泰莱微波
Talent Microwave

Suzhou Talent Microwave,Inc
sales@talentmw.com
www.talentmw.com

Power Amplifier

0.01-20GHz/46dB Gain/30.5dBm Psat Model: TLPA0.01G20G-46-30.5

TLPA0.01G20G-46-30.5 is a power amplifier with a typical gain of 46 dB and a nominal Psat of 30.5 dBm across the frequency range of 0.01 to 20 GHz. The DC power requirement for the amplifier is +24 VDC/600 mA. The input and output port configuration offers coax adapter structure with SMA female.

Features:

- Frequency range: 0.01-20GHz
- Gain: 46dB Typ
- Output Power Psat: 30.5dBm 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	0.01		20	GHz
增益 Gain	45	46		dB
增益平坦度 Gain Flatness		±3		dB
线性输出功率 Output P1dB		29.5		dBm
饱和输出功率 Output Psat		30.5		dBm
输入驻波 Input VSWR		1.8		:1
输出驻波 Output VSWR		1.8		:1
直流电压 DC Voltage		+24		V DC
直流电流 DC Supply Current		600		mA
阻抗 Impedance		50		Ohms

*Performance may degrade below 300 MHz. Please refer to below typical test plots

泰莱微波
Talent Microwave

Suzhou Talent Microwave,Inc
sales@talentmw.com
www.talentmw.com

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	Solder Pin	
尺寸 Size	50*65*14(Without heatsink) 100*50*64(With heatsink)	mm

绝对最大值 Absolute Maximum Ratings:

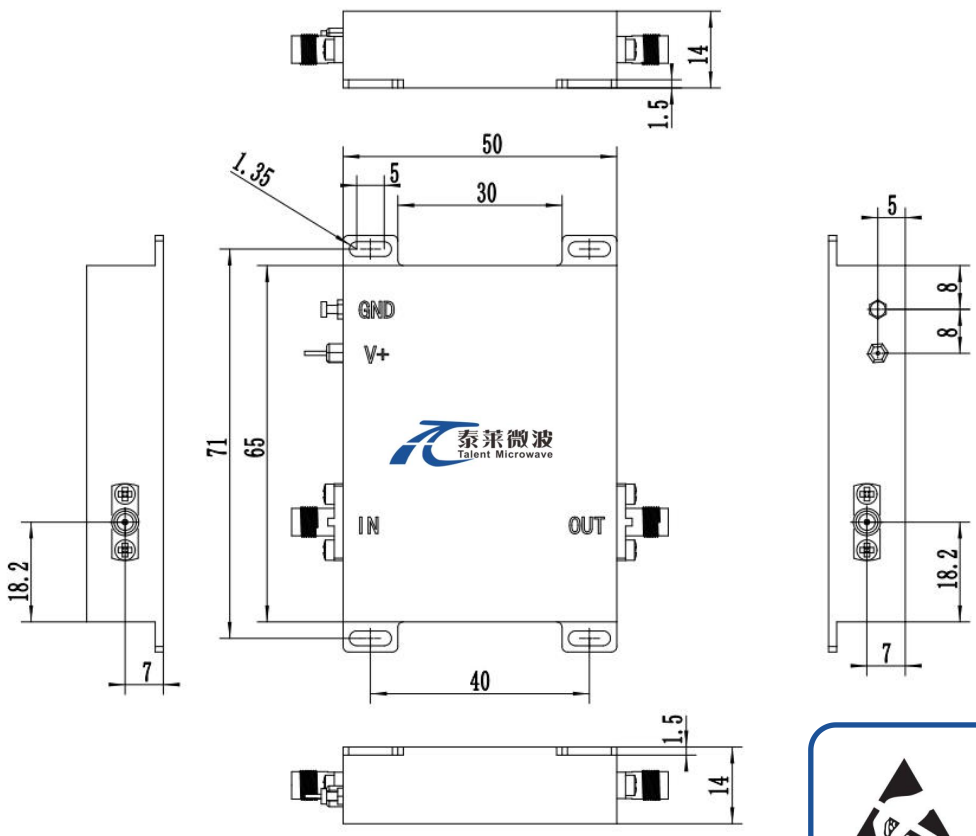
参数 Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	TBD
输入功率 RF Input Power	+5 dBm
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V



