

Power Amplifier

8-12GHz/51dB Gain/51dBm Psat

Model: TLPA8G12G-51-51

TLPA8G12G-51-51 is a power amplifier with a minimum power gain of 51 dB and a minimum Psat of 51 dBm across the frequency range of 8 to 12 GHz. The DC power requirement for the amplifier is +28 VDC. The input configuration offers coax adapter structure with SMA female and output port configuration offers coax adapter structure with N female.

Features:

- Frequency range: 8-12GHz
- Gain: 51dB Min
- Output Power Psat: 51dBm 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	8-12			GHz
功率增益 Power Gain	51			dB
增益平坦度 Gain Flatness		±3		dB
饱和输出功率 Output Psat	51			dBm
杂散 Spurious@Pout=51dBm			-55	dBc
二次谐波 2nd Harmonic@Pout=51dBm			-20	dBc
输入驻波 Input VSWR			2	:1
直流电压 DC Voltage		28	29	V DC
功耗 Power consumption			650	W
阻抗 Impedance	50			Ohms

机械特性 Mechanical Specifications:

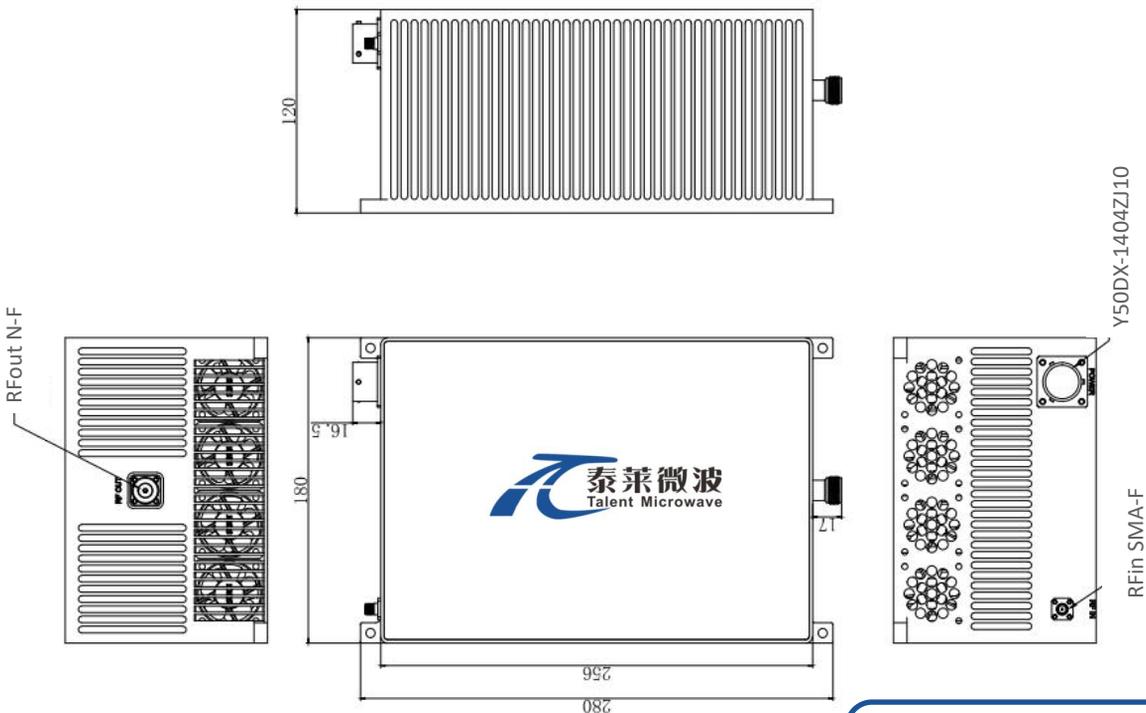
参数 Parameter	指标 Value	单位 Units
输入/输出接口 Input /Output Connector	SMA Female/N Female	
供电接口 Power Supply Connector	Y50DX-1404	Pin1~2 : +28V Pin3~4: GND
尺寸 Size	280*180*120	mm
重量 Weight	≤7.5	Kg

绝对最大值 Absolute Maximum Ratings:

参数 Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	+29 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*	-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
TLPA8G12G-51-51	Power amplifier 8-12GHz, Gain:51dB,Psat:51dBm,+28V DC,Without Heatsink	Rev.1.0