

Power Amplifier

10-14GHz/53dB Gain/53dBm Psat

Model: TLPA10G14G-53-53

TLPA10G14G-53-53 is a power amplifier with a minimum power gain of 53 dB and a minimum Psat of 53 dBm across the frequency range of 10 to 14 GHz. The DC power requirement for the amplifier is +24 VDC. The input port configuration offers coax adapter structure with N female and output port configuration offers WR75.

Features:

- Frequency range: 10-14GHz
- Gain: 53dB Min
- Output Power Psat: 53dBm 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		10-14		GHz
功率增益 Power Gain	53			dB
增益平坦度 Gain Flatness		±3		dB
增益调节范围 Gain adjust Range		31.5		dB
增益调节步进 Gain adjust Step		0.5		dB
饱和输出功率 Output Psat	53			dBm
杂散 Spurious@Pout=53dBm			-50	dBc
谐波抑制 Harmonic@Pout=53dBm			-15	dBc
输入驻波 Input VSWR			2	:1
直流电压 DC Voltage		24		V DC
功耗 Power Consumption			1600	W
阻抗 Impedance		50		Ohms

机械特性 Mechanical Specifications:

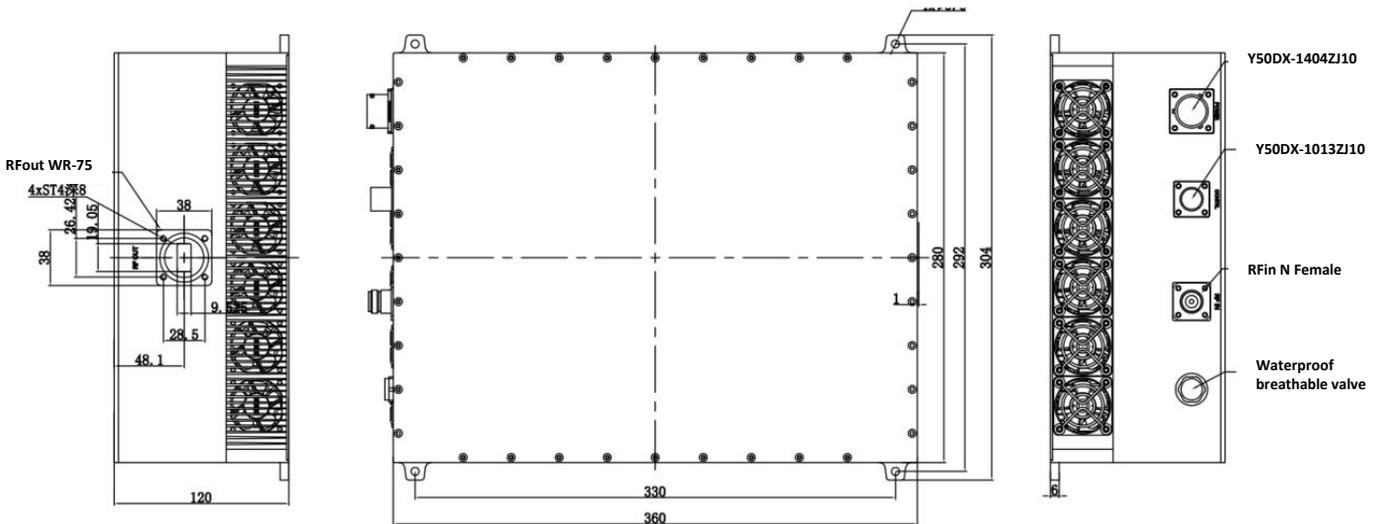
参数 Parameter	指标 Value	单位 Units
输入/输出接口 Input /Output Connector	N Female WR75	
直流供电接口 DC Power Supply Connector	Y50DX-1404	
控制接口 Control Connector	Y50X-1013	
尺寸 Size	360*280*120	mm
重量 Weight	≤15	Kg

绝对最大值 Absolute Maximum Ratings:

参数 Parameter	指标 Value
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.

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	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
TLPA10G14G-53-53	Power amplifier 10-14GHz, Gain:53dB,Psat:53dBm,+24V DC,Without Heatsink	Rev.1.1
TLPA10G14G-53-53-HS	Power amplifier 10-14GHz, Gain:53dB,Psat:53dBm,+24V DC,With Heatsink	Rev.1.1