

客户 :
CUSTOMER:

產品規格書

PRODUCT SPECIFICATION

产品名称 : 电源模块

PRODUCT NAME Power module

客户产品料号 :

CUSTOMER PART No.

供方产品型号 : SUS-60-MIN-3 0 V

SUSWE PART No.

Rev. 01

客户确认盖章
Customer Signature

Please return this copy with your company's official stamp on approval of this item, automatic approval to be considered if there is any order coming from your company before formal approval return.

规格书 NO.: QT/HD03.03.512-2016

日期/ DATE : 2023 年 07 月 10 日

APPROVAL

CHECK

PREPARE

苏州苏特电子科技子限公司
SUZHOU SUTE ELECTRONICS CO., LTD.
地址: 中国江苏省昆山市周市镇宇龙路 189 号
ADD: Yulong road 189 Zhoushi Town, Kunshan
City, Jiangsu Province, China

SPECIFICATION

CUSTOMER 客户	
CUSTOMER PART No.客户型号	
SUSWE PART No.产品型号	SUS-60-MIN-30V Rev.01

1 General description 概述

SUS-60-MIN-24V--是苏特电子客户提供的小体积高功率密度绿色模块电源，该系列电源具有交直流两用、输入电压范围宽、高可靠性、低功耗、安全隔离等优点。广泛适用于工控和电力仪器仪表、智能家居，新能源领域等对体积要求苛刻的场合，适配相应 EMC 外围电路满足多行业产品需求。

2 Electronic characteristics 电气特性

3.1 Input characteristics 输入特性

Input Voltage Range 输入电压范围	90Vac~264Vac 或 120Vdc~375Vdc
Normal Voltage Range 额定输入电压	110Vac~240Vac
Input Frequency Range 输入频率范围	47Hz~63Hz
Max. Input Current 满载输入电流	2.0A Max. at full load condition 220Vac
Inrush Current(cold star)浪涌电流	70A Max. at 264Vac
Efficiency(full load)效率	90% MIN@full Load 230Vac
Standby power loss 待机损耗	3.5W

3.2 Output characteristics 输出参数

3.2.1 Output Voltage, Output Current and Regulation 输出电压、电流及输出调整率

Output Voltage 输出电压	Voltage accuracy 电压精度	Min. Current 最小电流	Rated Current 额定电流	Load adjustment rate 负载调整率
+30V	±5%	0A	2400mA	±3%

3.2.2 Ripple & Noise 纹波和噪声

Output Voltage	Ripple & Noise
+30V	240mVp-p Max.

Note: Tested by loading side parallel with a 10uF/EC and 0.1uF/Ceramic capacitors and Measured Band-Width with DC-20MHz.

备注：测试时在负载侧并联 10uF 的电解电容和 0.1uF 的陶瓷电容，并将示波器的带宽设定在 20MHz

3.2.3 Hold-Up Time 维持时间

Output Voltage	110Vac Input	220Vac Input
+30V	≥10mS	≥10mS

Note: full load 输出满载

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3.2.4 Undershoot and Overshoot 过欠冲		
Output Voltage	Undershoot and Overshoot	
+30V	±10%	
3.2.5 Voltage Rise Time 输出电压上升时间		
Output Voltage	110Vac Input	220Vac Input
+30V	≤30mS	≤30mS
Note: The output voltage rise from 10% to 90%输出电压从 10%上升到 90%的时间		
3.2.6 Temperature Coefficient 温漂		
Output Voltage	Temperature Coefficient	
+30V	≤0.05%/°C	
3.3 Protection 保护		
3.3.1 Short Circuit Protection 短路保护		
Output Voltage	Note	
+30V	Hiccup and auto-recovery	
3.3.2 Over Current Protection 过流保护		
Output Voltage	Over Current	Note
+30V	≥3.0A	Hiccup and auto-recovery
3.3.3 Over Voltage Protection 过电压保护		
Output Voltage	Over Voltage	Note
+30V	---	Hiccup and auto-recovery
Note: The power supply should be test at all input voltage and output min. load or no load . 过压保护应在输出轻载或者空载的条件下测试。		
3.4 Isolation 绝缘性能		
3.4.1 Hi-pot test 耐电压测试		
3600Vac, 10mA, 2Sec between input side to output side. 输入---输出 3600Vac,10 mA,2 秒		
3.4.2 Insulation 绝缘阻抗		
500Vdc, 1sec between input side to output side circuit, ≥100MΩ . 输入---输出 500Vdc,1 秒, ≥100MΩ		

