

Power Amplifier

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

Model: TLPA18G40G-40-45

TLPA18G40G-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 18 to 40 GHz. The DC power requirement for the amplifier is +18 VDC/50 A. The input configuration offers coax adapter structure with 2.92mm female and output port is WRD180 waveguide.

Features:

- Frequency range: 18-40GHz
- 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	18		40	GHz
功率增益 Power Gain	40			dB
小信号增益平坦度 Small Signal Gain Flatness		±5		dB
饱和输出功率 Output Psat	45			dBm
杂散 Spurious@Pout=45dBm			-50	dBc
谐波抑制 Harmonic@Pout=45dBm		-20		dBc
输入驻波 Input VSWR			2	:1
直流电压 DC Voltage		18	19	V DC
直流电流 DC Supply Current		50		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	2.92mm Female/WRD180	
直流供电接口 DC Supply Connector	D-SUB8W8	A1~A4: +18V A5~A8: GND
尺寸 Size	80*80*15(Without heatsink) 220*160*76.5(With heatsink)	mm

绝对最大值 Absolute Maximum Ratings:

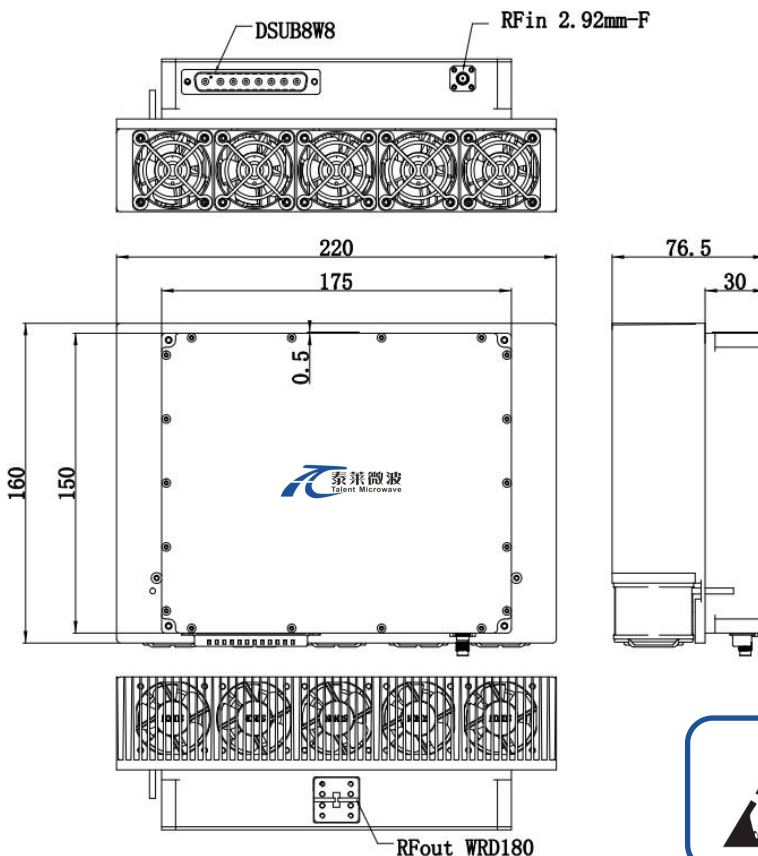
参数 Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	+19V
输入功率 RF Input Power	+5 dBm
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V



Simple 220V System
Available SAC option

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	℃
存储温度 Non-operating Temperature*	-50		+60	℃
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
TLPA18G40G-40-45	Power amplifier 18-40GHz, Gain:40dB,Psat:45dBm,+18V DC,With Heatsink	Rev.1.0