

Power Amplifier

2-18GHz/40dB Gain/45dBm Psat

Model: TLPA2G18G-40-45

TLPA2G18G-40-45 is a power amplifier with a minimum power gain of 40 dB and a minimum Psat of 45 dBm across the frequency range of 2 to 18 GHz. The DC power requirement for the amplifier is +22 VDC/16 A. The input port configuration offers coax adapter structure with SMA female and output port configuration offers coax adapter structure with N female.

Features:

- Frequency range: 2-18GHz
- Gain: 40dB Min
- Output Power Psat: 45dBm 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		18	GHz
功率增益 Power Gain	40			dB
功率增益平坦度 Power Gain Flatness		±3	±5	dB
饱和输出功率 Output Psat	45			dBm
杂散 Spurious@Pout=45dBm			-60	dBc
谐波抑制 Harmonic@Pout=45dBm		-15	-10	dBc
输入驻波 Input VSWR			2	:1
直流电压 DC Voltage		22	24	V DC
直流电流 DC Supply Current		16		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/N Female	
直流供电接口 DC Supply Connector	D-SUB-7W2	A1: +22V A2: GND 1~5: NC
尺寸 Size	200*100*69.5	mm

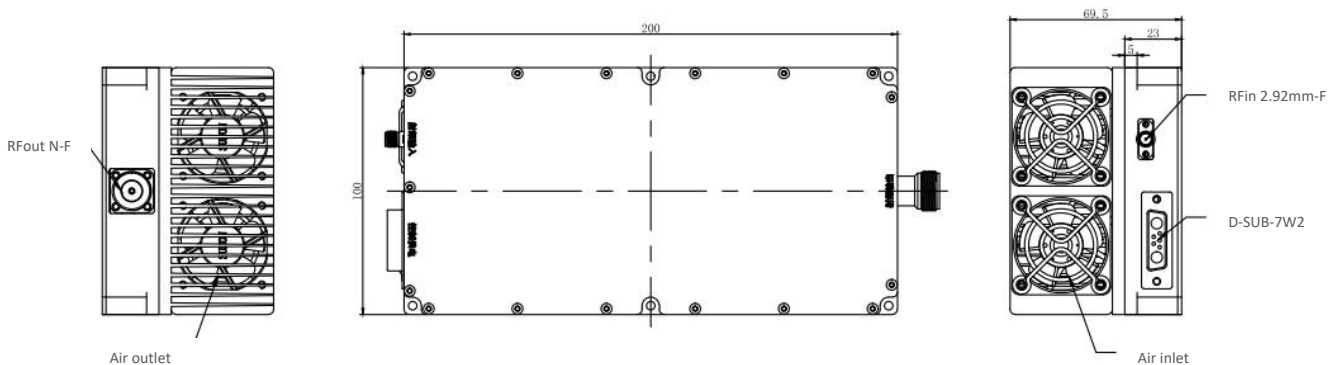
绝对最大值 Absolute Maximum Ratings:

参数 Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	+24 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



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		+50	°C
存储温度 Non-operating Temperature*	-50		+60	°C
相对湿度 Relative humidity		95		%
海拔 Altitude	10,000			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			

*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
TLPA2G18G-40-45	Power amplifier 2-18GHz, Gain:40dB,Psat:45dBm,+22V DC,With Heatsink	Rev.1.0