

Model:TLPA2.9G3.1G-47-47-HS
Power Amplifier
2.9-3.1GHz,Gain:47dB,Psat:47dBm
Feature:

- Frequency range: 2.9-3.1 GHz
- Gain: 47 dB Min
- Psat Output Power: 47 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	2.9-3.1			GHz
小信号增益 Small Signal Gain	47	50		dB
增益平坦度 Gain Flatness		±1	±1.5	dB
饱和输出功率 Output Psat	47	48		dBm
杂散 Supurious			-60	dBc
谐波 Harmonic		-25	-17	dBc
输入驻波 Input VSWR			2.0	:1
直流电压 DC Voltage	+28			V DC
直流电流 DC Supply Current	10			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/N Female	
直流偏置 DC Bias	D-SUB 9Pin	
尺寸 Size	200*130*20	mm

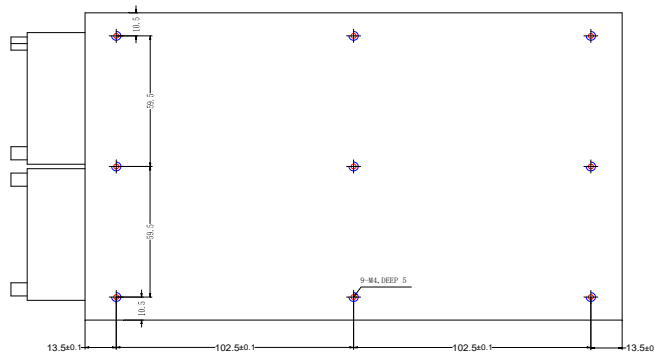
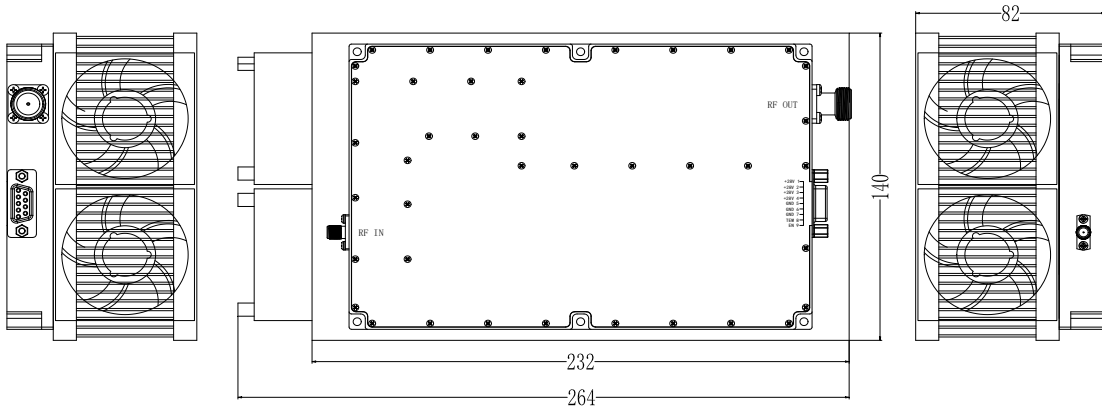
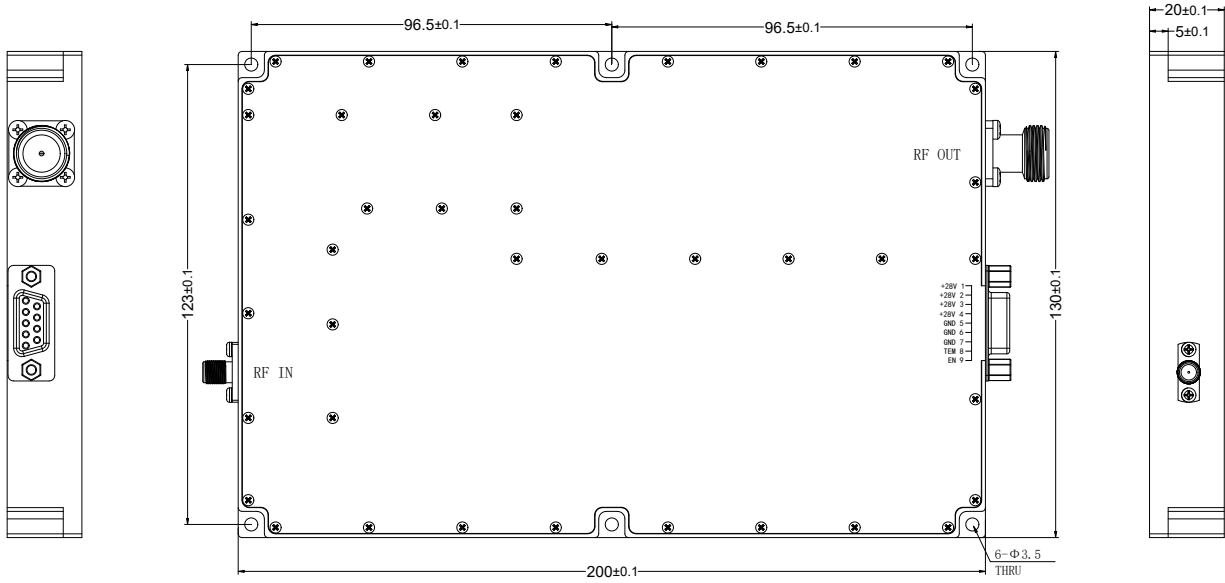
绝对最大值 Absolute Maximum Ratings:

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



风扇供电 Fans Supply Current: 0.4A@24V



OBSERVE PRECAUTIONS
ELECTROSTATIC SENSITIVE
DEVICES

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	+28V	+26.0-30.0VDC
5	GND	Ground
6	GND	Ground
7	GND	Ground
8	Over Temperature	When the temperature of the case exceeds 70 °C, the power amplifier will turn off and this pin will be pulled high. If the temperature of case drops to 60 °C, the power amplifier will return to normal operation, and this pin will be pulled low.
9	EN	Amplifier Enable: TTL High (5V) (Internally Pulled-High)

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
TLPA2.9G3.1G-47-47	Power amplifier 2.9-3.1GHz,Gain:47dB,Psat:47dBm, +28V DC,Without Heatsink	Rev.1.0
TLPA2.9G3.1G-47-47-HS	Power amplifier 2.9-3.1GHz,Gain:47dB,Psat:47dBm, +28V DC,With Heatsink	Rev.1.0