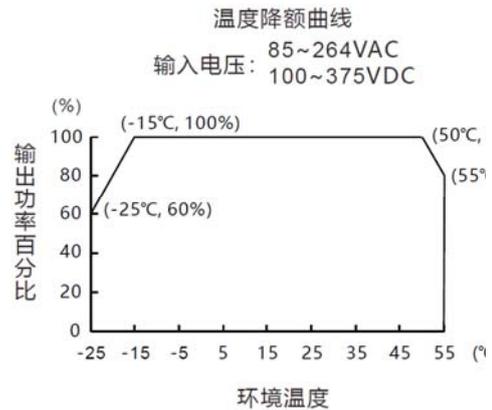
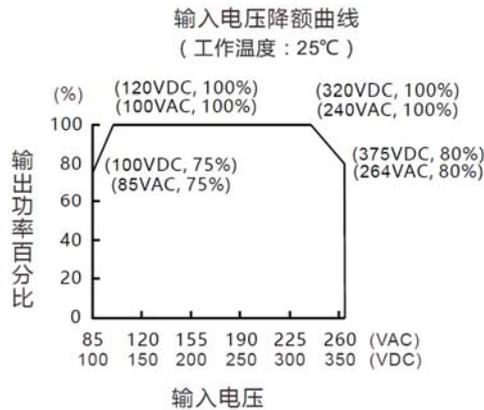
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<p>4 Environment Requirements 环境</p> <p>4.1 Temperature.温度 a、Operation 工作温度:0 °C -- 50°C. b、Storage 存储温度:-10°C --70 °C.</p> <p>4.2 Humidity.湿度 a、Operation 工作湿度 : 10--85%.non-condensing b、Storage 存储湿度: 5--95%.non-condensing</p> <p>4.3 Altitude 海拔高度: 5000m</p> <p>4.4 Vibration 振动 a、Operating: 5-17Hz, 0.048 inch double amplitude displacement 17-199Hz, 0.73Gs acceleration 200-500Hz, 0.33Gs acceleration, 30min sweep. 工作: 5-17Hz, 0.048英寸双倍振幅位移 17-199Hz, 0.73Gs加速度 200Hz-500Hz,0.33Gs加速度 b、Storage: 2-200Hz, 2.0G peak to peak, 3 axes, 30min sweep. 贮存: 扫描频率 2-200Hz,2.0G, 3 轴, 每轴 30 分钟</p> <p>4.5 Cooling Method 冷却方式 Ventilation Cooling 自然风冷</p> <p>5 Reliability 可靠性</p> <p>5.1 MTBF 平均无故障时间 50000Hrs power on at 25°C.</p> <p>5.2 Burn in 老化 100% Burn-In with 80-100% loading & 35~45°C Environment temperature for 4 hours. 全数在带 80-100%额定负载, 在 35~45°C 环境温度下老化 4 小时</p>	

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6 Product performance curve 产品性能曲线



7 Note 注意事项

- 7.1 使用时请注意, 如使用方法错误有可能导致导电\或破损\冒烟\发光等情况发生
Please pay attention, the electric shock\or broken\smoke\light may be happened, when using in the wrong method.
- 7.2 本品请在规格书的规格内使用
Please use this product within the specification.
- 7.3 勿将本品置于高温\高湿\灰尘\有腐蚀的环境中, 否则有可能导致破损\导电的情况发生
Do not place this product under high temperature\humidity\dust\corrosive environment, otherwise they may lead to breakage\electric shock happen.
- 7.4 输入电压\使用温度范围在规格书的规格内, 否则有可能导致破损
Input Voltage\operating temperature should be used in the specifications, or they may lead to breakage.

