SPECIFICATION
产品规格书

CUSTOMER 客户代码	SF-129
PRODUCT DESCRIPTION 产品描述	主反激变压器 PQ3415
Sunlord FuJun P/N 顺络富钧料号	DPQ340021-129
CUSTOMER P/N 客户料号	

【☒ New Released新发行 ☐Revised修订版】

SPEC REV（版本）：A0

【ROHS, Compliant Parts 符合RoHS要求的产品】

Approved By 批准	Checked By 审核	Issued By 发行
Jacky Looh 陆利兵	Andy Zhang 张矿利	ChunYu Chang 常春雨

Shenzhen Sunlord Electronics Co., Ltd.
深圳顺络电子股份有限公司

Address：Sunlord Industrial Park,Dafuyuan Industrial Zone,Longhua,Shenzhen,Guangdong P.R.,China 518110
地址：广东省深圳市龙华区观澜大富苑工业区顺络工业园 邮编：518110

Tel电话：0086-755-29832333 Fax传真：0086-755-82269029 E-Mail电子邮箱：sunlord@sunlordinc.com

JiangSu Sunlord FuJun New Energy Co.,Ltd.
江苏顺络富钧新能源有限公司

Address：No. 333 Fuming Middle Road, Tangqiao Town,Zhangjiagang City, Jiangsu P.R., China 215600
地址：江苏省张家港市塘桥镇富民中路333号 邮编：215600
Tel电话：0086-0512-58910890 Fax传真：0086-0512-58910863

【For Customer approval Only】 Date:_____

Qualification Status: Full Restricted Rejected

Approved By	Verified By	Re-checked By	Checked By

Comments:

江苏顺络富钧新能源有限公司
2025-04-27
研发部

【Version change history版本更改历史记录】

Rev. 版本	Effective Date 生效日期	Changed Contents 变更内容	Change reasons 变更理由	Approved By 批准
A0	27-Apr-25	New released 新发行	/	Jacky Looh 陆利兵

Caution
All products listed in this specification are developed, designed and intended for use in general electronics equipment. The products are not designed or warranted to meet the requirements of the applications listed below, whose performance and/or quality require especially high reliability, or whose failure, malfunction or trouble might directly cause damage to society, person, or property. Please understand that we are not responsible for any damage or liability caused by use of the products in any of the applications below. Please contact us for more details if you intend to use our products in the following applications.1．Aircraft equipment2．Aerospace equipment3．Undersea equipment4．Nuclear control equipment5．Military equipment6．Power plant equipment7．Medical equipment8．Transportation equipment (automobiles, trains, ships, etc.)9．Traffic signal equipment10．Disaster prevention / crime prevention equipment11．Data-processing equipment12．Applications of similar complexity or with reliability requirements comparable to the applications listed in the above

注意：
本规范中列出的所有产品都是为通用电子设备开发、设计和使用的。产品的设计或保证不满足下列应用的要求，其性能和/或质量要求特别高的可靠性，或其故障、故障或故障可能直接导致对社会、人身或财产的损害。请理解，我们对在以下任何应用程序中使用产品所造成的任何损坏或责任概不负责。 如果您打算在以下应用中使用我们的产品，请与我们联系以了解更多详情。1.飞机设备 2.航空航天设备 3.海底设备 4.核子控制设备 5.军事装备 6.发电厂设备 7.医疗设备 8.运输设备（汽车、火车、轮船等） 9.交通信号设备 10.防灾/预防犯罪设备 11.数据处理设备 12.应用程序具有与上述应用程序类似的复杂性或可靠性要求。

