

PRODUCT SPECIFICATION

产品规格书

PRODUCT/产品名称: DC-DC 车载电源 (升降压型)

SAQCN P/N / 型号 : SQD-160B

CUSTOMER / 客户 :

CUSTOMER P/N :
客户物料编码

DATE /日期 : 2022/ 10/ 6

APPROVED BY/客户确认栏	NOTE / 备注
CUSTOMER SIGNATURE (S) 客户签章	RoHS Available 环保品

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1. General Description / 概述

This product is the LED driver, has the constant pressure constant flow multi groups outputs, is suitable in the LED lamp's application./

本产品为 LED 车载电源,具有恒压输出,适用于车载 LED 显示器的应用.

2. Features / 特性

High performance, low consumption. / 具有高能低耗特点。

Short protection function(each) /短路保护功能

Over current function /过电流保护功能

The meter protection function /防反接保护功能

3. Application / 适用范围

This product for each kind of LED display unit design, applies each kind of LED demonstration! / 本产品为各类 LED 显示部件设计,应用各类 LED 显示!

4. Suitable load / 适用负载

LED backlight LCD panel.

5. Environmental Condition / 适用环境条件

Operating temperature /工作温度: 0°C -- 50°C

Storage temperature / 贮存温度 : -20°C -- 60°C

Operating humidity / 工作湿度 : 10% -- 80%RH

Storage humidity / 贮存湿度 : 10% -- 93%RH

6. Input Electrical Characteristics / 输入参数

No./ 序号	Description 描述	Specification 规格	Condition 测试条件
1	Input Voltage Range 输入电压范围	DC8V~36V	Vout=12VDC/5A
2	Rated Input Voltage 额定输入电压	DC9V~32V	Vout=12VDC/5A
3	Input Current 输入电流	6A Max.	Vin=12VDC, Full load / 满载.
4	Inrush Current 涌入电流	50A Max.	Vin=12VDC Full load.Cold start / 满载, 冷机启动
5	Efficiency / 效率	90%Min	Vin=12VDC Full load/满载
6	Standby Power Loss 待机功耗	≤ 1W	Vin=24VDC, 12V is 30mA load Vin=24VDC, +12V 负载 30mA

7. Output electrical characteristics / 输出电气参数

Item 项目	Symbol 符号	Test Conditions 测试条件	Min 最小值	Type 规格值	Max 最大值	Unit 单位
Output Current 输出电流	I _{out}	V _{in} (DC)=9~32V	---	5	---	A
Output Voltage 输出电压	V _{out}	V _{in} (DC)=9~32V;	---	12	---	V
Efficiency 效率	η	V _{in} (DC)=9~32V;	---	90	---	%

8. Pin assignments / 插座引脚定义

Input connector /输入插座: CN1: VH8P-2.54mm(二选一)	
Terminal/端子	Function/功能
Pin5、Pin6、Pin7、Pin8	IN+
Pin1、Pin2、Pin3、Pin4	IN-
Input connector /输入插座: CN1: VH3.96P-4mm (二选一)	
Terminal/端子	Function/功能
Pin3、Pin4	IN+
Pin1、Pin2	IN-

