

Power Amplifier

800MHz-1.3GHz/50dB Gain/50dBm Psat

Model: TLPA800M1300M-50-50

TLPA800M1300M-50-50 is a power amplifier with a minimum gain of 50 dB and a minimum Psat of 50 dBm across the frequency range of 800MHz to 1.3GHz. The DC power requirement for the amplifier is +28 VDC/15 A. The input and output port configuration offers coax adapter structure with SMA female.

Features:

- Frequency range: 800MHz-1.3GHz
- Gain: 50dB Min
- Output Power Psat: 50dBm 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	800MHz		1.3GHz	
增益 Gain	50	52		dB
增益平坦度 Gain Flatness		±1	±2	dB
饱和输出功率 Output Psat	50	51		dBm
输入驻波 Input VSWR		1.5	2.0	:1
直流电压 DC Voltage		+28		V DC
直流电流 DC Supply Current		2	15	A
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/SMA Female	
直流偏置 DC Bias	Solder Pin	
尺寸 Size	180*100*20	mm
重量 Weight	250	g

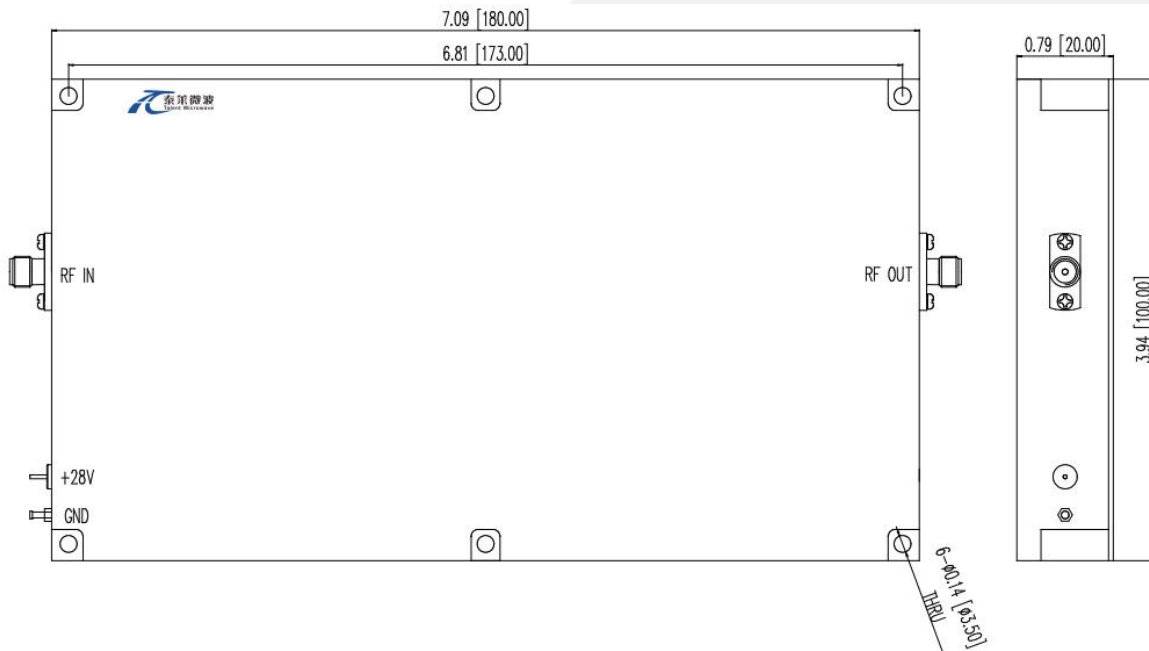
绝对最大值 Absolute Maximum Ratings:

参数 Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	+30 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
TLPA800M1300M-50-50	Power amplifier 800MHz-1.3GHz, Gain:50dB,Psat:50dBm,+28V DC,Without Heatsink	Rev.1.1
TLPA800M1300M-50-50- HS	Power amplifier 800MHz-1.3GHz, Gain:50dB,Psat:50dBm,+28V DC,With Heatsink	Rev.1.1