1．Aircraft equipment 飞机设备

2．Aerospace equipment 航空航天设备

3．Undersea equipment 海底设备

4．Nuclear control equipment核控制设备

5．Military equipment 军事设备

6．Power plant equipment 发电厂设备

7．Medical equipment 医疗设备

8．Transportation equipment (automobiles, trains, ships, etc.) 运输设备（汽车、火车、轮船等）

9．Traffic signal equipment 交通信号设备

10．Disaster prevention / crime prevention equipment 防灾/预防犯罪设备

11．Data-processing equipment 数据处理设备

12．Applications of similar complexity or with reliability requirements comparable to the applications listed in the above
与上述应用程序具有类似复杂性或可靠性要求的应用程序

1. Scope范围

This specification is applied to the Transformer DPQ340021-129 本规范适用于变压器 DPQ340021-129

2. Product Description and Identification (Part Number) 产品说明和标识（产品料号）

a) Description: 描述：TheTransformer DPQ340021-129

b) Product Identification (Part Number) 产品标识（产品料号）

D PQ 34 0021 - 129

① ② ③ ④ ⑤

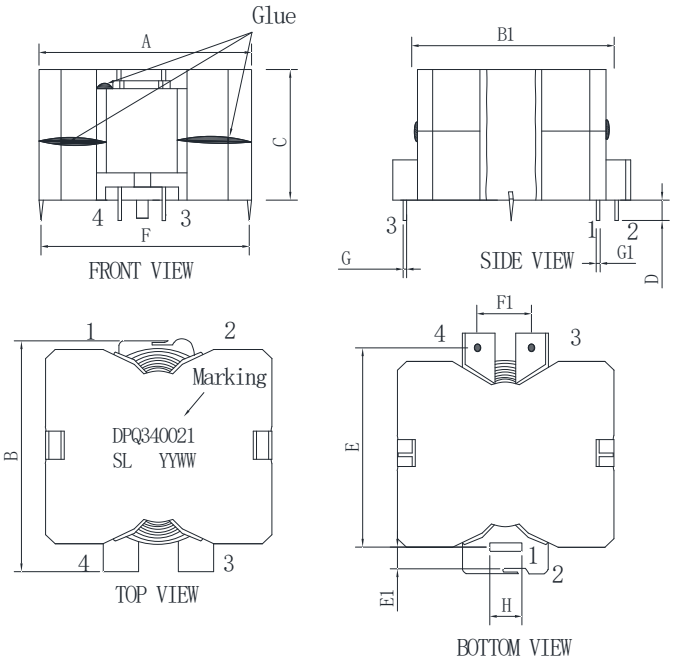
Named notes:命名注释：

①Customized Products 定制产品 ② Core Shape 磁芯形状

③Core Size 磁芯尺寸 ④ Serial Number 产品序列号 ⑤ Customer Code 客户代码

3. Shape and Dimensions 形状和尺寸

3.1 Shape 外形图



Notes(备注）: For RoHS compliant products（环保部品）:

1.The Sunlord ordering code: DPQ340021-129
顺络富钧料号DPQ340021-129。

2. Date Code suffix to (YYWW).
日期代码后缀YY:年份，WW：周期

3.Full PIN of skeleton; The single air gap agnetic core is assembled at the PIN side;
骨架为全脚，气隙磁芯装PIN侧

4.Fix the magnetic core with iron clips after assembly;
组装完成后用铁夹固定磁芯;

5. The magnetic core is fixed with gray soft glue at the middle column,and the magnetic core is fixed with 6 black hard glue at the core and the core and the frame;
磁芯中柱点灰色软胶；磁芯与磁芯、磁芯与骨架处共点6点黑色的硬胶 固定.

