

## 全球办事处 Global office

### 创益太阳能控股有限公司

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### Shenzhen Trony New Energy Tech. Co., Ltd.

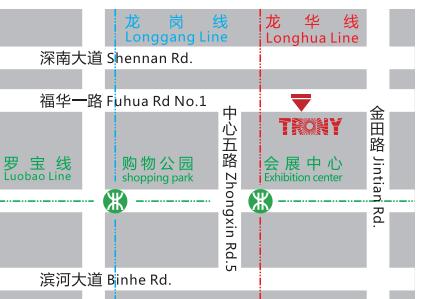
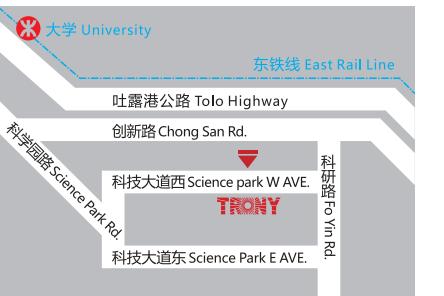
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## 生产基地与研发中心 Manufacture and R&D Center

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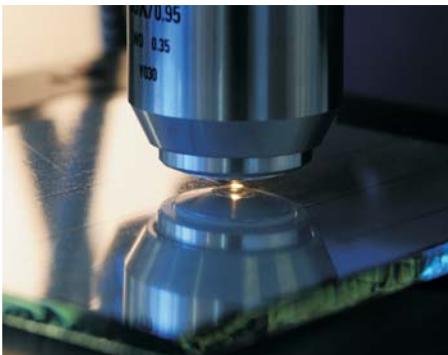
### Shenzhen Trony Solar Science and Technology Development Co., Ltd.

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# 嵌入式太阳能电池片手册

## Embedded Solar Cells Manual



# 关于创意

## ABOUT TRONY

创意太阳能控股有限公司（简称创意太阳能）是在香港上市（香港交易所上市编号：02468）的高新技术产业化的新能源公司，下设全资子公司：深圳市创意科技发展有限公司（简称创意科技）和深圳市创意新能源科技有限公司（简称创意新能源）。

创意科技，创建于1993年，是国内最大的非晶硅薄膜太阳能电池产品制造商和解决方案供应商之一，拥有第二代太阳能薄膜电池的生产和研发核心技术。公司通过ISO9001质量管理体系认证、ISO14000环境管理体系认证，拥有200多项国家专利技术，公司的不断创新和优化，使产品具备独特的核心竞争力。2010年5月公司被列入《广东省现代产业500强》中的战略产业100强的新能源企业名单，是国家住建部，科技部，深圳市科工贸和信息化委的太阳能产业示范基地。

创意科技是公司的产业基地，主要承担着研发，技术创新，产业化推进，在现有基础上采用产业扩展战略发展，与多家产业链企业建立合作。

位于深圳龙岗区的创意太阳能产业基地总工业建筑面积超过70000平方米，绿化面积将近25000平方米。产业园全部采用绿色节能设计，涵盖了太阳能发电系统、光伏玻璃幕墙、太阳能海水淡化系统等各种高新环保技术，是闻

Trony Solar Holdings Company Limited (referred to as **TRONY SOLAR**) (HKEx Stock Code: 02468) is the high-tech industrialization company listed in Hong Kong, it consists of 2 wholly-owned subsidiaries: Shenzhen Trony Solar Science and Technology Development Co., Ltd.(referred to as **TRONY TECH**) and Shenzhen Trony New Energy Tech. Co., Ltd.(referred to as **TRONY NEW ENERGY**).

**TRONY TECH**, founded in 1993, is one of the largest a-Si thin-film solar cell manufacturers and solution providers in China. It owns the latest second-generation thin film solar production and R & D core technologies. The company has passed the ISO9001 quality management system certification and ISO14000 environmental management system certification, products achieve unique core competitiveness through continued innovation and optimization. Up to now, the company has more than 200 national patents. In the list of Top 500 Modern Industries in Guangdong Province announced (May 2010), the company was selected as Top 100 New

名遐迩的绿色工厂。

创意新能源，成立于2010年，承担公司新能源产品的海内外营销，包括强弱光组件及太阳能离网应用产品销售，光伏系统及光热系统的工程设计，施工，光伏组件构件在安全幕墙工程的应用，光伏工程总承包，如：光伏电站，BIPV工程，光伏农业设施项目，以及创意太阳能资本运营拓展等新业务，是一家提供太阳能应用产品、技术支持服务和相关配套业务解决方案的现代化高科技新能源企业。从2011年以来，建成和正在实施的光伏电站和BIPV单项项目工程及光伏农业设施项目均超过10MW规模。

公司业务遍及大江南北，亚非欧美。光伏电站，离网照明系统，多种基片硅基薄膜组件及电子消费产品已经形成稳定市场，目前正在寻求合资，合作的长期投资项目。

创意太阳能将“以人才国际化为根本，以市场国际化为重点，以资本国际化为依托”，积极迎接市场挑战，全力以赴为客户提供有竞争力的太阳能光伏产品，光伏发电工程设计，解决方案和工程承揽，肩负起可持续发展、新能源开发的历史使命，为让太阳能走入千家万户、开创绿色环保生活方式作出应有的贡献。

创意太阳能总部和创意新能源位于深圳福田区CBD。

Enterprises to be supported by strategic plan of government. Also, it is awarded as a demonstration base of solar energy by MOHURD, MOST, Szsitic.