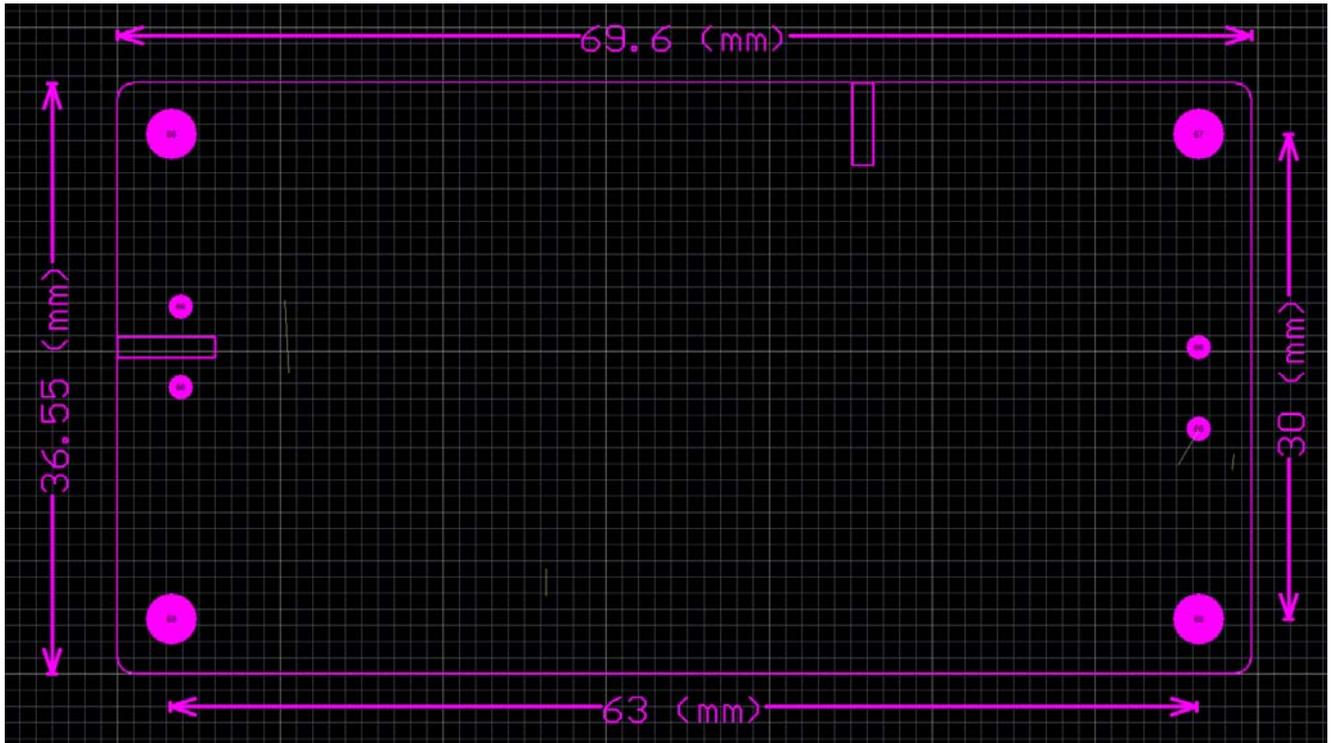
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<p>7.5 时严禁有覆盖物遮掩本品，否则有可能导致损坏\变形\烫伤的情况发生 Please do not place anything on the product before power on, otherwise it may lead to damage\deformation\burn happen.</p> <p>7.6 本产品在规定存储条件下，若存储时间超过 6 个月，需对本产品进行通电工作 2 小时以上,否则有可能导致产品寿命缩短 Under specified storage conditions, if the product stored longer than 6 months , please charge the product and make it work for more than 2 hours, or they may lead to shortened product life</p>	
8 fety requirement 安规要求	
Compliance with the following Criterion:符合以下标准	
Safety referring standards	File Records
9 EMC 电磁兼容	
9.1 EMI (Both of Conduction and Radiated) 电磁干扰	
Compliance with the following Criterion:	
Referring standards	Specification
9.2 EMS(电磁抗扰)	
Compliance with the following criterion:	
ITEM	Standard

