

## PRODUCT SPECIFICATION

### 产品规格书

PRODUCT/产品名称: DC TO DC BUCK

SAQCN P/N / 型号 : 24Z12V REV:1.0

CUSTOMER / 客户 :

CUSTOMER P/N :  
客户物料编码

DATE /日期 : 2021/ 11/ 27

APPROVED BY/客户确认栏	NOTE / 备注
<b>CUSTOMER SIGNATURE (S)</b> 客户签章	

PREPARED BY / 编制: \_\_\_\_\_

CHECKED BY / 审查: \_\_\_\_\_

APPROVED BY / 批准: \_\_\_\_\_



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## 1. General Description / 概述

This product is for buck dc-dc power supply, applicable to vehicle power supply module. / 本产品为直流一直流的降压电源，适用于车载模块电源。

## 2. Features / 特性

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

short protection / 开路保护功能

Constant Voltage drive / 恒压驱动

## 3. Application / 适用范围

The product is intended for all kinds of automotive electrical equipment to provide the 12 v output voltage stability.

本产品专为各种车载用电设备提供稳定的12V输出电压。

## 4. Suitable load / 适用负载

12V 3.0A DC Output

## 5. Environmental Condition / 环境特性

Operating temperature / 工作温度:  $-5^{\circ}\text{C} \text{ -- } 50^{\circ}\text{C}$

Storage temperature / 贮存温度 :  $-20^{\circ}\text{C} \text{ -- } 70^{\circ}\text{C}$

Operating humidity / 工作湿度 : 10% -- 95%RH

Storage humidity / 贮存湿度 : 10% -- 95%RH

The DC to DC back-light inverter suggested working in the condition of upon. It can be work 300thousand hours at least in the below condition.

本产品建议在以上条件下工作，在下列条件下可以工作3万小时。

Operating temperature/工作温度:  $-20\text{--}40^{\circ}\text{C}$

Operating humidity / 工作湿度 : 10% -- 95%RH

## 6. Input Electrical Characteristics / 输入参数

No.	Item/项目	Symbol	Min	Type	Max	Unit
1	Input Voltage/输入电压	Vin	21.6	24.0	26.4	V
2	Input Current/输入电流	Iin	-	-	2.4	A
3	Input Power/输入功率	Pin	-	-	54	W

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## 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	Iout	Vin=24V	0.2	3.0	3.5	A
Output Voltage 输出电压	Vout	Vin=24V	10.8	12	13.2	V
Efficiency 效率	$\eta$	Vin=24V	85	-	-	%

## 8. Pin assignments / 插座引脚定义

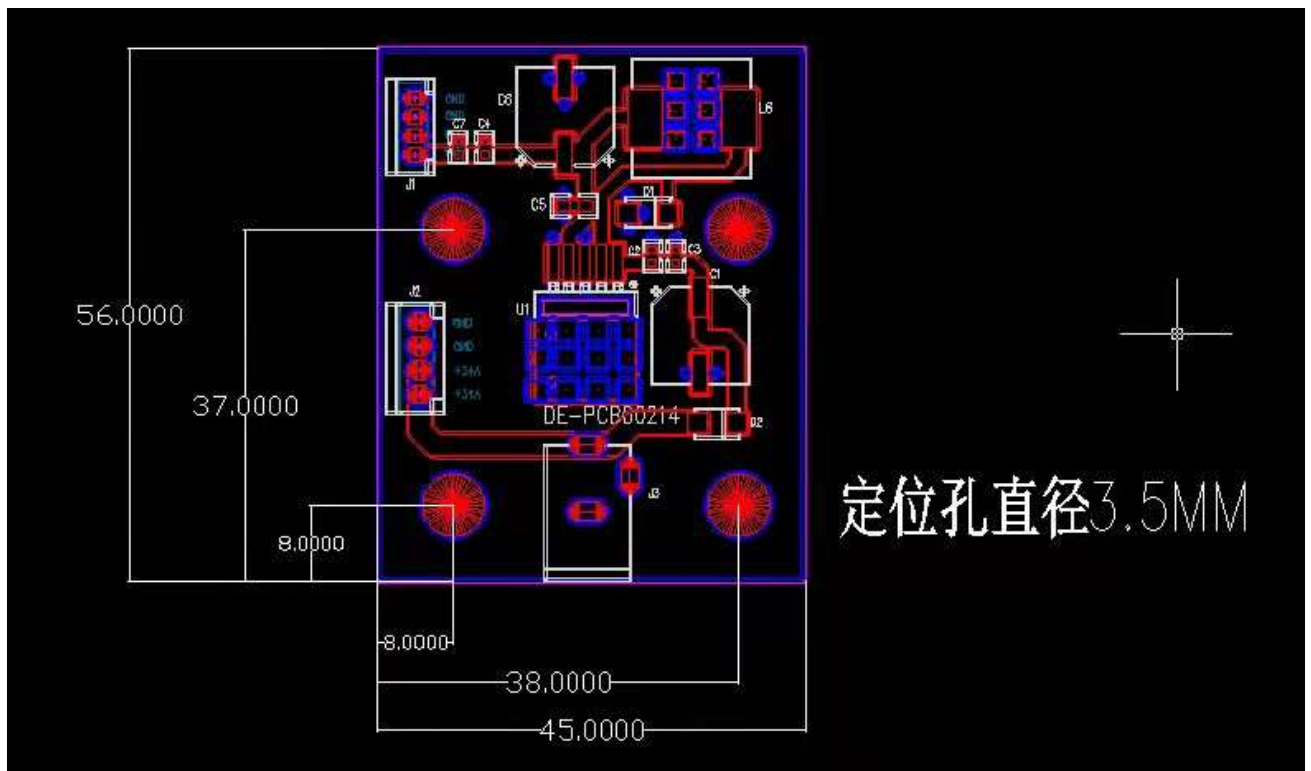
Input connector /输入插座: J2: DIP w-4pin2.54mm or equivalent			
Pin No./引脚	Symbol/符号	Description/描述	Parameter/参数
1、2	<b>24V</b>	Supply voltage/供电	21.6-26.4V
3、4	<b>GND</b>	Ground/接地	<b>GND</b>
Output connector/输出插座: J1: PH2.0-4P or equivalent			
Pin No./引脚	Symbol/符号	Description/描述	Parameter/参数
1、2	<b>12V</b>	<b>12V</b>	10.8V-13.2V
3、4	<b>GND</b>	<b>GND</b>	<b>GND</b>

## 9. Mechanical Dimension / 结构示意图

Dimension of P.C.B. / PCB 机械尺寸

Unit/单位: mm

Tolerance/公差:  $\pm 0.5\text{mm}$



## 10. 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、出现熔出金属等现象。

## 11. Notice / 注意事项

**A.** For Safety Issue, please keep 4.0mm at least from the metal parts of the system to the inverter. Or put a suitable insulator between the inverter and the metal parts to avoid the situation of breakdown or arcing etc.

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, 避免高压放电而产生危险。

**B.** 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。

**C.** 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。

**D.** China Galaxy 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。