**TRONY TECH** is the company's industrial base, mainly responsible for the research and development of innovative technology and industrialization for the inventions. Base on the core, it helps the group to grow continuously through strategic development and cooperation with enterprises in the chain of solar industry.

Located in the Longgang District in Shenzhen, the **TRONY** industrial park of **TRONY TECH** has a floor area of more than 70,000 square meters and 25000 square meters of green area. with energy-saving green design, it was constructed with solar power systems, photovoltaic glass curtain walls, solar desalination systems and other high-tech environmental protection technologies.



**TRONY NEW ENERGY**, established in 2010, is responsible for the sales and marketing of new energy related products. In addition to embedded solar modules and solar off-grid application products, the company also providing services in the engineering design and construction of photovoltaic systems and solar-thermal systems. Projects include PV module application in safety curtain wall projects and EPC for PV power plant, BIPV, PV agricultural facilities. With the smart use of capital, **TRONY NEW ENERGY** helps the group to modernize the business model. It aims to build up a remarkable new energy enterprises specializing in the development of solar products, integrated solar solutions and technical servicing. From 2011, the completed and ongoing individual PV power plant, BIPV and PV agriculture projects has surpassed 10MW.

**TRONY NEW ENERGY**'s business is expanding throughout China, Asian, African and Western world. It has achieved a stable market share of photovoltaic power plant, off-grid lighting system, thin film silicon modules with a variety of substrates and consumer electronics products, and is currently seeking joint ventures and cooperative long-term investment projects.



TRONY will make use of international talent and capital to meet market challenges. It will go all out to provide customers with competitive solar PV products, PV power plant design and engineering solutions. The company is dedicated to improving the quality of life for its customers around the world by providing healthy, green and innovative clean energy solutions.

**TRONY SOLAR**'s headquarters and **TRONY NEW ENERGY** is located in CBD, Futian District, Shenzhen.

## 合作共赢

WIN-WIN COOPERATION

创益的非晶硅太阳能电池产品成功运用在交通、通信、石油、建筑、海上导航、钟表等方面，在国内、国际占有较大市场份额，并与许多著名国际大公司如佳能、卡西欧、西铁城、夏普、金宝等建立了长期友好合作关系。创益公司积极参加各种展会活动，与广大客户共同寻求共赢商机。

TRONY's products are successfully used in the transportation, telecommunications, petroleum, construction, maritime navigation, watches, etc. TRONY has great share in both domestic and international market, and established long-term friendly cooperative relationships with many famous international companies such as Canon, Casio, Citizen, Sharp, Kinpo, etc.. TRONY actively participates in various exhibitions to seek win-win opportunities with customers.

CASIO



SHARP

Canon 佳能

CITIZEN



三井木-G

AURORA

TRULY®

HITACHI  
Inspire the Next



新威  
SUNWAY

部分创益合作伙伴/Some Trony Partners



# 性能卓越

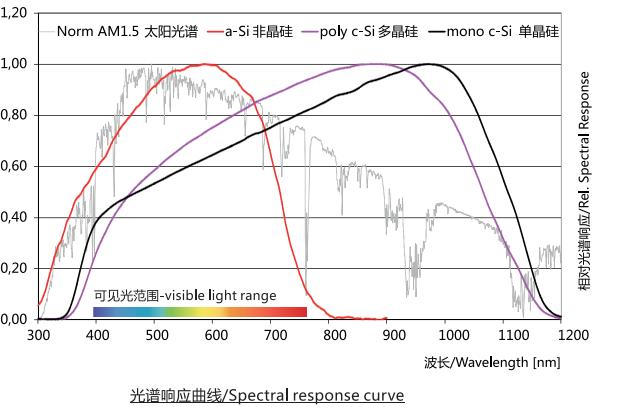
SUPERIOR PERFORMANCE

PHOTOVOLTAIC TECHNOLOGY  
FOR GREEN LIFE 光能科技 绿色生活

## 优秀的光环境适应能力/Excellent Lighting Environment Adaptability

创益嵌入式太阳能电池片分为户内和户外产品两大系列，采用自行研发的非晶硅电池生产工艺制造。非晶硅材料的吸收系数在整个可见光范围内，在实际使用中对低光强光有较好的适应。

TRONY's embedded solar cells are divided into two series of indoor and outdoor products, and are manufactured by self-developed production process of amorphous silicon solar cells. The absorption coefficient of the amorphous silicon material is in the entire visible range, the a-Si solar cells are better adapted to low & strong light in practical application.



## 稳定的高温发电性能/Stable High Temperature Output Performance

当太阳能电池片工作温度高于标准测试温度25°C时，其最佳输出功率会有所下降；由于非晶硅太阳能电池片的温度系数较小（约只有晶硅的一半），非晶硅太阳能电池片在高温工作环境下的发电功率下降比晶硅少得多，同样日照条件下，同等功率的非晶硅太阳能电池片可比晶体硅太阳能电池片发出更多的电量。

When the working temperature of the solar cells are higher than the standard test temperature 25 °C, their best output rate will decline. Because the temperature coefficient of the amorphous silicon cell is small (about half of the silicon crystal), the electricity generated from the s-Si solar cells decreased much less than the crystalline silicon in the high-temperature working environment . Amorphous silicon solar cells can output more electricity than crystalline silicon solar cells at the same rating under the same sunlight condition.