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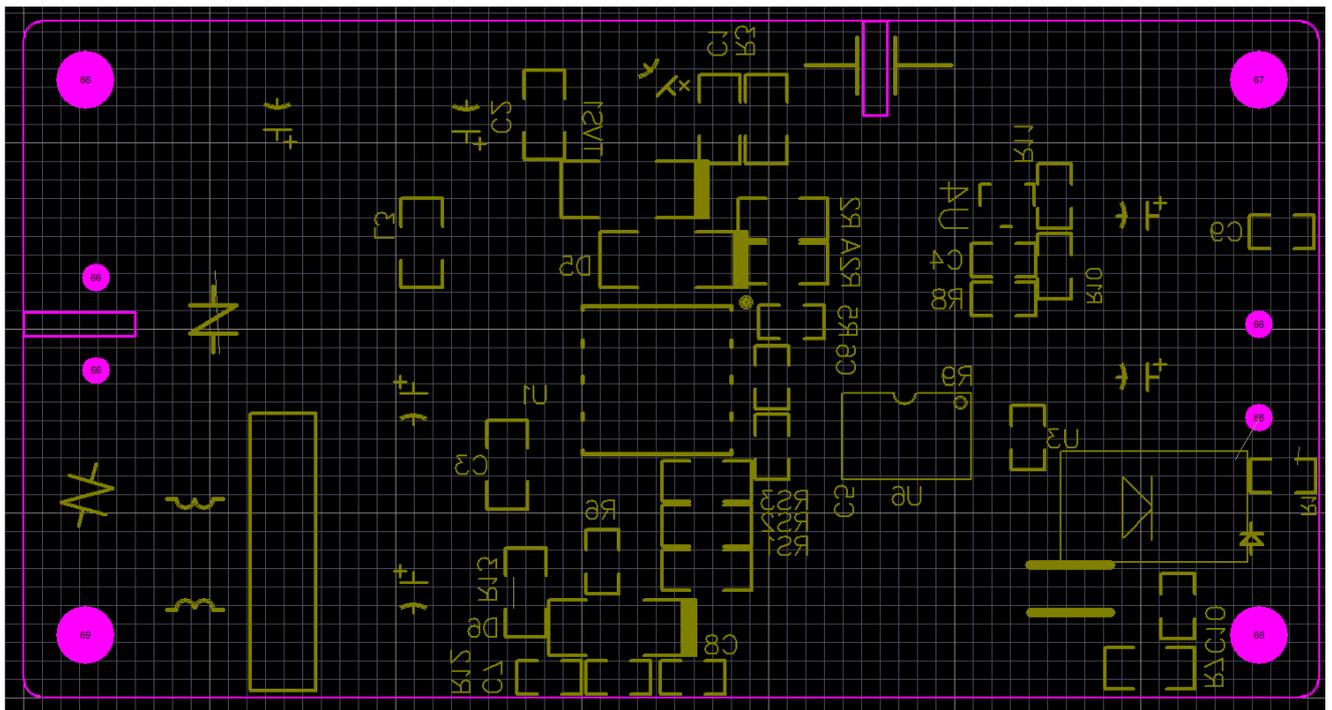