6.Solder: Sn/Cu .焊料:锡/铜

7.Marking code:On the magnetic core on the top of the product, the word foot faces PIN3-4 side. The content of laser coding is shown in the figure above;
标签激光打码在产品顶部磁芯上，字脚朝PIN3-4 侧，内容如上图所示；

3.2 Dimensions (Unit: mm) 外形尺寸（单位:mm）

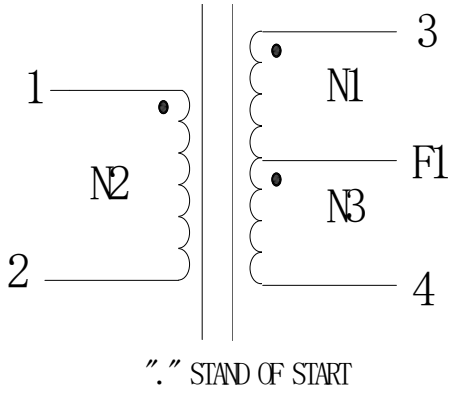
ITEM项目	A	B	B1	C	D	E	E1
Unit单位 (mm)	37.0	38.0	32.5	15.50	3.50	31.0	3.3
TOLERANCE 公差	MAX	MAX	MAX	MAX	±0.5	±0.5	±0.5
ITEM项目	**F**	**F1**	**G**	**G1**	**H**		
Unit单位 (mm)	33.5	6.0	SQ0.5/φ0.7	0.30	3.00	3.5	
TOLERANCE 公差	±0.5	±0.5	±0.1	0.3-0.6	TYP	MAX	

3.3 Appearance 外观

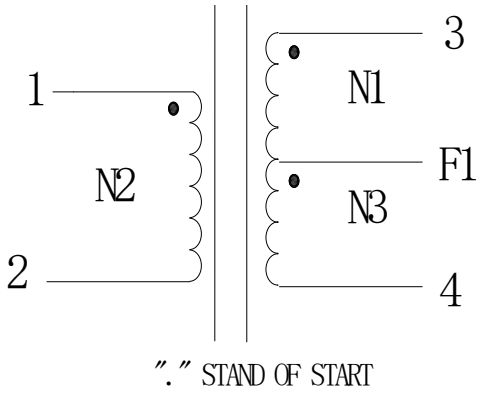
There is not the visual track and other mechanical damage on the product surface. Marking must be clearly and completely.
产品表面无视觉痕迹及其它机械损伤。 标签必须清晰完整。

Core and other parts assembly stably. mounting dimensions and the location of the terminals should be in accord with standard.
磁芯与其他部件装配稳定。 端子的安装尺寸和位置应符合标准。

4.Circuit diagram 电路图：



5.Winding construct 绕组结构图：



6. Winding Specification 绕组规格

NO.	MARGIN TAPE WIDTH 挡墙宽度		START & FINISH TERMINAL 起收脚位				WIRE SPECIFICATION 线材规格	WINGDING TURN 绕组匝数	METHOD 绕制方式	TAPE TURN 胶带圈数	NOTE 注意
	PIN SIDE 脚位侧	TOP SIDE 顶面	START 起脚	TUBE 套管	FINISH 收脚	TUBE 套定					
N1	/	/	3	/	F1	/	TIW-B Ø0.13*7P	6TS	DENSE（密绕）	2TS	
N2	/	/	1	/	2	/	T0.25mm*4mm 背胶铜箔	2TS	DENSE（密绕）	2TS	
N3	/	/	F1	/	4	/	TIW-B Ø0.13*7P	6TS	DENSE（密绕）	2TS	
N4											

NOTE:

1.During winding N1.N3 winding copper wire shall not be cut in the middle

绕线时N1.N3绕组铜线中间不剪断作业。

7. Electrical Characteristics 电气特性

TEST ITEM 测试项目	TEST FOOT POSITION 测试脚位	TEST SPECIFICATION 测试规格	TEST CONDITION 测试条件	Testing equipment 测试设备
INDUCTANCE 电感	Ls(1 -- 2)	3.5uH ±7%	100KHz ,0.1V内阻100Ω	TH2829 OR Equivalent
LEAKAGE INDUCTANCE 漏感	Lk3-4(短路PIN1-2)	2.5uH MAX	100KHz ,0.1V内阻100Ω	
DCR 直流电阻	R (1 -- 2）	4.0mΩ MAX.	@25℃	TH2512B Equivalent
	R (3 -- 4）	220.0mΩ MAX.	@25℃	
HI -POT 耐压	N1,N3 -- N2	No breakdown（无击穿）	AC 3750V 5mA 6Sec	TH9320 OR Equivalent
	N1,N2 -- CORE	No breakdown（无击穿）	AC 3750V 5mA 6Sec	
Insulation Resistance绝缘阻抗		100MΩ MIN	DC 500V	TH9320 OR Equivalent

