

Model: TLPA0.4G2.5G-50-50
Power Amplifier
0.4-2.5GHz, Gain: 50dB, Psat: 50dBm
Feature:

- Wide Band: 0.4-2.5GHz
- Gain: 50dB Min
- Psat Output Power: 50dBm 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	0.4-2.5			GHz
增益 Gain	50	52		dB
增益平坦度 Gain Flatness		±1.8dB	±2.5dB	dB
噪声系数 Noise Figure			10	dB
Input Power for Rated Psat		-5	0	dBm
OIP3 2-Tone @ 37dBm/Tone, 1MHz Spacing		50		dBm
饱和输出功率 Psat	70W@400-500MHz 100W@500-2500MHz	100		W
谐波 Harmonics @ Pout=100W		-20		dBc
杂散 Spurious			-60	dBc
输入驻波 Input VSWR		1.5	2.0	:1
直流电压 DC Voltage	26	28	30	V DC
Current Consumption @ POUT = 100W		12	15	A
Switching Time @ 1kHz TTL, PIN = 0dBm		2	5	us
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	D-sub 9-pin, Male	
尺寸 Size	208.3X91.4X26.9	mm
重量 Weight	1000	g



绝对最大值 Absolute Maximum Ratings:

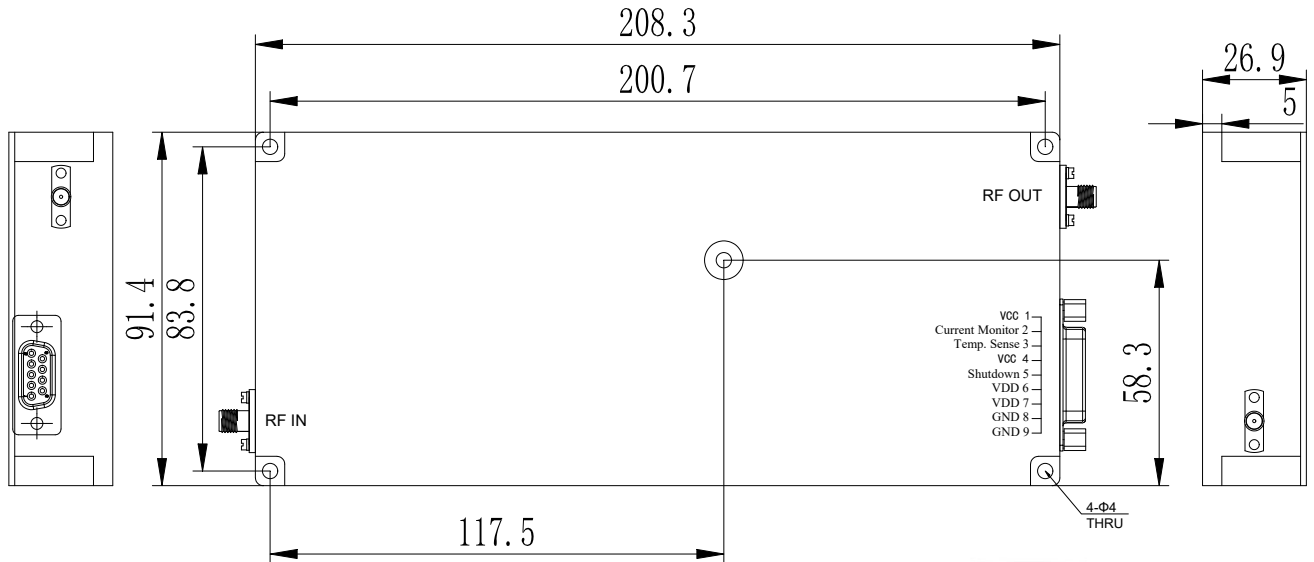
参数 Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	30
输入功率 RF INPUT POWER	10 dBm
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V
Load VSWR @ POUT = 90W	∞ @ all load phase & amplitude for duration of 1 minute 3:1 @ all load phase & amplitude continuous
Thermal Overload	85°C Graceful Degradation

DC INTERFACE CONNECTOR – D-sub, 9-Pin, Male

Pin #	Description	Specification
2	Current Monitor	Analog voltage relative to IDD @ 25mV/100mA
3	Temp. Sense	Analog voltage relative to Unit's Temperature @ 10mV/°C (0.50V/OFFSET) ; (VMEAUSRED - 0.50)/0.01= °C, Example; (1.00V-0.50)/0.01= 50°C
5	Shutdown	Amplifier Disable: TTL Logic High (5V) (Internally Pulled-Low)
1, 6, 7	VDD	+26.0-30.0VDC
4, 8, 9	GND	Ground

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
TLPA0.4G2.5G-50-50	Power amplifier 0.4-2.5GHz,Gain:50dB,Psat:50dBm, 28V DC, Without Heatsink	Rev.1.0
TLPA0.4G2.5G-50-50-HS	Power amplifier 0.4-2.5GHz,Gain:50dB,Psat:50dBm, 28V DC, With Heatsink	Rev.1.0