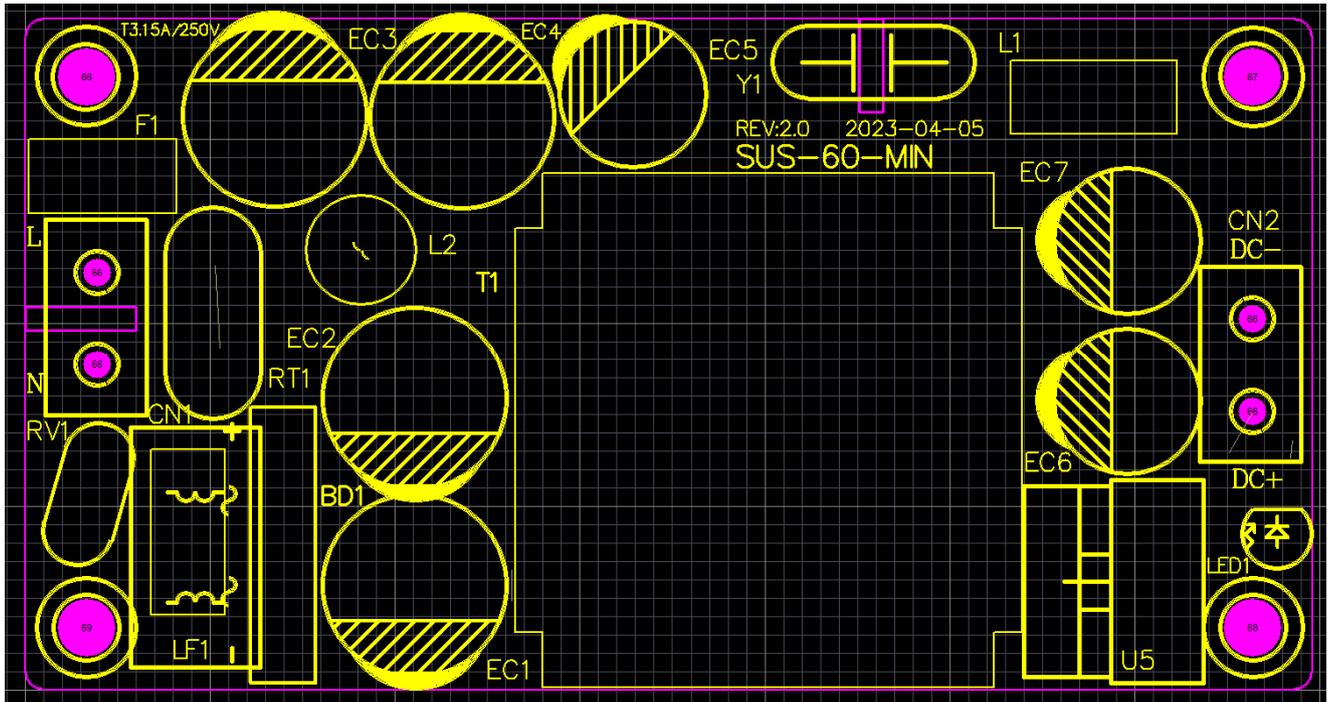
10 Shape and Dimensions 外形结构图(mm)



