

**Model:TLPA13.75G14.5G-55-55**
**Power Amplifier**  
**13.75-14.5GHz,Gain:55dB,Psat:55dBm**
**Feature:**

- Ultra Wide Band: 13.75-14.5 GHz
- Gain: 55 dB Min
- Psat Output Power: 55 dBm Min
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

**电气特性 Electrical Specifications:**

参数 Parameter	Min	Typ	Max	单位 Units
频率范围 Frequency range	13.75-14.5			GHz
功率增益 Power Gain	55			dB
增益平坦度 Gain Flatness		±3.5		dB
线性增益调节范围/步进 Linear Gain Adjustment Range/Step		31.5/0.5		dB
饱和输出功率 Output Psat	55			dBm
杂散 Spurious@Pout=55dBm			-60	dBc
二次谐波 2nd Harmonics@Pout=55dBm			-20	dBc
输入驻波 Input VSWR			2.0	:1
直流电压 DC Voltage		28		V DC
功耗 Power Consumption			2500	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/WR62	
正向/反向耦合 Forward/Reverse Coupling	SMA Female/ SMA Female	40±0.5dB
直流供电 DC Supply	Y50DX-1804	PIN1~2: +28V PIN3~4: GND
尺寸 Size	305*342*128	mm
重量 Weight	≤25	g

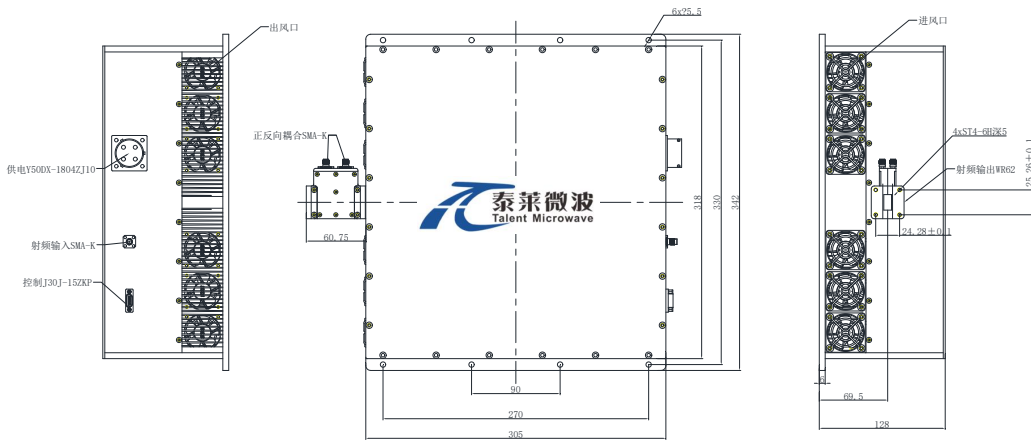
**绝对最大值 Absolute Maximum Ratings:**

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



**外形尺寸 Outline Drawing:**

Unit: mm



**\*\*\*Heat Sink Required During Operation**

J30J-15ZKP引脚定义	
引脚 Pin	功能 Function
1-6	0.5/1/2/4/8/16 Decay control bit
7	Power On/Off
8	RF On/Off
9-15	GND



Note: All control levels are effective at the high level, while the low level and suspended level are invalid.

**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)	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 Part Number	描述 Description	版本号 Revision
TLPA13.75G14.5G-55-55	Power amplifier 13.75-14.5GHz, Gain:55dB, Psat:55dBm, +28V DC, Without Heatsink	Rev.1.1
TLPA13.75G14.5G-55-55-HS	Power amplifier 13.75-14.5GHz, Gain:55dB, Psat:55dBm, +28V DC, With Heatsink	Rev.1.1