泰莱微波
Talent Microwave

Suzhou Talent Microwave,Inc
sales@talentmw.com
www.talentmw.com

Power Amplifier

0.4-8GHz/40dB Gain/40dBm Psat

Model: TLPA0.4G8G-40-40

TLPA0.4G8G-40-40 is a power amplifier with a minimum small signal gain of 40 dB and a minimum Psat of 40 dBm across the frequency range of 0.4 to 8 GHz. The DC power requirement for the amplifier is +28 VDC/2.5A. The input port and output port configuration offers coax adapter structure with SMA female.

Features:

- Frequency range: 0.4-8GHz
- Gain: 40dB Min
- Output Power Psat: 40dBm 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	0.4		8	GHz
小信号增益 Small Signal Gain	40	42		dB
增益平坦度 Gain Flatness		±3	±4	dB
线性输出功率 Output P1dB	35	36		dBm
饱和输出功率 Output Psat	40			dBm
谐波 Harmonic		-15	-8	dBc
输入驻波 Input VSWR		1.5	2	:1
直流电压 DC Voltage		28	30	V DC
静态电流 Static Current		1.5		A
饱和电流 Saturation current		2.5	3	A
阻抗 Impedance	50			Ohms

泰莱微波 Talent Microwave

Suzhou Talent Microwave,Inc
sales@talentmw.com
www.talentmw.com

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	J30J-9TJSL	
尺寸 Size	60*85*15(Without heatsink) 140*180*77(With heatsink)	mm
重量 Weight	500(Without heatsink) 3500(With heatsink)	g

绝对最大值 Absolute Maximum Ratings:

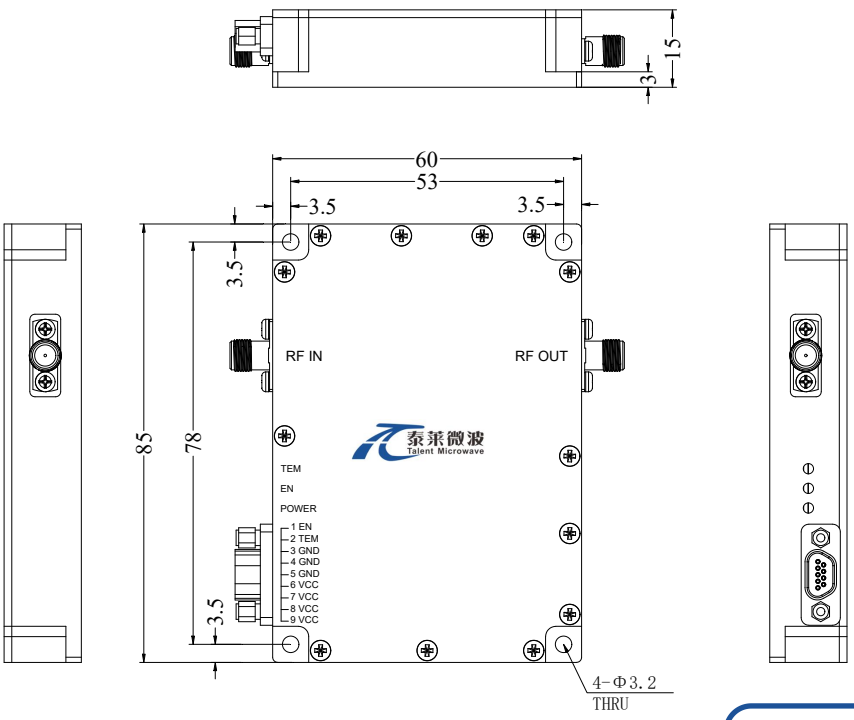
参数 Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	+30 V
输入功率 RF Input Power	+5 dBm
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V



Simple 220V System
Available SAC option

外形图 Outline Drawing:

