泰莱微波 Talent Microwave

Suzhou Talent Microwave,Inc
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Power Amplifier

5-500MHz/33dB Gain/33dBm P1dB

Model: TLPA5M500M-30-33

TLPA5M500M-30-33 is a power amplifier with a typical gain of 33 dB and a minimum P1dB of 33 dBm across the frequency range of 5 to 500 MHz. The DC power requirement for the amplifier is +24 VDC/0.9 A. The input and output port configuration offers coax adapter structure with SMA female.

Features:

- Frequency range: 5-500MHz
- Gain: 33dB Typ
- Output Power P1dB: 33dBm 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	5		500	MHz
增益 Gain	30	33		dB
增益平坦度 Gain Flatness		±0.5	±1	dB
线性输出功率 Output P1dB	33	34		dBm
三阶互调 Output IP3		38		dBm
噪声系数 Noise Figure		7		dB
输入驻波 Input VSWR		1.5	2	:1
输出驻波 Output VSWR		1.5	2	:1
直流电压 DC Voltage		+24	+28	V DC
直流电流 DC Supply Current		0.9	1.5	A
阻抗 Impedance		50		Ohms

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

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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	110*48*15(With heatsink) 110*144*45(Without heatsink)	mm
重量 Weight	400	g

绝对最大值 Absolute Maximum Ratings:

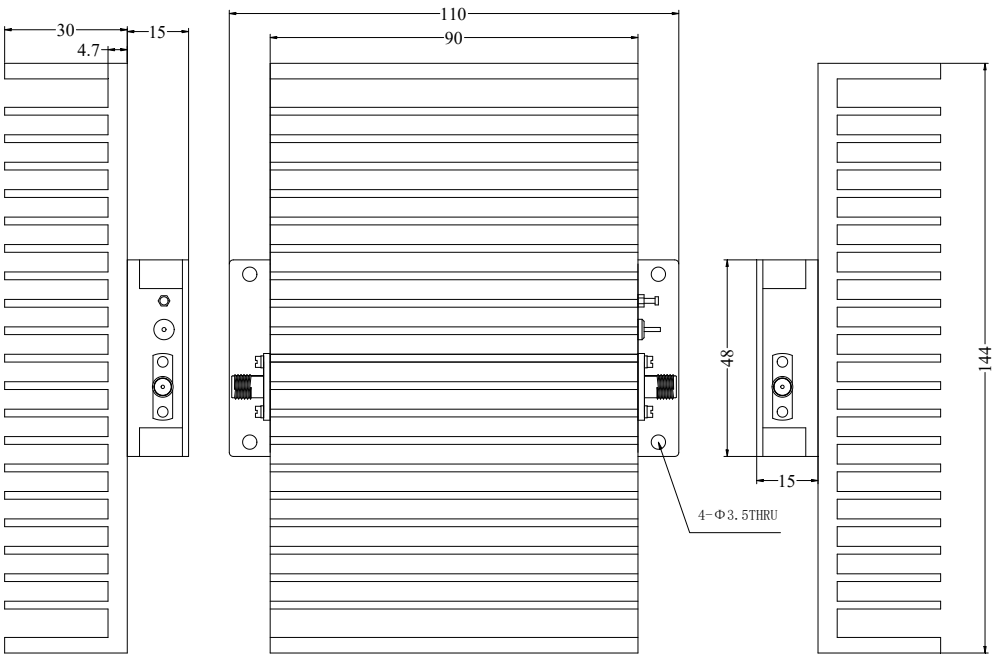
参数 Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	+28 V
输入功率 RF Input Power	+10 dBm
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V



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.

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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)	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
TLPA5M500M-30-33	Power amplifier 5-500MHz, Gain:33dB,P1dB:33dBm,+24V DC,Without Heatsink	Rev.1.1
TLPA5M500M-30-33-HS	Power amplifier 5-500MHz, Gain:33dB,P1dB:33dBm,+24V DC,With Heatsink	Rev.1.1