## 易于定制的电压和尺寸 Easy Voltage And Shapes Customization

创益嵌入式太阳能电池片可以按照实际电子产品需要灵活订制尺寸，形状以及电压。

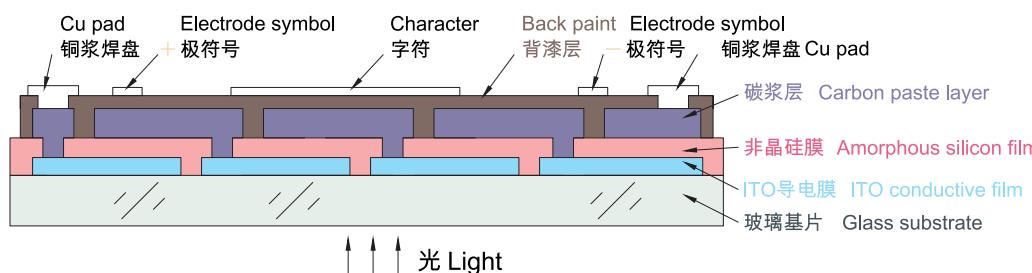
The shape and voltage of TRONY's embedded solar cells can be easily customized to meet actual electronic products' requirement.



不同形状的非晶硅太阳能电池片  
Different Shapes Of Different A-si Solar Cells



## 户内系列 INDOOR SERIES



[创意户内嵌入式太阳能电池片结构示意图/Trony indoor embedded solar cell structure diagram](#)

创意户内嵌入式太阳能电池片，是指在普通室内光线条件下(20-1000LUX照度)下即可以发电的光伏产品，一般用于在室内或光照强度不高的环境下使用的小型电子产品，例如计算器、电子手表、摇摆器、光电焊接面罩、电子体重计、电子温度计、电子速度计、汽车防盗器等。

TRONY indoor embedded solar cells are photovoltaic products capable of generating electricity under general indoor lighting conditions (20-1000LUX illuminance), they're generally applied for small electronic products used indoor or under low light intensity environment, such as calculators, electronic watches, swingers, photoelectric welding mask, electronic scales, electronic speedometer, car anti-theft device, etc.

### 户内嵌入式太阳能电池片

组件功率：0.001-0.5W

尺寸：见后页“创意户内嵌入式太阳能电池片参数表”

### Indoor Embedded solar cells

Module power: 0.001-0.5W

Size: see pages of "TRONY indoor solar cells specification"



户内嵌入式太阳能电池片的频谱响应曲线和人眼对光的视觉敏感曲线相似，其峰值响应所对应的光的波长约在570nm左右。特别适合在可见光，尤其是在荧光灯下工作。

The spectral response curve of indoor embedded solar cell is similar to the human eye spectral sensitivity curve, its peak response value is corresponding to the light wave length at around 600nm. It is particularly suitable to work under visible lighting condition, especially under fluorescent light.



