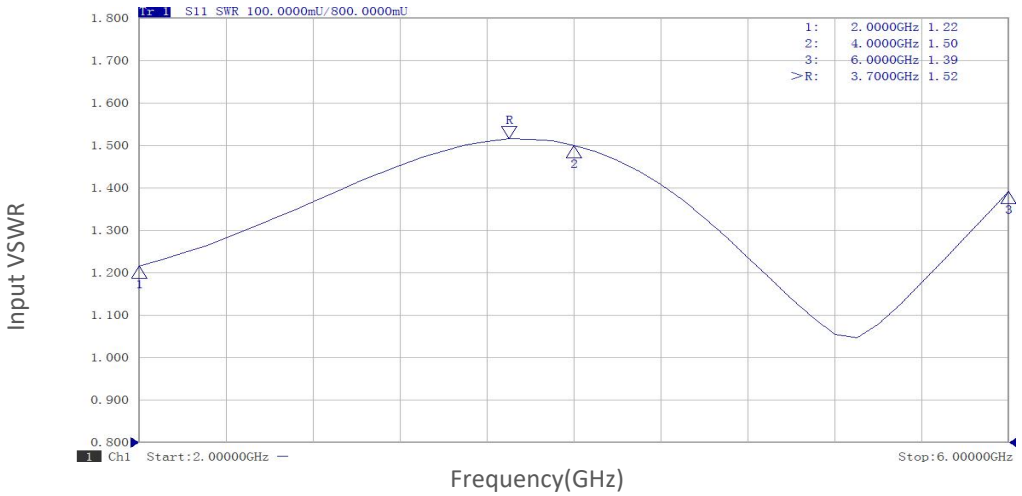
典型曲线 Typical Performance Data:

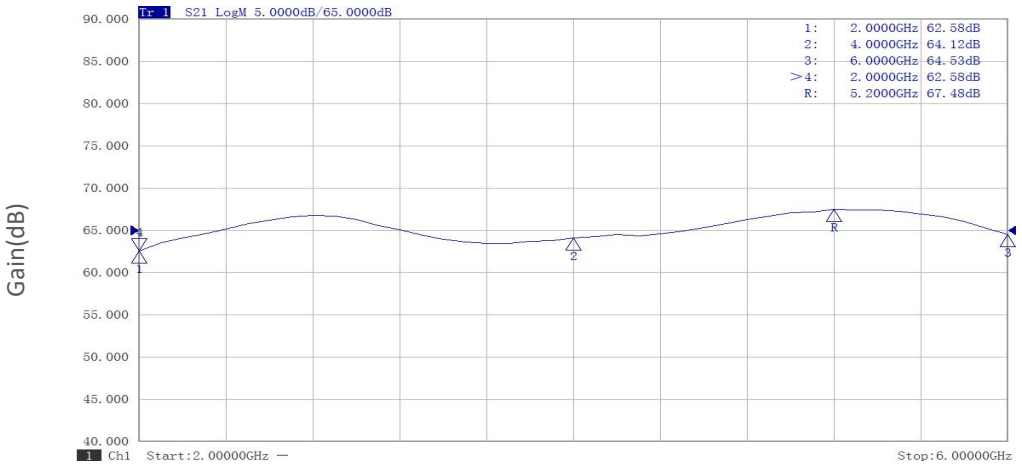
Input VSWR vs Frequency



Input VSWR

Frequency(GHz)

Gain vs Frequency



Gain(dB)

Frequency(GHz)

P1dB vs Frequency

P1dB(dBm)

