

**Model: TPA50M500M-50-47-HS**
**Power Amplifier**
**50MHz-500MHz, Gain: 50dB, Psat: 47dBm**
**Feature:**

- Frequency range: 50MHz-500MHz
- Gain: 50dB Typ
- Psat Output Power: 47 dBm Typ
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

**电气特性 Electrical:**

参数Parameter	Min.	Typ.	Max.	单位Units
频率范围 Frequency range	50MHz-500MHz			GHz
增益 Gain	47	50		dB
增益平坦度 Gain Flatness		±1dB	±2dB	dB
线性输出功率P1dB	44	46		dBm
饱和输出功率Psat	46	48		dBm
噪声系数Noise Figure		4.5	7	dB
输入驻波 Input VSWR		1.5	2.0	:1
直流电压 DC Voltage		24		V DC
直流电流 DC Supply Current		10		A
阻抗 Impedance		50		Ohms

**机械特性 Mechanical :**

参数Parameter	指标 Value	单位Units
输入输出接口 Input /Output Connector	SMA Female	
直流偏置 Bias	Solder Pin	
尺寸 Size	152.4X82.6X28.6	mm
重量 Weight	500	g

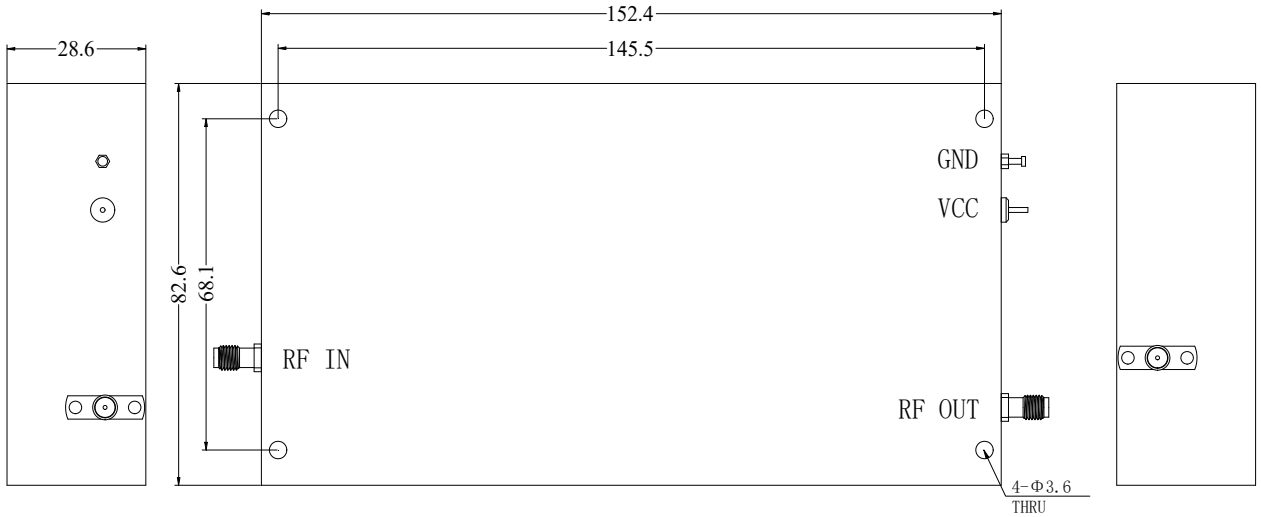

 Available 220V System  
 Benchtop Amplifier

**绝对最大值 Absolute Maximum Ratings:**

参数Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	28
输入功率 RF INPUT POWER	+3 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**



OBSERVE PRECAUTIONS  
ELECTROSTATIC SENSITIVE  
DEVICES

温度环境 Environmental Conditions:

参数Parameter	Min.	Typ.	Max.	单位Units
操作温度 Operating Temperature	-45		+85	°C
存储温度 Non-operating Temperature	-55		+125	°C
相对湿度 Relative humidity		95		%
海拔 Altitude	30,000			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			

订货信息 Ordering Information:

标准型号 Part Number	描述 Description	版本号Revision
TLPA50M500M-50-47	Power amplifier 50MHz-500MHz, Gain:50dB, Psat:47dBm, 24V DC, Without Heatsink	Rev.1.0
TLPA50M500M-50-47-HS	Power amplifier 50MHz-500MHz, Gain:50dB, Psat:47dBm, 24V DC, With Heatsink	Rev.1.0