创益户内嵌入式太阳能电池片参数表/TRONY indoor embedded solar cells specification

序号 No.	型号 Type No.	串接数 Section Qty.	尺寸 / Size ( W×L )mm	短流 ( uA) Isc TYP.	短流 ( uA) Isc MIN.	成品检验标准 / Product inspection standard			
						开压 ( V) Voc TYP.	开压 ( V) Voc MIN.	工压 ( V) Vop TYP.	工压 ( V) Vop MIN.
1	SC0330I	9	3.4×30.0	1.1	1.0	4.5	4.05	3.4	2.9
2	SC0332I	5	2.5×22.0	1.1	0.9	2.5	2.25	1.9	1.6
3	SC0339I	6	3.1×38.7	2.0	1.7	3.0	2.7	2.3	2.0
4	SC0404I	1	4.0×4.0	1.6	1.4	0.5	0.45	0.4	0.3
5	SC0415I	5	3.54×14.94	1.1	0.9	2.5	2.25	1.9	1.6
6	SC0420I	7	3.7×19.8	1.0	0.9	3.5	3.15	2.6	2.3
7	SC0434I	7	4.1×33.6	2.0	1.7	3.5	3.15	2.6	2.3
8	SC0455I	8	3.5×55.0	2.7	2.0	4.0	3.6	3.0	2.6
9	SC0505IDS*	3	5×5	0.8	0.7	1.5	1.35	1.1	1.0
10	SC0534I	7	5.0×33.6	2.4	2.0	3.5	3.15	2.6	2.3
11	SC0539I	7	4.9×38.7	2.8	2.3	3.5	3.15	2.6	2.3
12	SC0540I	9	5.0×40.0	2.1	1.7	4.5	4.05	3.4	2.9
13	SC0540I-1	9	4.5×39	2.0	1.7	4.5	4.05	3.4	2.9
14	SC0550I	7	5.0×50.0	3.9	3.3	3.5	3.15	2.6	2.3
15	SC0555I	7	5.0×55	4.5	3.3	3.5	3.15	2.6	2.3
16	SC0555I-1	9	4.4×54.4	3.0	2.3	4.5	4.05	3.4	2.9
17	SC0555I-9	9	4.5×54.6	2.7	2.3	4.5	4.05	3.4	2.9
18	SC0606I	1	5.9×5.9	3.5	3.0	0.5	0.45	0.4	0.3
19	SC0610I-3-4	3	6.0×10.0	0.1	1.7	1.5	1.35	1.1	1.0
20	SC0616I	4	6.4×16.0	1.9	1.6	2.0	1.8	1.5	1.3
21	SC0625I	3	6.4×24.5	5.8	4.4	1.5	1.35	1.1	1.0
22	SC0630I	4	6.3×30.3	4.8	4.1	2.0	1.8	1.5	1.3
23	SC0718I	4	6.8×18.0	3.1	2.6	2.0	1.8	1.5	1.3
24	SC0718I01	4	6.9×17.9	2.7	2.3	2.0	1.8	1.5	1.3
25	SC0722I	4	7.0×22.10	3.9	3.3	2.0	1.8	1.5	1.3
26	SC0722I01	4	6.8×22.0	3.9	3.2	2.0	1.8	1.5	1.3
27	SC0725I	8	6.2×24.6	1.4	1.2	4.0	3.6	3.0	2.6
28	SC0725I-8	8	6.0×25.0	1.9	1.6	4.0	3.6	3.0	2.6
29	SC0736I	8	6.9×35.9	3.5	2.6	4.0	3.6	3.0	2.6
30	SC0808I	4	8×8	0.9	0.7	2.0	1.8	1.5	1.3
31	SC0832I	8	7.4×31.1	2.9	2.4	4.0	3.6	3.0	2.6
32	SC0840I	4	8.0×39.8	10.0	7.5	2.0	1.8	1.5	1.3
33	SC0914I	1	8.8×13.9	14.0	10.4	0.5	0.45	0.4	0.3
34	SC0920I	5	8.9×19.9	4.0	3.0	2.5	2.25	1.9	1.6
35	SC0921I	2	8.5×20.5	8.7	7.4	1.0	0.9	0.8	0.7
36	SC0925I	4	8.9×24.9	5.5	4.7	2.0	1.8	1.5	1.3
37	SC0960I	10	9.0×60.0	6.5	4.6	5.0	4.5	3.8	3.3
38	SC0962I-8L	8	9.0×62.0	7.8	5.9	4.0	3.6	3.0	2.6
39	SC1010I01	2	9.9×9.9	4.9	4.2	1.0	0.9	0.8	0.7
40	SC1010I02	3	9.9×9.9	2.3	2.0	1.5	1.35	1.1	1.0

创益户内嵌入式太阳能电池片参数表/TRONY indoor embedded solar cells specification

序号 No.	型号 Type No.	串接数 Section Qty.	尺寸 / Size ( W×L )mm	短流 ( uA) Isc TYP.	短流 ( uA) Isc MIN.	成品检验标准 / Product inspection standard			
						开压 ( V) Voc TYP.	开压 ( V) Voc MIN.	工压 ( V) Vop TYP.	工压 ( V) Vop MIN.
41	SC1025I	4	10.0×25.0	6.3	5.3	2.0	1.8	1.5	1.3
42	SC1025I*	4	9.7×24.7	6.0	5.1	2.0	1.8	1.5	1.3
43	SC1025I*-1	4	9.7×24.7	6.0	5.1	2.0	1.8	1.5	1.3
44	SC1025I-2	2	9.8×24.8	13.4	10.3	1.0	0.9	0.8	0.7
45	SC1025I-8	8	9.7×24.8	2.5	2.1	4.0	3.6	3.0	2.6
46	SC1025IDS	4	8.8×24.7	5.4	4.4	2.0	1.8	1.5	1.3
47	SC1025IDS*	4	8.6×24.5	5.4	4.4	2.0	1.8	1.5	1.3
48	SC1025IDS-1	4	8.7×24.9	5.4	4.4	2.0	1.8	1.5	1.3
49	SC1025IDS-2	4	8.8×24.7	5.4	4.4	2.0	1.8	1.5	1.3
50	SC1025IDS-3	4	8.8×24.7	5.4	4.4	2.0	1.8	1.5	1.3
51	SC1028I	10	9.9×27.9	2.8	2.3	5.0	4.5	3.8	3.3
52	SC1028I-4	4	9.9×27.9	8.0	6.2	2.0	1.8	1.5	1.3
53	SC1029I	4	10.0×29.0	8.4	6.2	2.0	1.8	1.5	1.3
54	SC1031I-3	3	10×30.8	11.8	8.7	1.5	1.35	1.1	1.0
55	SC1031I-4	4	10.0×30.8	8.4	6.5	2.0	1.8	1.5	1.3
56	SC1031I-7	7	10.0×30.8	3.8	3.3	3.5	3.15	2.6	2.3
57	SC1032I	8	10.0×32.6	5.0	4.2	4.0	3.6	3.0	2.6
58	SC1035I	10	10.0×35.0	3.3	2.8	5.0	4.5	3.8	3.3
59	SC1038I	4	9.9×37.9	11.0	8.6	2.0	1.8	1.5	1.3
60	SC1042I	3	10.1×41.5	18.5	12.9	1.5	1.35	1.1	1.0
61	SC1050I	11	9.9×49.9	4.7	3.8	5.5	4.95	4.1	3.6
62	SC1050I-4	4	9.9×49.9	15.3	11.5	2.0	1.8	1.5	1.3
63	SC1050I-8	8	9.9×49.9	6.8	5.2	4.0	3.6	3.0	2.6
64	SC1055I	9	10.0×55.0	7.2	5.5	4.5	4.05	3.4	2.9
65	SC1067I	8	9.9×66.9	10.3	7.8	4.0	3.6	3.0	2.6
66	SC1069I	10	15.9×89.9	14.3	12.1	5.0	4.5	3.8	3.3
67	SC1090I	12	9.8×89.5	8.8	6.8	6.0	5.4	4.5	3.9
68	SC1090I-11	11	10.0×90.0	10.0	8.0	5.5	4.95	4.1	3.6
69	SC1129I	4	10.4×28.4	9.0	7.0	2.0	1.8	1.5	1.3
70	SC1129IS	4	11.8×29.6	9.2	7.4	2.0	1.8	1.5	1.3
71	SC1130I	4	11.5×29.4	9.8	7.9	2.0	1.8	1.5	1.3
72	SC1132I	4	10.8×31.4	9.1	7.2	2.0	1.8	1.5	1.3
73	SC1132I	7	10.8×31.4	4.8	4.1	3.5	3.15	2.6	2.3
74	SC1139I	3	11×39	16.6	12.2	1.5	1.35	1.1	1.0
75	SC1139I-4	4	11×39	11.6	9.1	2.0	1.8	1.5	1.3
76	SC1143I-2	2	10.2×42.3	28.8	22.0	1.0	0.9	0.8	0.7
77	SC1143I-3	3	10.2×42.3	18.2	14.3	1.5	1.35	1.1	1.0
78	SC1144I-9	9	11×44	5.4	4.6	4.5	4.05	3.4	2.9
79	SC1155I	4	11×55	18.3	13.9	2.0	1.8	1.5	1.3
80	SC1172I	16	10.6×72.1	4.8	4.1	8.0	7.2	6.0	5.2

