

**Model:TLPA30M1G-43-43**
**Power Amplifier**  
**30MHz-1GHz, Gain:43dB, Psat:43dBm**
**Feature:**

- Ultra Wide Band: 30MHz-1GHz
- Gain: 43 dB Min
- Psat Output Power: 43 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	30MHz-1GHz			
增益 Gain	43	45		dB
增益平坦度 Gain Flatness		±2	±3	dB
线性输出功率 Output P1dB	41			dBm
饱和输出功率 Output Psat	43	44		dBm
谐波 Harmonic		-10		dBc
输入驻波 Input VSWR		1.5	2.0	:1
直流电压 DC Voltage		28	30	V DC
直流电流 DC Supply Current		1	6	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	D-SUB-9	
尺寸 Size	170*80*20	mm
重量 Weight	500	g

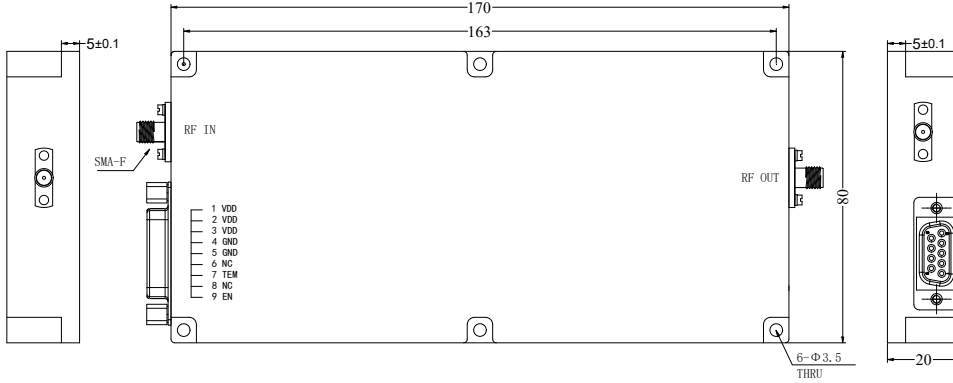
**绝对最大值 Absolute Maximum Ratings:**

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


**Available 220V System  
Benchtop Amplifier**

外形尺寸 Outline Drawing:

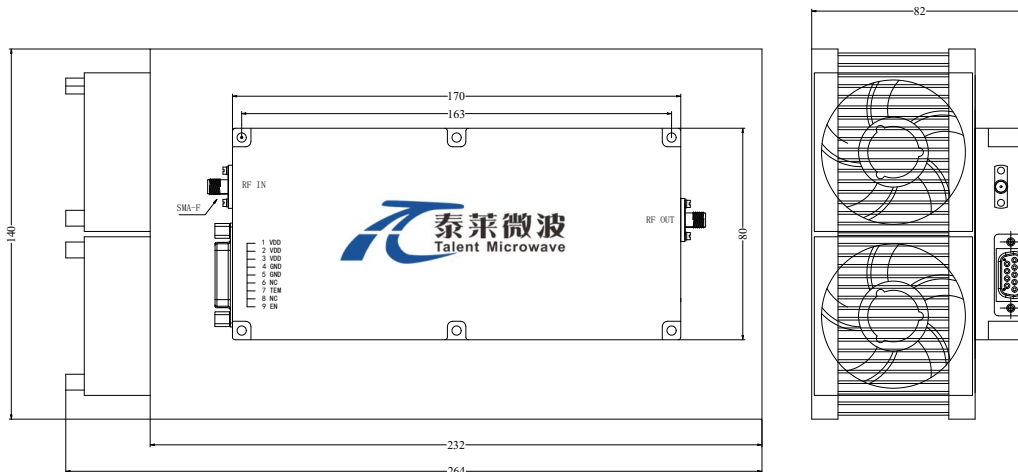
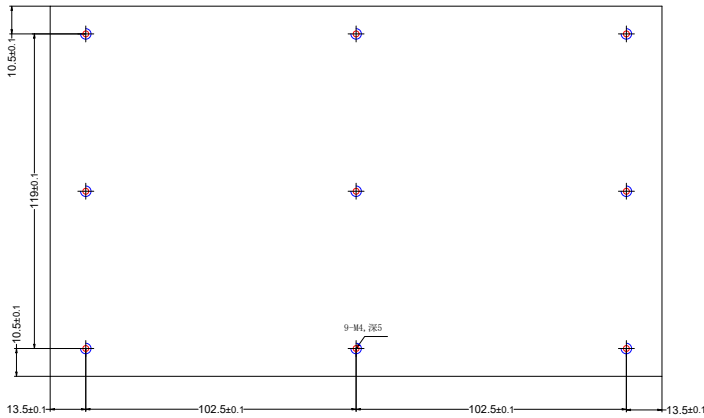
Unit: mm



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



OBSERVE PRECAUTIONS  
ELECTROSTATIC SENSITIVE  
DEVICES



风扇供电 Fans Supply Current: 0.4A@24V

**直流供电连接器 D-sub, 9-Pin, Female:**

Pin	Name	Function
1	+28V	+26.0-30.0VDC
2	+28V	+26.0-30.0VDC
3	+28V	+26.0-30.0VDC
4	GND	Ground
5	GND	Ground
6	NC	Not connected
7	Over Temperature	When the temperature of the case exceeds 85 °C, the power amplifier will turn off and this pin will be pulled high. If the temperature of case drops to 70 °C, the power amplifier will return to normal operation, and this pin will be pulled low.
8	NC	Not connected
9	EN	Amplifier Enable: TTL High (5V) (Internally Pulled-High) Amplifier Disable: Short to ground

**温度环境 Environmental Conditions:**

参数 Parameter	Min	Typ	Max	单位 Units
操作温度 Operating Temperature*	-40		+50	°C
存储温度 Non-operating Temperature*	-50		+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
TLPA30M1G-43-43	Power amplifier 30MHz-1GHz,Gain:43dB,Psat:43dBm, +28V DC,Without Heatsink	Rev.1.1
TLPA30M1G-43-43-HS	Power amplifier 30MHz-1GHz,Gain:43dB,Psat:43dBm, +28V DC,With Heatsink	Rev.1.1