Simple 220V System
Available SAC option

外形图 Outline Drawing:

Unit:mm; Tolerance:±0.1mm



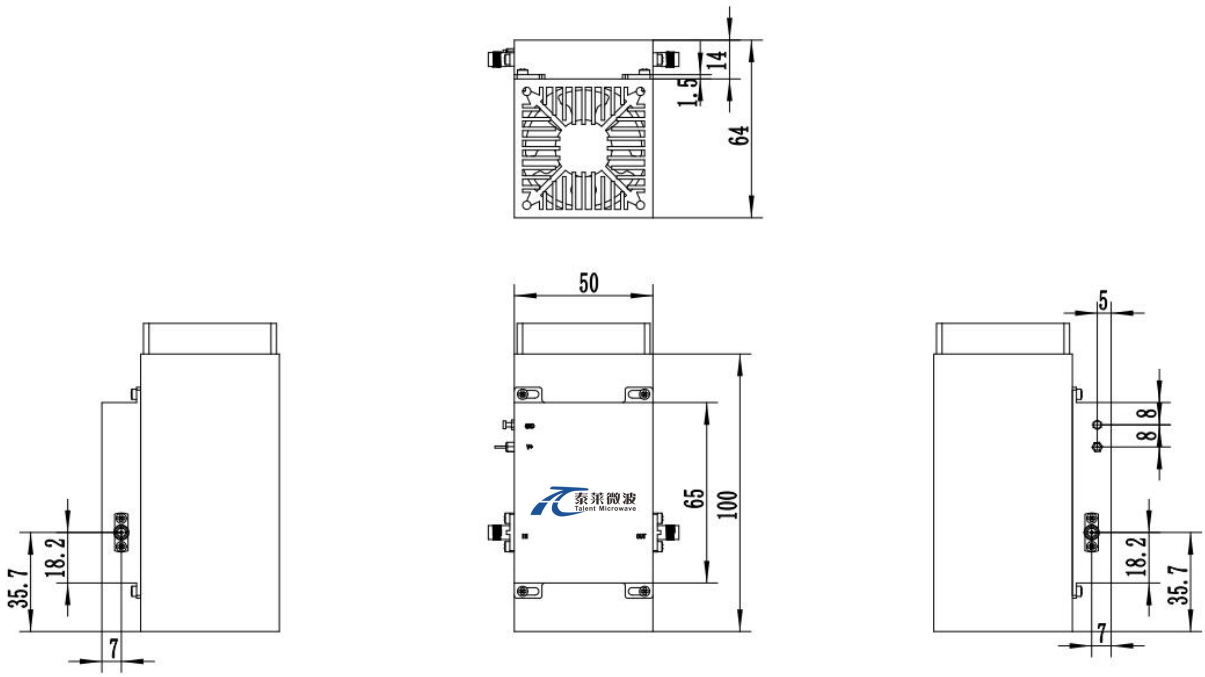
ESD Protection: Strictly adhere to ESD precautions to prevent electrostatic damage.

***Heat Sink Required During Operation

Suzhou Talent Microwave,Inc
sales@talentmw.com
www.talentmw.com

外形图 Outline Drawing:

Unit:mm; Tolerance:±0.1mm



温度环境 Environmental Conditions:

参数 Parameter	Min	Typ	Max	单位 Units
操作温度 Operating Temperature*	-40		+60	℃
存储温度 Non-operating Temperature*	-50		+70	℃
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
TLPA0.01G20G-46-30.5	Power amplifier 0.01-20GHz, Gain:46dB,Psat:30.5dBm,+24V DC,Without Heatsink	Rev.1.1
TLPA0.01G20G-46-30.5-HS	Power amplifier 0.01-20GHz, Gain:46dB,Psat:30.5dBm,+24V DC,With Heatsink	Rev.1.1