

Power Amplifier

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

Model: TLPA2G6G-47-47

TLPA2G6G-47-47 is a power amplifier with a typical small signal gain of 47 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 +36 VDC/12 A. The input and output port configuration offers coax adapter structure with SMA Female.

Features:

- Ultra Wide Band: 2-6GHz
- Gain: 47dB Min
- Output Power Psat: 47dBm Min
- 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	47			dB
增益平坦度 Gain Flatness		±3		dB
饱和输出功率 Output Psat	47			dBm
饱和输出功率平坦度 Output Psat Flatness		±1.5		dB
杂散 Spurious			-60	dBc
谐波 Harmonics		-15		dBc
输入驻波 Input VSWR			2.0	:1
直流电压 DC Voltage		+36		V DC
直流电流 DC Supply Current		12		A
阻抗 Impedance	50			Ohms

机械特性 Mechanical Specifications:

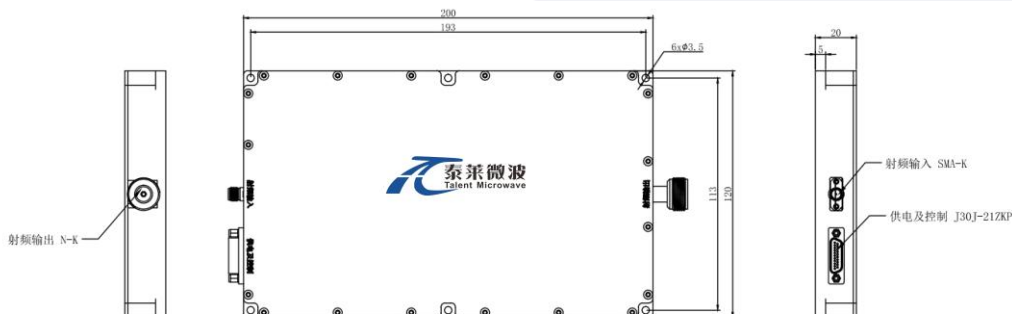
参数 Parameter	指标 Value	单位 Units
输入/输出接口 Input /Output Connector	SMA Female/SMA Female	
直流偏置 DC Bias	J30J-21ZKP	
尺寸 Size	200*120*20	mm
重量 Weight	3	Kg

绝对最大值 Absolute Maximum Ratings:

参数 Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	+36 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



***Heat Sink Required During Operation

J30J-21ZKP	
Pin	Function
Pin1-9	+36V
Pin10-18	GND
Pin19	Current detection (analog voltage, current/voltage comparison table provided)
Pin20	Temperature detection (analog voltage, temperature/voltage comparison table available)
Pin21	Enable (high level valid, low level and hover invalid)



ESD Protection: Strictly adhere to ESD precautions to prevent electrostatic damage.

温度环境 Environmental Conditions:

参数 Parameter	Min	Typ	Max	单位 Units
操作温度 Operating Temperature*	-40		+60	°C
存储温度 Non-operating Temperature*	-45		+65	°C
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 Description	版本号 Revision
TLPA2G6G-47-47	Power amplifier 2-6GHz,Gain:47dB,Psat:47dBm,+36V DC,Without Heatsink.	Rev.1.1
TLPA2G6G-47-47-HS	Power amplifier 2-6GHz,Gain:47dB,Psat:47dBm,+36V DC,With Heatsink.	Rev.1.1