

Power Amplifier

2.2-2.3GHz/40dB Gain/47dBm Psat

Model: TLPA2.2G2.3G-40-47

TLPA2.2G2.3G-40-47 is a power amplifier with a minimum small signal gain of 40 dB and a minimum Psat of 47 dBm across the frequency range of 2.2 to 2.3 GHz. The DC power requirement for the amplifier is +28 VDC/5A. The input port and output port configuration offers coax adapter structure with SMA female.

Features:

- Frequency range: 2.2-2.3GHz
- Gain: 40dB Min
- Output Power Psat: 47dBm 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	2.2		2.3	GHz
增益 Gain	40	43		dB
增益平坦度 Gain Flatness		±1	±1.5	dB
线性输出功率 Output P1dB	44	45		dBm
饱和输出功率 Output Psat	47	47.5		dBm
输入驻波 Input VSWR		1.5	2	:1
直流电压 DC Voltage	26	28	30	V DC
静态电流 Static Current		1		A
饱和电流 Saturation current		5	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/N Female	
直流偏置 DC Bias	PHD2.0-2x3P	
尺寸 Size	135*50*20	mm
重量 Weight	300	g

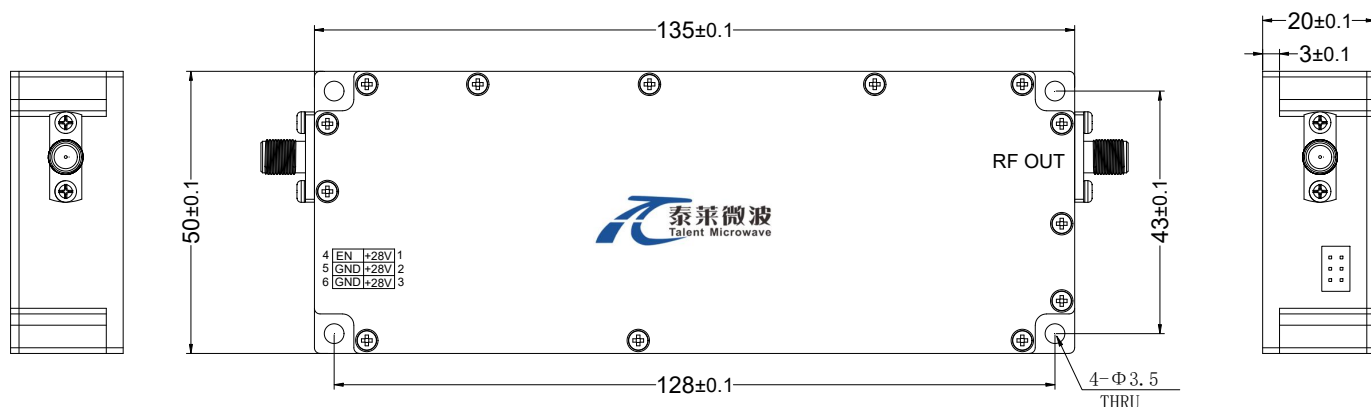
绝对最大值 Absolute Maximum Ratings:

参数 Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	+30 V
输入功率 RF Input Power	+10 dBm
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V



外形图 Outline Drawing:

Unit:mm; Tolerance:±0.1mm



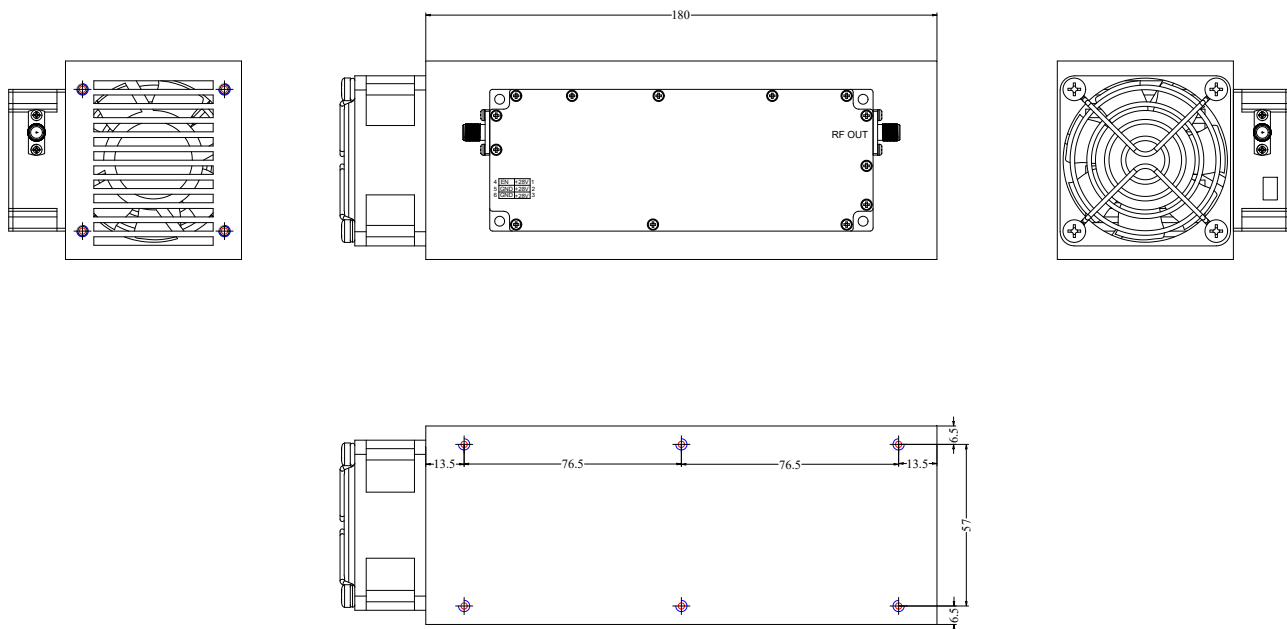
*****Heat Sink Required During Operation**



ESD Protection: Strictly adhere to ESD precautions to prevent electrostatic damage.

外形图 Outline Drawing:

Unit:mm; Tolerance:±0.1mm



风扇供电 Fan power supply

Red line	Power supply positive, +24.0-28.0VDC DC current: 0.2A
Black line	Ground

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
TLPA2.2G2.3G-40-47	Power amplifier 2.2-2.3GHz, Gain:40dB,Psat:47dBm,+28V DC,Without Heatsink	Rev.1.0
TLPA2.2G2.3G-40-47-HS	Power amplifier 2.2-2.3GHz, Gain:40dB,Psat:47dBm,+28V DC,With Heatsink	Rev.1.0