Notes:1.Test Condition（测试条件）: 温度T=25±5℃，湿度RH=65%±20% 工作温度Operating Temperature: -40℃ to 125 ℃（Excluding self-temperature rise不包含自身温升）
2.Operating temperature rage（温度范围）:-40℃to+125℃
3.Life time at Twind（适用温度）=110℃ and Tcore（适用温度）=110℃:50000H Min

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8. Material List

NO. (序号)	ITEM（项目）	MATERIAL DESCRIPTION （材质）	TEMP. CLASS (耐温等级)	VENDER. (供应商)	UL FILE NO. (安规号)
1	BOBBIN	PM9630	150℃	SUMITOMO	E41429
		PM9823	150℃	SUMITOMO	E41429
2	Core PQ3415	KF9	NA	LIANFENG √	/
		DMR96A	NA	DMEGC	/
		BP96	NA	BAICI	/
3	Triple insulated wire	TIW-B	155℃	YUSHENG	E332529
		TIW-B	155℃	KAIZHONGHEDONG	E357240
4	TAPE	CT-280/PF-301	130℃/180℃	YAHUA	E165111
5	Copper foil	Cu	NA	SanPin	/
6	Clip	SK7	NA	JINJI	/
7	Solder	Sn Cu0.7	NA	WANSHAN	/
8	EPOXY	3300-ZH	90℃	EATTO	E253983
		E-500	130℃	DONGGUAN EATTO	E218090

9. Packaging Information包装信息: (Unit单位 :mm)

9.1 Storage and Manufacturer存储和制造商: :

9.1.1 Storage 存储: Recommended keeping conditions推荐存储条件: 温度 **-40℃~85℃, 相对湿度5~95%RH (Max.)**

Service life使用寿命 : Within the limits of twelve month from being produced.自生产之日起十二个月内。

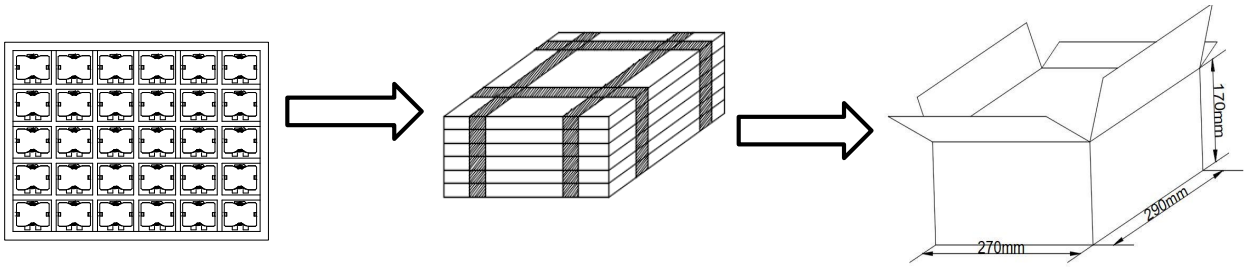
The appearance and solder ability should be check, If product is not in expiry date.如果产品不在有效期内，应检查其外观和可焊性。

9.1.2 Manufacturer: Jiangsu Sunlord Fujun New Energy Co., Ltd.江苏顺络富钧新能源有限公司

NO.333,Fumin Middle Road, Tan qiao Town,ZhangjiagangCity,JiangsuProvince江苏省张家港市塘桥镇富民中路333号