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序号 No.	型号 Type No.	串接数 Section Qty.	尺寸 / Size ( W×L )mm	短流 ( uA) Isc TYP.	短流 ( uA) Isc MIN.	成品检验标准 / Product inspection standard			
						开压 ( V) Voc TYP.	开压 ( V) Voc MIN.	工压 ( V) Vop TYP.	工压 ( V) Vop MIN.
81	SC1220I	4	11.9×19.9	5.9	5.0	2.0	1.8	1.5	1.3
82	SC1230I	4	11.8×29.6	9.2	7.4	2.0	1.8	1.5	1.3
83	SC1230I*	4	11.5×29.4	9.4	7.6	2.0	1.8	1.5	1.3
84	SC1230I*-4	4	11.5×29.4	9.3	7.5	2.0	1.8	1.5	1.3
85	SC1230I-2	2	11.9×29.9	23.3	18.0	1.0	0.9	0.8	0.7
86	SC1230IDS	4	10.0×29.6	7.7	6.5	2.0	1.8	1.5	1.3
87	SC1230IDS*	4	9.7×29.1	7.1	6.0	2.0	1.8	1.5	1.3
88	SC1230IDS*-1	4	9.7×29.4	7.4	6.2	2.0	1.8	1.5	1.3
89	SC1230IDS*-2	4	9.7×29.1	7.9	6.5	2.0	1.8	1.5	1.3
90	SC1230IDS*-3	4	9.8×29.6	7.3	6.2	2.0	1.8	1.5	1.3
91	SC1230IDS-4	4	9.6×29.3	7.7	6.4	2.0	1.8	1.5	1.3
92	SC1239I-3	3	11.16×38.6	17.6	13.2	1.5	1.35	1.1	1.0
93	SC1242I-3	3	11.69×41.87	20.1	15.8	1.5	1.35	1.1	1.0
94	SC1246I-2	2	12.0×46.0	33.0	26.0	1.0	0.9	0.8	0.7
95	SC1246I-3	3	12.6×46.7	24.3	18.0	1.5	1.35	1.1	1.0
96	SC1249I-3	3	11.8×48.4	23.9	17.8	1.5	1.35	1.1	1.0
97	SC1314I	1	13.0×14.0	20.6	16.8	0.5	0.45	0.4	0.3
98	SC1329I	7	13.2×29.2	5.5	4.7	3.5	3.15	2.6	2.3
99	SC1334I	6	13.1×33.6	7.3	5.8	3.0	2.7	2.3	2.0
100	SC1335-5IS	5	13.5×34.9	9.7	8.0	2.5	2.25	1.9	1.6
101	SC1335I	4	12.7×34.9	14.5	10.8	2.0	1.8	1.5	1.3
102	SC1335I-2	8	13×35	5.7	3.9	4.0	3.6	3.0	2.6
103	SC1335I-3	8	12.8×35	6.0	4.8	4.0	3.6	3.0	2.6
104	SC1335I-3	8	12.8×35	6.0	4.8	4.0	3.6	3.0	2.6
105	SC1338I	4	12.4×37.8	12.6	10.0	2.0	1.8	1.5	1.3
106	SC1338I-3	3	12.5×38.0	20.0	14.9	1.5	1.35	1.1	1.0
107	SC1338I-4	4	12.4×37.8	13.5	10.8	2.0	1.8	1.5	1.3
108	SC1338IS	4	12.6×38	15.0	11.2	2.0	1.8	1.5	1.3
109	SC1338IS-1	4	12.4×38	13.8	10.0	2.0	1.8	1.5	1.3
110	SC1345I-3	3	12.6×44.7	23.0	18.0	1.5	1.35	1.1	1.0
111	SC1346I-9L	9	13×46	7.3	5.6	4.5	4.05	3.4	2.9
112	SC1380I	4	12.3×79.8	31.6	27.3	2.0	1.8	1.5	1.3
113	SC1380I	4	13.0×80.0	35.3	29.8	2.0	1.8	1.5	1.3
114	SC1396I-4	4	12.5×96.0	40.0	33.0	2.0	1.8	1.5	1.3
115	SC1418I	8	13.5×19.7	3.3	2.4	4.0	3.6	3.0	2.6
116	SC1425I	4	13.9×24.9	10.8	8.9	2.0	1.8	1.5	1.3
117	SC1435I	4	13.5×34.9	13.2	10.4	2.0	1.8	1.5	1.3
118	SC1435I01	7	13.5×34.9	6.7	5.7	3.5	3.15	2.6	2.3
119	SC1435I02	5	13.5×34.9	11.3	9.2	2.5	2.25	1.9	1.6
120	SC1435I-1	4	13.5×34.9	12.2	10.0	2.0	1.8	1.5	1.3

