

Model: TLPA0.4G3G-44-44
Power Amplifier
0.4-3GHz, Gain: 44dB, Psat: 44dBm
Feature:

- Ultra Wide Band: 0.4-3 GHz
- Gain: 44 dB Typ
- Psat Output Power: 44 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	0.4-3			GHz
增益 Gain	40	44		dB
增益平坦度 Gain Flatness		±3	±3.5	dB
线性输出功率 Output P1dB		42		dBm
饱和输出功率 Output Psat	44	45		dBm
谐波 Harmonic@Pout=44dBm		-10		dBc
输入驻波 Input VSWR		1.5	2.0	:1
直流电压 DC Voltage		48	50	V DC
直流电流 DC Supply Current		1	3	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	160*95*20	mm
重量 Weight	550	g

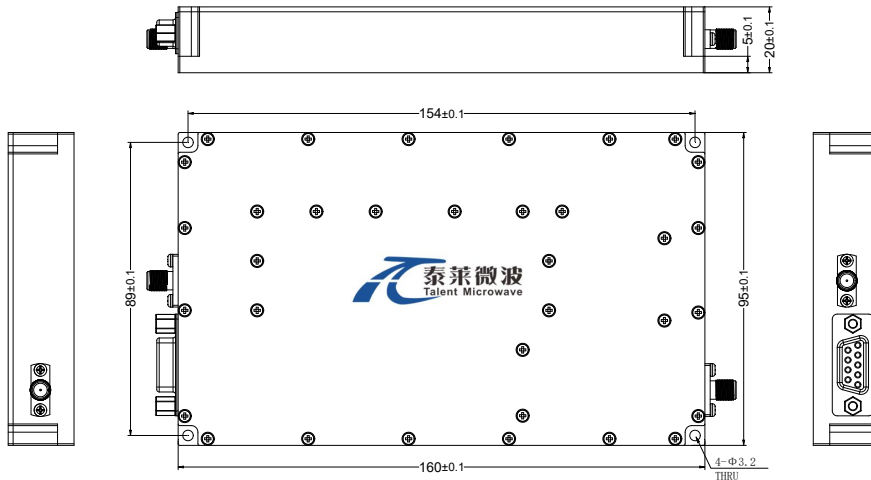
绝对最大值 Absolute Maximum Ratings:

参数 Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	+50 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**



直流供电连接器 D-sub, 9-Pin, Female:

Pin	Identificati on	Type	Function specification
1	Over Voltage	Output	When the power supply voltage of the power amplifier exceeds the threshold, the power amplifier is turned off and this pin outputs a high level.
2	GND	Supply	Power supply negative
3	GND	Supply	Power supply negative
4	VCC	Supply	Power supply positive
5	VCC	Supply	Power supply positive
6	EN	Input	A high (or suspended) level 5V turns on the power amplifier, and a low level turns it off
7	Reset	Input	When the power amplifier triggers overcurrent protection, the power amplifier will be turned off and enter a state of lockout, and shorting to ground for 10ms will restart the power amplifier. Only the overcurrent protection can be reset.
8	Over Temp	Output	When the temperature of the power amplifier housing is greater than 70° C, the power amplifier is closed and this pin will output a high level. When the temperature of the power shell is reduced to 60°C, the power amplifier returns to normal operation, and this pin will output a low level.
9	Over Current	Output	When the power amplifier current exceeds the threshold, the power amplifier is turned off and this pin outputs a high level.

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
TLPA0.4G3G-44-44	Power amplifier 0.4-3GHz, Gain:44dB, Psat:44dBm, +48V DC, Without Heatsink	Rev.1.1
TLPA0.4G3G-44-44-HS	Power amplifier 0.4-3GHz, Gain:44dB, Psat:44dBm, +48V DC, With Heatsink	Rev.1.1