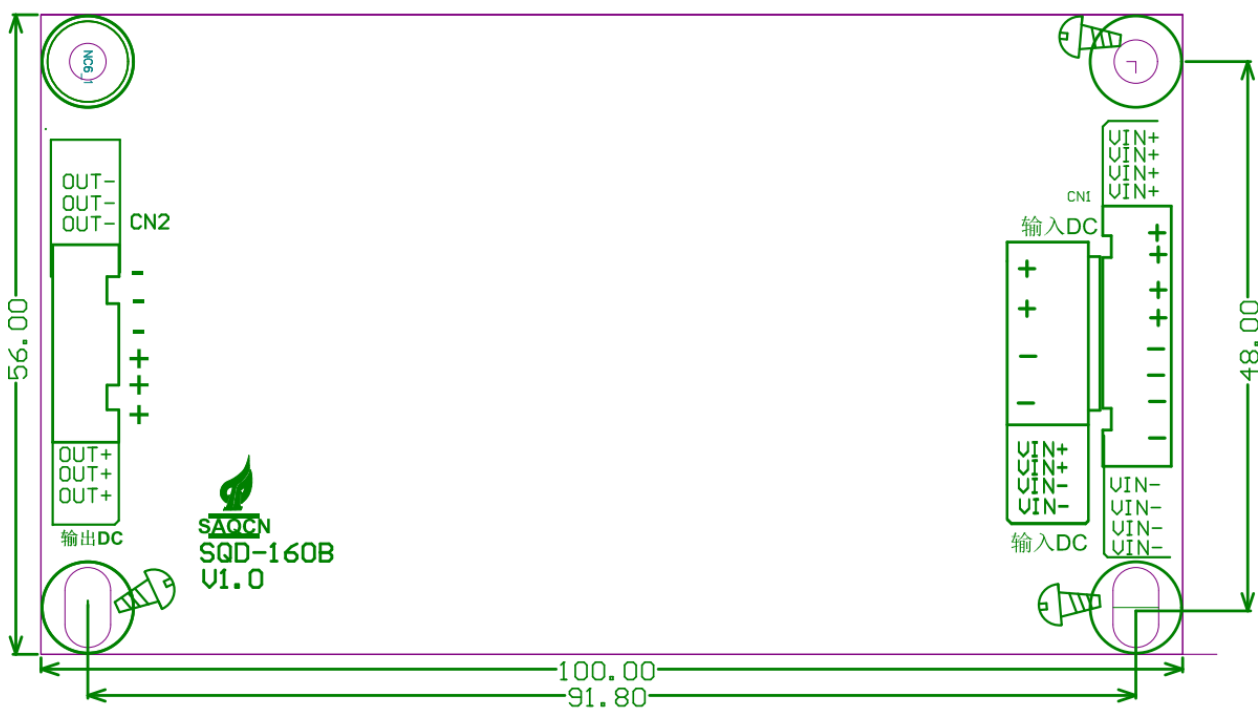
Output connector/输出插座: CN2: PH4P-2.54mm	
Terminal/端子	Function/功能
Pin4、Pin5、Pin6	GND
Pin1、Pin2、Pin3	+12V

9. Mechanical Dimension / 结构示意图

Dimension of P.C.B. / PCB 机械尺寸 : 100mm*56mm

Unit/单位: mm

Tolerance/公差: $\pm 0.5\text{mm}$



10. Safety Parts List / 安规元件清单

No. 序号	Description 描述	Manufacturer 制造商	File No. 证书编号
1	PCB/印制线路板	WEI DE XIN	E304272
		KE XIAN PCB	E222151
2	Transformer/变压器	LANCER	
	2.1 Bobbin/骨架	Sumitomo Chemical	E54705
	2.2 Copper Wire/漆包线	FUJI	E193774
	2.3 Copper Wire/漆包线	SHENGANG	E239508
	2.4 Insulating tape/绝缘胶带	SAGE	E302291
	2.5 Insulating Varnish/绝缘漆	HANG CHEUNG	E200154
3	Connector/插座	FULL CON	E204211
		LAND WIN	E159426
4			

11. Abnormal Operating Testing / 非正常工作测试

Damage to the inverter must not occur such as fire, high temperature, breakdown, and molten metal etc, in equipment. 非正常工作条件下, 不可出现起火、高温、击穿、出现熔化金属等现象。

12. Notice / 注意事项

A. Please in the crosspiece extension wiring with the high temperature contact, like this do not cause the board to be unable to use normally, also cannot join the wire, so will affect electric circuit's performance.

请勿在联接板的转接线上用高温接触,这样会造成板子无法正常使用,也不能联接导线,如此会影响电路的性能.

B. Based on the security problem, please when assembles this product, do guarantee that in this product and between the complete machine metallic material maintains at least the 4mm above distance, or the use enough insulation grade's insulation material carries on the isolation, avoids the static electricity creating the direct damage to the electric circuit chip.

基于安全问题,请在组装本产品时,确保本产品和整机中的金属材料间保持至少 4mm 以上的距离, 或者使用足够绝缘等级的绝缘材料进行隔离, 避免静电对电路芯片造成直接的损坏.

C. Don't twist , deform , drop or knock the inverter during assembly.

请在组装本产品时,避免扭曲,弯折,大力碰撞及跌落产生损害。

D. Guarantee to offer ESD shield bag to protect the product from electrostatic or magnetic interference during delivery. Due to the inverter is usually designed without the enclosure. please take care about ESD at anytime .

在产品交付的整个过程中均保证采用 ESD 屏蔽袋包装处理,因为该产品无外壳保护, 请务必随时注意防静电措施。

E. This products are not intended for use in systems in which failures of product could result in personal injury.

请勿将本产品使用在非适用范围的产品上, 以免造成意外伤害。



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