TEL: +86-0512-58900890 FAX: +86-0512-58900863

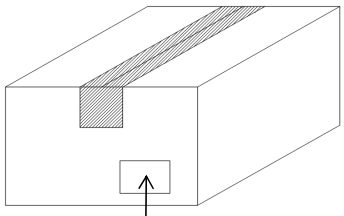
9.1.3 Packing：包装：



Per Blister disc30PCS

INNER BOX *6（180PCS)

OUTER BOX (180PCS)



LABEL

weight：

Single weight/PCS：60g±3g

gross weight/box：11.55Kg

net weight/box：11Kg

10. THERMAL PROFILE 焊接简要：

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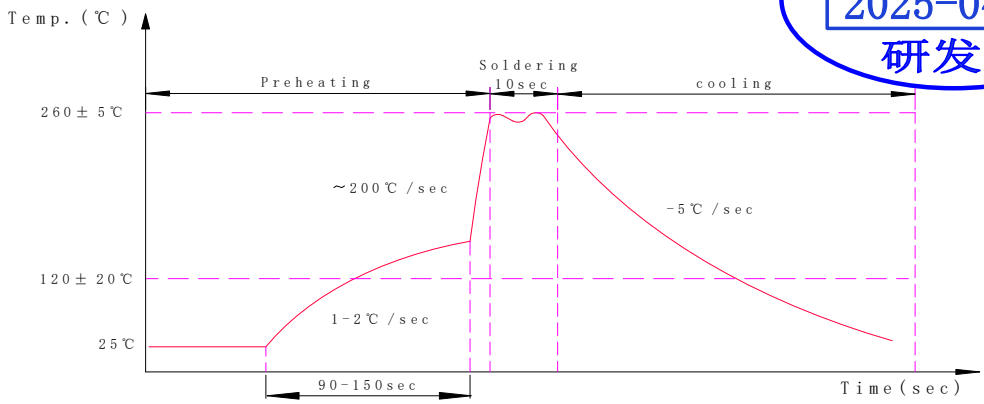
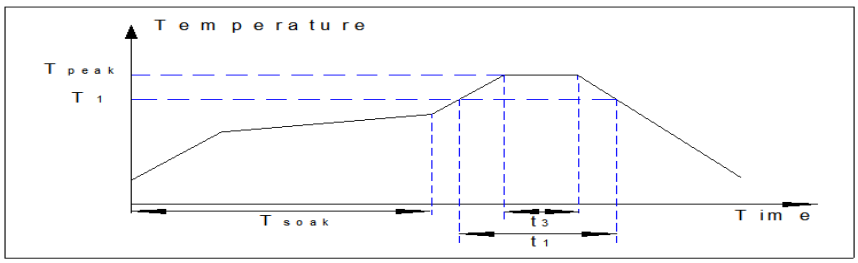
10.1 Wave flow soldering profile 波峰焊介绍：



Profile feature	Time	Temperature
Preheating time	90～150 sec	
Heating rate during preheat		1~2℃ / sec
Final preheat temperature		120± 20℃
Ramp-up rate		～200℃ / sec
Dip time and temperature	2.5～5 sec	260± 5℃
Ramp-down rate		～5℃ / sec

10.2 Reflow soldering profile 回流焊介绍：



Pb-free reflow profile requirements for soldering heat resistance			
Parameter	**Reference**	**Specification**	
		Large Body Thickness ≥2.5mm and Volume≥350mm³	**Small Body** Thickness ≥2.5mm and Volume <350mm³
Temperature gradient in preheating		3°C/s max.	
Soak time 150°C- 200°C	Tsoak	60 -180 seconds	
Time above 217°C (T1)	t1	60 - 150 seconds	
Time within 5°C of actual peak	t3	20 -40 seconds	
Peak temperature in reflow	Tpeak	245°C (+0/–5°C)	250°C (+0/–5°C)
Temperature gradient in cooling		6°C/second Max.	
Time 25 °C to Peak Temperature		8 minutes Max.	