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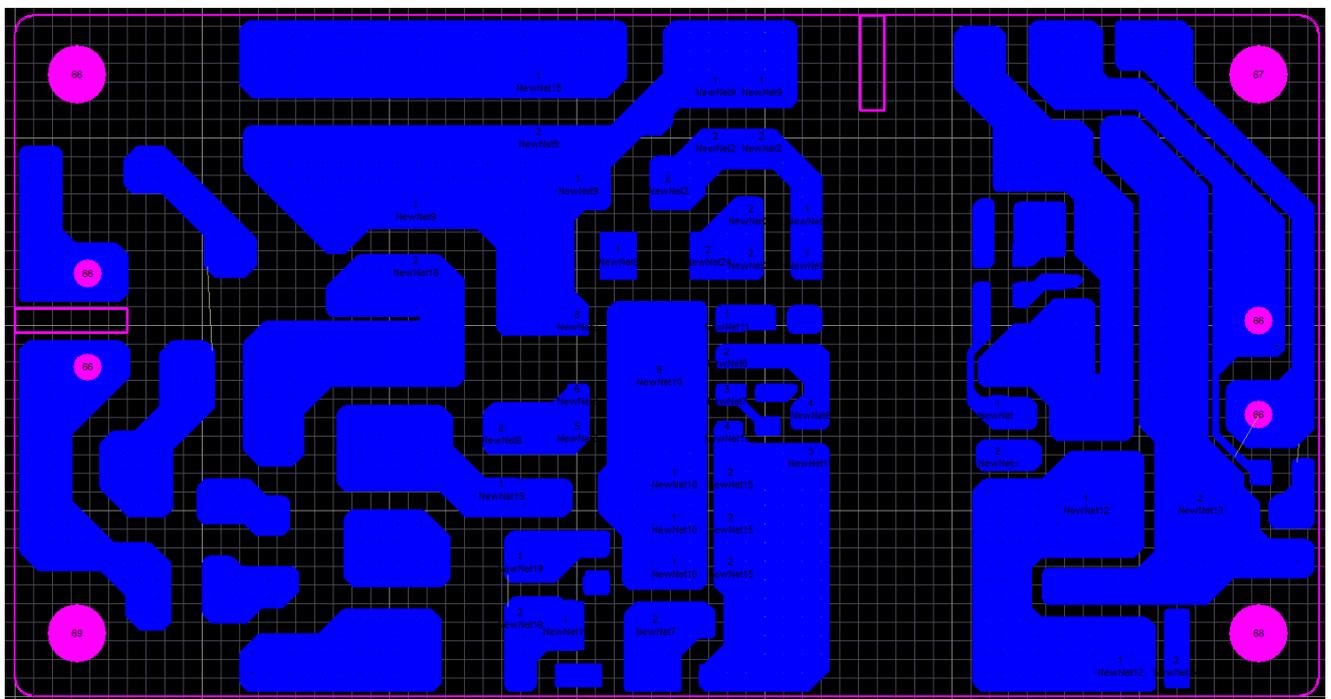
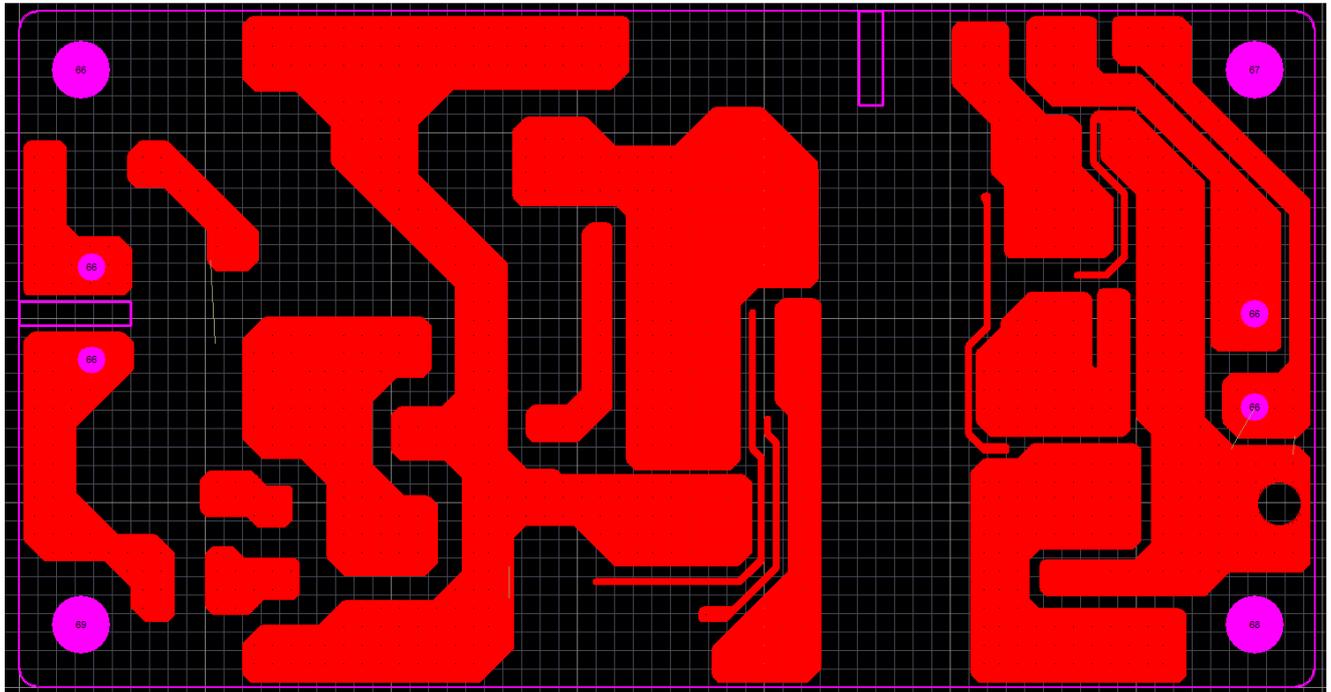
11 PCB 图



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