

Power Amplifier

1-18GHz /43 dB Gain/43 dBm Psat

Model: TLPA1G18G-43-43

TLPA1G18G-43-43 is a power amplifier with a typical small signal gain of 43 dB and a nominal Psat of 43 dBm across the frequency range of 1 to 18 GHz. The DC power requirement for the amplifier is +28 VDC/400 W. The input and output port configuration offers coax adapter structure with SMA female/N Female.

Features:

- Ultra Wide Band: 1-18GHz
- Gain: 43dB Min
- Output Power Psat: 43dBm 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	1-18			GHz
增益 Gain	43			dB
增益平坦度 Gain Flatness		±5		dB
饱和输出功率 Output Psat	43			dBm
杂散 Spurious			-60	dBc
谐波 Harmonics			-10	dBc
输入驻波 Input VSWR			2.5	:1
直流电压 DC Voltage	+28			V DC
功耗 Power Consumption			400	W
阻抗 Impedance	50			Ohms

机械特性 Mechanical Specifications:

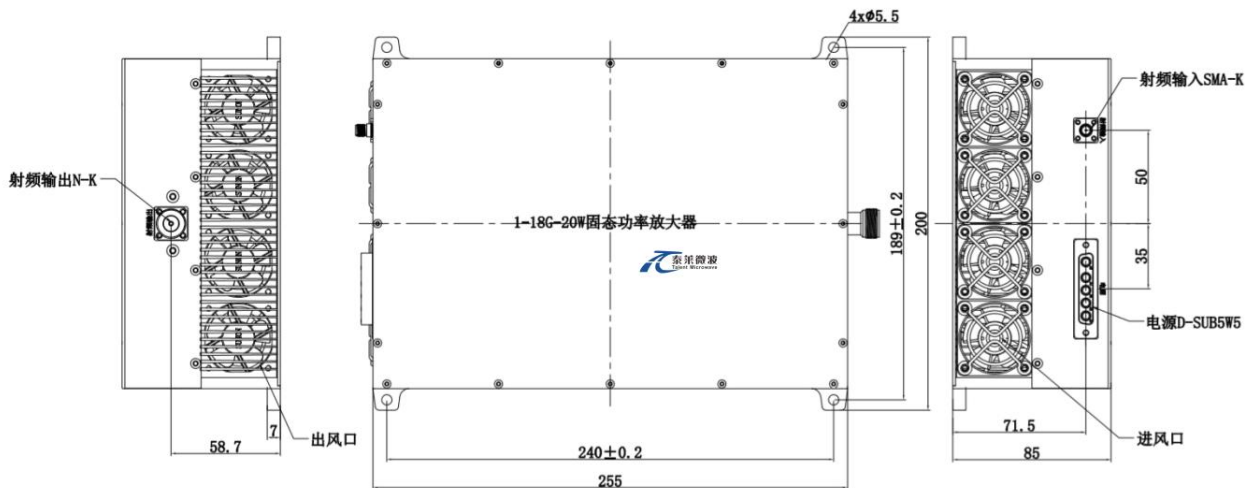
参数 Parameter	指标 Value	单位 Units
输入/输出接口 Input /Output Connector	SMA Female/N Female	
监控和控制接口 Monitor and control interface	D-SUB5W5	
尺寸 Size	255*200*85	mm
重量 Weight	7.5	Kg

绝对最大值 Absolute Maximum Ratings:

参数 Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	+28 V
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



D-SUB7W2 Define	
引脚 Pin	功能 Function
A1-A2	+28V
A3-A5	GND

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



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	℃
存储温度 Non-operating Temperature*	-40		+65	℃
相对湿度 Relative humidity		95		%
海拔 Altitude	10000		30000	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
TLPA1G18G-43-43	Power amplifier 1-18GHz,Gain:43dB,Psat:43dBm, +28V DC,Without Heatsink	Rev.1.1
TLPA1G18G-43-43-HS	Power amplifier 1-18GHz,Gain:43dB,Psat:43dBm, +28V DC,With Heatsink	Rev.1.1

Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.