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						开压 ( V) Voc TYP.	开压 ( V) Voc MIN.	工压 ( V) Vop TYP.	工压 ( V) Vop MIN.
121	SC1435I-2	2	13.5×34.9	30.0	24.0	1.0	0.9	0.8	0.7
122	SC1435IS	4	13.8×35	14.3	11.4	2.0	1.8	1.5	1.3
123	SC1449I	4	14×48.5	21.8	16.9	2.0	1.8	1.5	1.3
124	SC1453I	4	13.6×52.8	22.7	17.4	2.0	1.8	1.5	1.3
125	SC1453I-1	5	13.6×52.8	17.2	14.1	2.5	2.25	1.9	1.6
126	SC1455I	5	13.3×54.8	16.7	13.4	2.5	2.25	1.9	1.6
127	SC1455I01	6	13.9×54.9	15.7	11.8	3.0	2.7	2.3	2.0
128	SC1455I-11	5	13.3×54.8	14.6	12.4	2.5	2.25	1.9	1.6
129	SC1455I4	4	13.3×54.8	22.5	17.5	2.0	1.8	1.5	1.3
130	SC1455I8	8	13.3×54.9	10.6	8.6	4.0	3.6	3.0	2.6
131	SC1485I	4	13.4×84	39.1	32.8	2.0	1.8	1.5	1.3
132	SC15110I	4	14.4×110	56.2	44.9	2.0	1.8	1.5	1.3
133	SC1519I	10	14.9×18.4	2.7	1.9	5.0	4.5	3.8	3.3
134	SC1520I	6	15×19.5	4.9	4.1	3.0	2.7	2.3	2.0
135	SC1520I-3	3	15×19.5	10.7	8.6	1.5	1.35	1.1	1.0
136	SC1520I-8	8	15×19.5	3.7	3.1	4.0	3.6	3.0	2.6
137	SC1530I	8	14.8×29.8	6.2	4.7	4.0	3.6	3.0	2.6
138	SC1535I	4	15.7×35.0	15.4	11.7	2.0	1.8	1.5	1.3
139	SC15385I	10	14.6×385	84.0	72.0	5.0	4.5	3.8	3.3
140	SC1538I	12	15.0×38.0	4.0	3.6	6.0	5.4	4.5	3.9
141	SC1540I-7	7	15.0×40.0	8.9	7.3	3.5	3.15	2.6	2.3
142	SC1555I0	8	14.9×54.9	11.8	9.2	4.0	3.6	3.0	2.6
143	SC1556I-4	4	15×56	24.3	19.6	2.0	1.8	1.5	1.3
144	SC1572I	12	15×72	10.7	8.8	6.0	5.4	4.5	3.9
145	SC1590I-10	10	15.0×90.0	16.5	12.9	5.0	4.5	3.8	3.3
146	SC16103I	16	15.4×102.9	10.8	8.9	8.0	7.2	6.0	5.2
147	SC1658I	4	16.5×58.4	29.2	24.1	2.0	1.8	1.5	1.3
148	SC1727I	4	16.5×26.6	11.8	9.7	2.0	1.8	1.5	1.3
149	SC1730I	7	17.0×30.0	7.3	6.2	3.5	3.15	2.6	2.3
150	SC175130I	14	17.5×130	120.7	102.6	7.0	6.3	5.3	4.6
151	SC1787I-14	14	16.8×87.0	11.7	9.8	7.0	6.3	5.3	4.6
152	SC18100I	14	17.9×99.9	16.0	12.8	7.0	6.3	5.3	4.6
153	SC18124I-9L	9	18×124	32.5	26.6	4.5	4.05	3.4	2.9
154	SC18162I-9L	9	17.8×162.1	37.4	32.3	4.5	4.05	3.4	2.9
155	SC18174I-9L	9	18×174	46.0	39.0	4.5	4.05	3.4	2.9
156	SC1848I	8	17.7×47.8	11.6	9.5	4.0	3.6	3.0	2.6
157	SC1883I	6	18.1×82.9	31.0	26.2	3.0	2.7	2.3	2.0
158	SC1883I-8	8	18.1×82.9	23.2	17.9	4.0	3.6	3.0	2.6
159	SC19155I-10	10	19.0×155.0	40.0	33.5	5.0	4.5	3.8	3.3
160	SC1939I	6	19×39	12.4	10.5	3.0	2.7	2.3	2.0

