

Power Amplifier

50-65GHz/33dB Gain/25dBm Psat

Model: TLPA50G65G-33-25

TLPA50G65G-33-25 is a power amplifier with a minimum small signal gain of 33 dB and a nominal Psat of 25 dBm across the frequency range of 50 to 65 GHz. The DC power requirement for the amplifier is +4 VDC/1.7 A. The input and output port configuration offers coax adapter structure with 1.85mm female.

Features:

- Frequency range: 50-65GHz
- Gain: 33dB Min
- Output Power Psat: 25dBm 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	50		65	GHz
小信号增益 Small Signal Gain	33	36		dB
增益平坦度 Gain Flatness		±3		dB
线性输出功率 Output P1dB	22	23		dBm
饱和输出功率 Output Psat		25		dBm
输入驻波 Input VSWR			2	:1
输出驻波 Output VSWR			2	:1
直流电压 DC Voltage		+4		V DC
直流电流 DC Supply Current		1.7		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	1.85mm Female/1.85mm Female	
直流供电接口 DC Supply Connector	Solder Pin	
尺寸 Size	80*80*15	mm

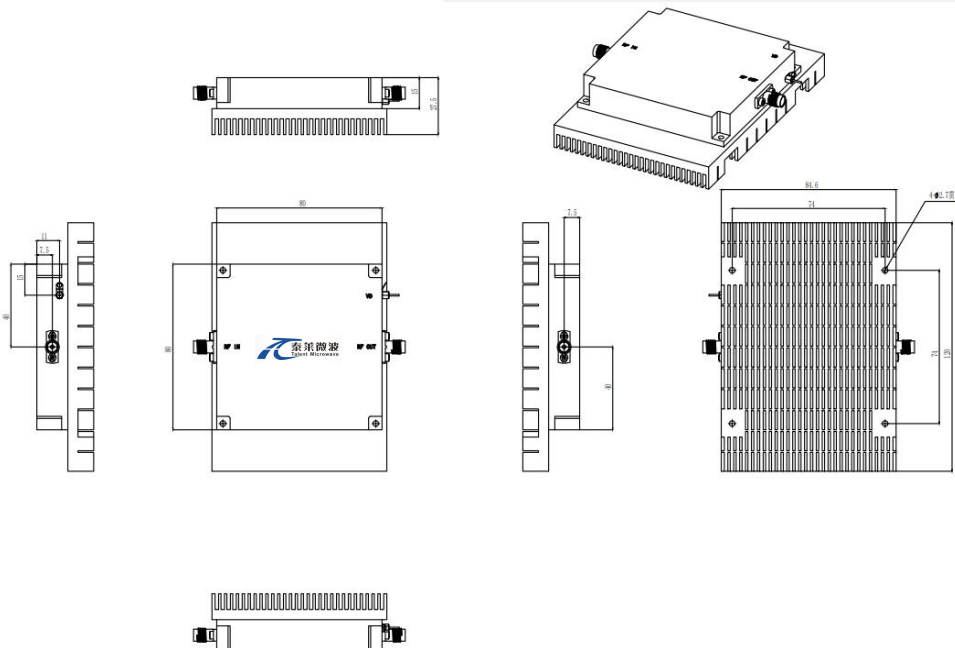
绝对最大值 Absolute Maximum Ratings:

参数 Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	+5 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		+60	°C
存储温度 Non-operating Temperature*	-50		+70	°C
相对湿度 Relative humidity		95		%
海拔 Altitude	10,000			feet
震动 Shock / Vibration(MIL-STD-810F)	20g,11ms,saw-tooth			
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
TLPA50G65G-33-25	Power amplifier 50-65GHz, Gain:33dB,Psat:25dBm,+4V DC,Without Heatsink	Rev.1.1
TLPA50G65G-33-25-HS	Power amplifier 50-65GHz, Gain:33dB,Psat:25dBm,+4V DC,With Heatsink	Rev.1.1