

Power Amplifier

18-40GHz/47dB Gain/47dBm Psat

Model: TLPA18G40G-47-47

TLPA18G40G-47-47 is a power amplifier with a minimum gain of 47 dB and a minimum Psat of 47 dBm across the frequency range of 18 to 40 GHz. The DC power requirement for the amplifier is +18 VDC/110 A. The input port configuration offers coax adapter structure with 2.92mm female and output port is WRD180C24.

Features:

- Frequency range: 18-40GHz
- 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	18		40	GHz
增益 Gain	47			dB
饱和输出功率 Output Psat	47			dBm
输入功率 Input Power	-3	0	10	dBm
杂散 Spurious@Pout=40dBm	-50			dBc
输入驻波 Input VSWR		2.0	2.5	:1
直流电压 DC Voltage		+18	+19	V DC
直流电流 DC Supply Current			110	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/WRD180C24	
DC加电接口 DC Power Interface	SUB-8W8	
控制及检测接口 Control and Test Connector	J30J-9ZKP	
尺寸 Size	254*254*198	mm
重量 Weight	<30	Kg

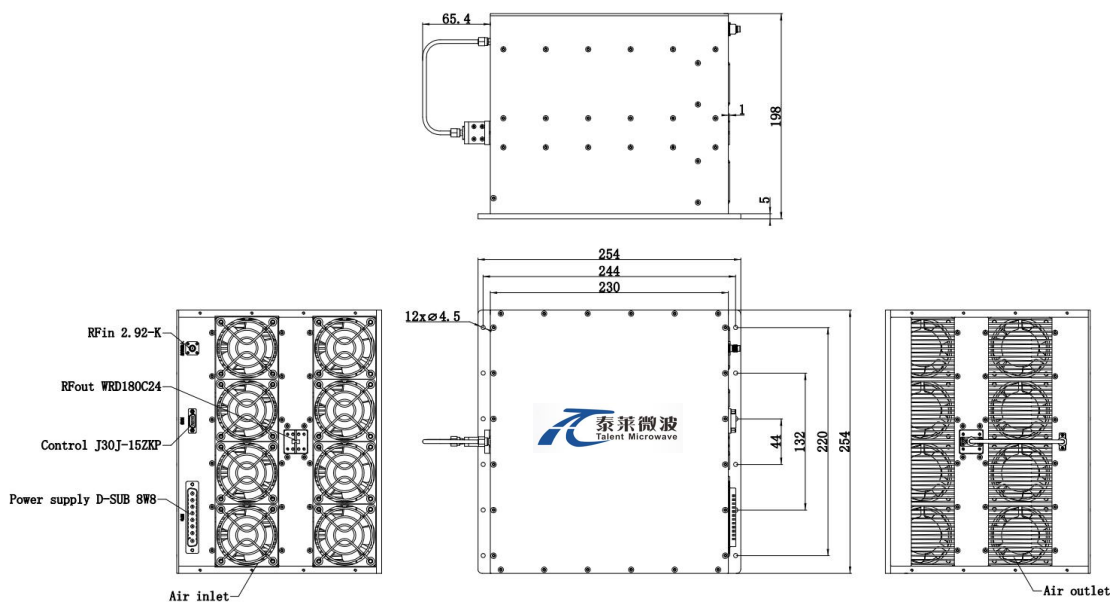
绝对最大值 Absolute Maximum Ratings:

参数 Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	+19 V
输入功率 RF Input Power	+10 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.

直流供电接口 DC Supply Connector(DSUB-8W8):

引脚 Pin	功能 Function
A1-4	+18V
A5-8	GND
Pin1	TTL (high for open,low for close)
Pin2	Current Monitor
Pin3	Temperature Monitor

温度环境 Environmental Conditions:

参数 Parameter	Min	Typ	Max	单位 Units
操作温度 Operating Temperature*	-20		+50	°C
存储温度 Non-operating Temperature*	-30		+60	°C
相对湿度 Relative humidity		95		%
海拔 Altitude	50,000			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-47-47	Power amplifier 18-40GHz, Gain:47dB,Psat:47dBm,+18V DC,With Heatsink	Rev.1.1