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						开压 ( V) Voc TYP.	开压 ( V) Voc MIN.	工压 ( V) Vop TYP.	工压 ( V) Vop MIN.
161	SC20100I	14	19.9×99.9	16.3	13.1	7.0	6.3	5.3	4.6
162	SC20103I-14	14	20×102.8	16.0	12.8	7.0	6.3	5.3	4.6
163	SC20110I	4	20×110	71.0	62.0	2.0	1.8	1.5	1.3
164	SC20120I	20	20×120	14.3	11.8	10.0	9	7.5	6.5
165	SC20130I	5	20×130	84.0	70.0	2.5	2.25	1.9	1.6
166	SC20131I	3	20×131	113.0	95.0	1.5	1.35	1.1	1.0
167	SC20131I-4	4	20×131	82.0	69.0	2.0	1.8	1.5	1.3
168	SC2025I	8	20×25	6.6	5.3	4.0	3.6	3.0	2.6
169	SC2025I*	8	20×25	6.6	5.3	4.0	3.6	3.0	2.6
170	SC20301I0	10	19.9×29.9	6.0	5.1	5.0	4.5	3.8	3.3
171	SC20301I9	9	19.9×29.9	6.6	5.3	4.5	4.05	3.4	2.9
172	SC2040I	1	20.0×40.0	101.0	82.1	0.5	0.45	0.4	0.3
173	SC2048I-10L	10	20.0×48.0	10.0	8.2	5.0	4.5	3.8	3.3
174	SC2050I	8	20×50	15.4	10.6	4.0	3.6	3.0	2.6
175	SC2050I-1	8	20×50	12.5	10.6	4.0	3.6	3.0	2.6
176	SC2050I-8L	8	20×50	15.4	10.6	4.0	3.6	3.0	2.6
177	SC2055I00	8	19.9×54.9	16.4	11.6	4.0	3.6	3.0	2.6
178	SC2055I-2	2	19.9×54.9	73.0	61.8	1.0	0.9	0.8	0.7
179	SC2055I-3	3	19.9×54.9	47.7	40.3	1.5	1.35	1.1	1.0
180	SC2055I4	4	19.9×54.9	36.2	31.4	2.0	1.8	1.5	1.3
181	SC2096I	4	20×96	68.8	59.0	2.0	1.8	1.5	1.3
182	SC21106I-15	15	20.3×105.3	16.4	12.9	7.5	6.75	5.6	4.9
183	SC22100I-14L	14	22.0×100.0	18.6	14.5	7.0	6.3	5.3	4.6
184	SC2237	9	37×21.8	9.2	6.8	4.5	4.05	3.4	2.9
185	SC2237I	8	21.8×37.0	11.6	9.4	4.0	3.6	3.0	2.6
186	SC2237I-9L	9	21.8×37.0	9.0	7.6	4.5	4.05	3.4	2.9
187	SC2240I	7	22×40	12.6	10.7	3.5	3.15	2.6	2.3
188	SC2253I-8L	8	21.8×53.0	17.1	14.0	4.0	3.6	3.0	2.6
189	SC2254I-9L	9	22.0×54.0	14.3	11.2	4.5	4.05	3.4	2.9
190	SC2275I-9	9	22.0×75.0	21.1	16.4	4.5	4.05	3.4	2.9
191	SC2280I	8	21.8×79.8	26.6	21.3	4.0	3.6	3.0	2.6
192	SC23123I-4	4	22.8×122.8	93.5	80.0	2.0	1.8	1.5	1.3
193	SC2364I-7	7	23×64	25.6	20.4	3.5	3.15	2.6	2.3
194	SC2424I-8	8	24.0×24.0	7.2	5.8	4.0	3.6	3.0	2.6
195	SC2427I	10	26.3×23.3	6.1	5.2	5.0	4.5	3.8	3.3
196	SC2431I00	8	23.9×30.9	9.2	7.8	4.0	3.6	3.0	2.6
197	SC25100I	13	24.9×99.9	22.5	17.6	6.5	5.85	4.9	4.2
198	SC25100I01	16	24.9×99.9	18.6	14.9	8.0	7.2	6.0	5.2
199	SC25111I	13	24.9×110.9	27.2	23.1	6.5	5.85	4.9	4.2
200	SC2545I	1	25×45	160.0	130.0	0.5	0.45	0.4	0.3