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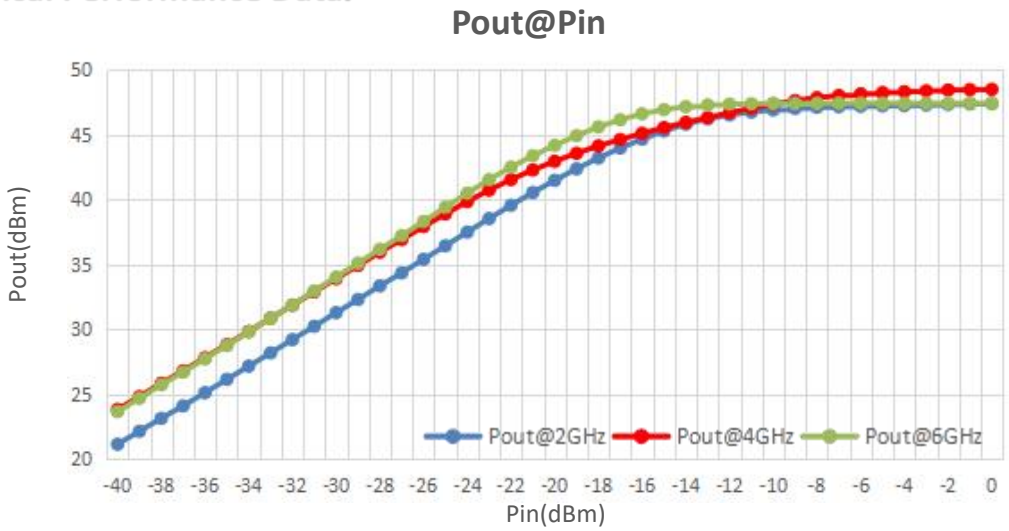
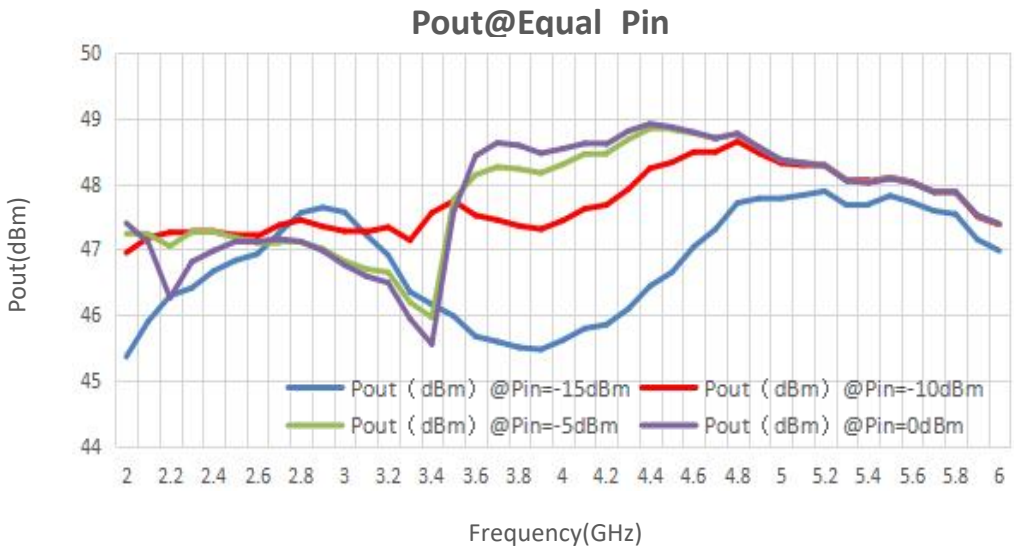
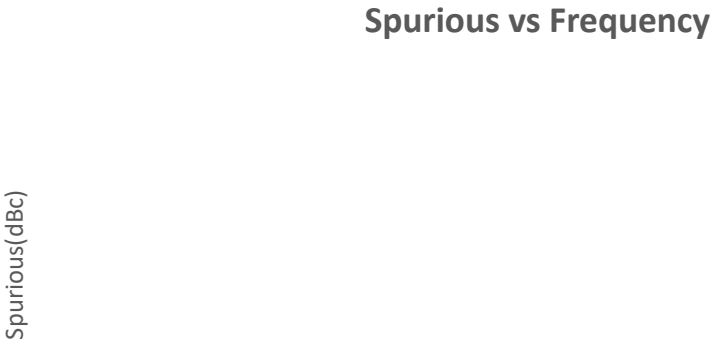
典型曲线 Typical Performance Data:







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