Unit:mm; Tolerance:±0.1mm



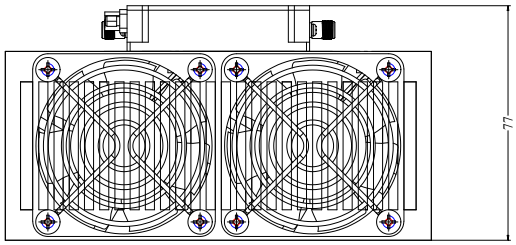
***Heat Sink Required During Operation

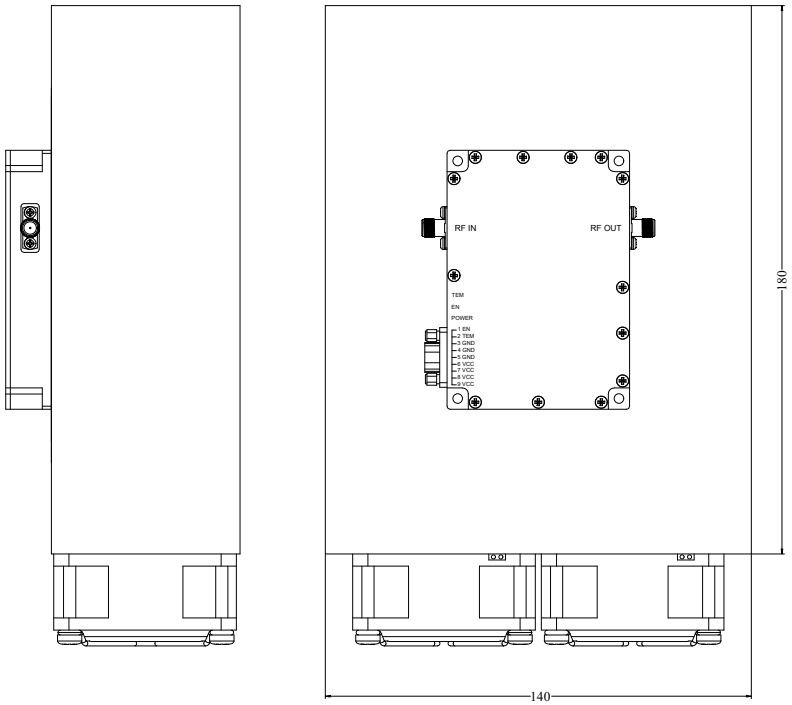
ESD Protection: Strictly adhere to ESD precautions to prevent electrostatic damage.

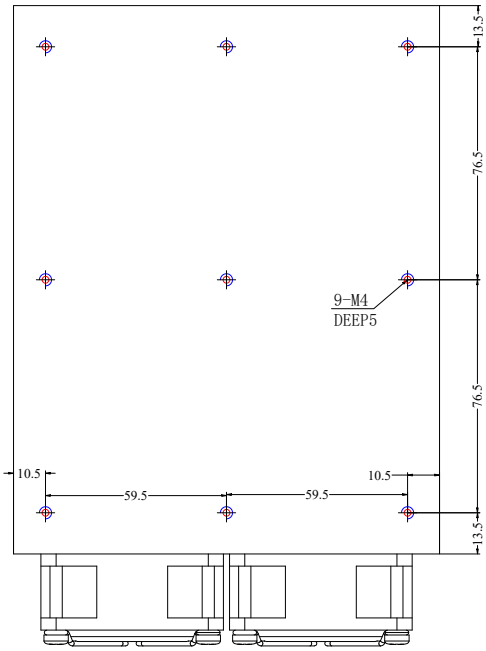
Suzhou Talent Microwave,Inc
sales@talentmw.com
www.talentmw.com

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: 0.3A
Black line	Ground

Suzhou Talent Microwave,Inc
sales@talentmw.com
www.talentmw.com

直流供电接口 DC Supply Connector(J30J-9TJSL):

引脚 Pin	名称 Name	功能 Function
1	EN	放大器使能：TTL高(5V)(内拉高) 放大器禁用：接地
2	Over TEM	当外壳温度超过75℃时，功率放大器关闭，此引脚拉高。如果机箱温度降至60℃，功率放大器将恢复正常工作，此引脚将拉低。
3~5	GND	地
6~9	VCC	电源正极,+26.0-30.0VDC

使用说明 Instruction Manual:

开机 Power on	
1	连接地和射频输入端口。
2	将射频输出端口与负载连接(负载的驻波比应小于3:1)。
3	给风扇加电。
4	给功放加电。
5	打开射频信号，确保输入信号不超过5dBm。

关机 Power off	
1	关闭射频信号。
2	给功放断电。
3	给风扇断电。
4	移除输入端信号源。

温度环境 Environmental Conditions:

参数 Parameter	Min	Typ	Max	单位 Units
操作温度 Operating Temperature*	-20		+50	℃
存储温度 Non-operating Temperature*	-30		+60	℃
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.

Suzhou Talent Microwave,Inc
sales@talentmw.com
www.talentmw.com

订货信息 Ordering Information:

标准型号 Base Number	描述 Description	版本号 Revision
TLPA0.4G8G-40-40	Power amplifier 0.4-8GHz, Gain:40dB,Psat:40dBm,+28V DC,Without Heatsink	Rev.1.0
TLPA0.4G8G-40-40-HS	Power amplifier 0.4-8GHz, Gain:40dB,Psat:40dBm,+28V DC,With Heatsink	Rev.1.0