泰莱微波 Talent Microwave

Suzhou Talent Microwave,Inc
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Power Amplifier

7-10GHz /53dB Gain/53 dBm Psat

Model: TLPA7G10G-53-53

TLPA7G10G-53-53 is a power amplifier with a power gain of 53 dB and a nominal Psat of 53 dBm across the frequency range of 7 to 10 GHz. The DC power requirement for the amplifier is +100 V AC/14 A. The input configuration offers coax adapter structure with SMA female and the output is a WR112 waveguide.

Features:

- Ultra Wide Band: 7-10GHz
- Gain: 53dB Min
- Output Power Psat: 53dBm Typ
- Functions:Power setting on/off,gain adjustment
- 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		7-10		GHz
工作模式 Working Mode		CW/PULSE compatible		
功率增益 Power Gain	53			dB
增益平坦度 Gain Flatness		±3		dB
线性输出功率 Output P1dB	46			dBm
饱和输出功率 Output Psat		53		dBm
杂散 Spurious@Pout=53dBm			-60	dBc
谐波抑制 Harmonic@Pout=53dBm		-20		dBc
输入驻波 Input VSWR			2	:1
交流电压 AC Voltage	86	100	120	V AC
交流电流 AC Supply Current		14		A
功耗 Power consumption@CW		1400		W
阻抗 Impedance		50		Ohms

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机械特性 Mechanical Specifications:

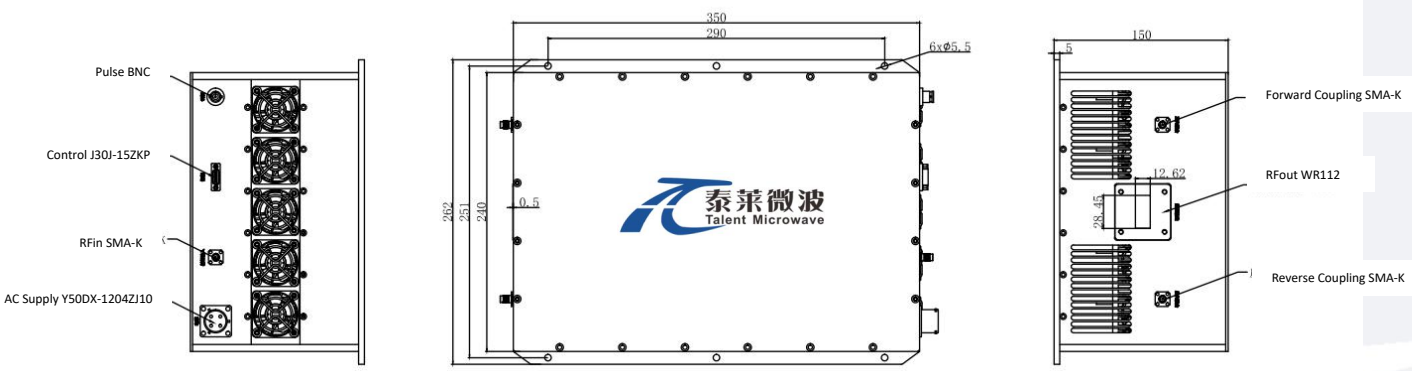
参数 Parameter	指标 Value	单位 Units
输入/输出接口 Input /Output Connector	SMA Female/WR112	
正向/反向耦合 Forward/Reverse Coupling	SMA Female/SMA Female	
交流供电接口 AC Supply Connector	Y50DX-1204	
脉冲输入接口 Pulse Input Connector	BNC Female	
控制接口 Control Connector	J30J-15ZKP	
尺寸 Size	350*262*150	mm
重量 Weight	≤20	Kg

绝对最大值 Absolute Maximum Ratings:

参数 Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	+120 V
输入功率 RF Input Power	TBD
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V

外形图 Outline Drawing:

Unit:mm



***Heat Sink Required During Operation

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*	-20		+50	℃
存储温度 Non-operating Temperature*	-30		+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 Desciption	版本号 Revision
TLPA7G10G-53-53	Power amplifier 7-10GHz,Gain:53dB,Psat:53dBm, +100V AC,With Heatsink	Rev.1.1