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						开压 ( V) Voc TYP.	开压 ( V) Voc MIN.	工压 ( V) Vop TYP.	工压 ( V) Vop MIN.
201	SC2553I00	4	24.8×52.8	45.9	38.4	2.0	1.8	1.5	1.3
202	SC2553I-1	9	24.8×52.8	17.2	14.1	4.5	4.05	3.4	2.9
203	SC2557I	22	25.0×57.0	6.6	5.5	11.0	9.9	8.3	7.2
204	SC2575I-13	13	25.0×75.0	16.7	13.8	6.5	5.85	4.9	4.2
205	SC2592I	16	24.9×91.9	16.0	13.0	8.0	7.2	6.0	5.2
206	SC2592I01	22	24.9×91.9	11.1	9.2	11.0	9.9	8.3	7.2
207	SC26101I	10	25.7×100.7	33.2	27.4	5.0	4.5	3.8	3.3
208	SC26101I	13	25.7×100.7	23.7	18.4	6.5	5.85	4.9	4.2
209	SC26101I01	18	25.7×100.7	17.4	13.6	9.0	8.1	6.8	5.9
210	SC2639I	9	25.4×38.4	11.0	9.2	4.5	4.05	3.4	2.9
211	SC2642I	4	26.0×41.2	34.3	29.1	2.0	1.8	1.5	1.3
212	SC2642I01	8	26.0×41.2	16.6	14.1	4.0	3.6	3.0	2.6
213	SC2643I	9	26.1×43.1	13.5	10.6	4.5	4.05	3.4	2.9
214	SC2650I-3	3	26.0×50.0	54.1	47.3	1.5	1.35	1.1	1.0
215	SC2727I-8	8	27×27	9.1	7.7	4.0	3.6	3.0	2.6
216	SC2727I-9	9	27×27	8.1	6.9	4.5	4.05	3.4	2.9
217	SC2742I	4	26.1×41.2	33.0	27.5	2.0	1.8	1.5	1.3
218	SC2754I-9L	9	27.0×54.0	17.5	14.2	4.5	4.05	3.4	2.9
219	SC2755I	5	26×54.8	28.5	24.2	2.5	2.25	1.9	1.6
220	SC2757I-9	9	26.5×57.0	18.8	14.9	4.5	4.05	3.4	2.9
221	SC2799I	10	26.5×99.0	34.1	27.2	5.0	4.5	3.8	3.3
222	SC28100I	8	28.0×100.0	44.3	37.9	4.0	3.6	3.0	2.6
223	SC28108I	14	28.1×107.8	21.6	18.4	7.0	6.3	5.3	4.6
224	SC28108I01	17	28.1×107.8	17.8	15.1	8.5	7.65	6.4	5.5
225	SC28130I	5	28×130	97.5	80.0	2.5	2.25	1.9	1.6
226	SC28130I-3	3	28×130	171.0	145.2	1.5	1.35	1.1	1.0
227	SC28130I-4	4	28×130	110.0	85.0	2.0	1.8	1.5	1.3
228	SC28130I-6	6	28×130	73.1	61.2	3.0	2.7	2.3	2.0
229	SC28130I-7	7	28×130	63.0	52.0	3.5	3.15	2.6	2.3
230	SC2855I	5	27.1×55	42.9	36.8	2.5	2.25	1.9	1.6
231	SC2855I-2	2	27.1×55	113.0	92.0	1.0	0.9	0.8	0.7
232	SC2855I4	4	27.7×54.9	50.0	42.3	2.0	1.8	1.5	1.3
233	SC2872I	16	27.9×72.35	14.8	11.5	8.0	7.2	6.0	5.2
234	SC2929I8	8	28.8×28.8	10.4	8.8	4.0	3.6	3.0	2.6
235	SC29406I	16	29×406	73.6	62.5	8.0	7.2	6.0	5.2
236	SC2961I-8	8	28.5×61.0	25.6	21.0	4.0	3.6	3.0	2.6
237	SC3050I	6	29.5×49.5	30.0	25.5	3.0	2.7	2.3	2.0
238	SC3070I-7	7	30.0×70.0	35.5	29.4	3.5	3.15	2.6	2.3
239	SC32110I-4	4	31.5×110	121.0	99.2	2.0	1.8	1.5	1.3
240	SC33146I	20	32.9×145.9	28.2	22.1	10.0	9	7.5	6.5

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						开压 ( V ) Voc TYP.	开压 ( V ) Voc MIN.	工压 ( V ) Vop TYP.	工压 ( V ) Vop MIN.
241	SC3367I-9L	9	32.5×66.5	32.1	27.6	4.5	4.05	3.4	2.9
242	SC3470I	4	34×70	86.4	70.2	2.0	1.8	1.5	1.3
243	SC3470I-2	2	34×70	187.0	130.0	1.0	0.9	0.8	0.7
244	SC35100I-9L	9	35.0×100.0	50.1	41.2	4.5	4.05	3.4	2.9
245	SC36120I-8	8	36×120	72.0	58.0	4.0	3.6	3.0	2.6
246	SC3726I-8	8	36.5×26	12.4	10.1	4.0	3.6	3.0	2.6
247	SC3726I-8-1	8	36.5×26.0	12.4	10.1	4.0	3.6	3.0	2.6
248	SC3733I-8L	8	37.0×33.0	15.3	13.0	4.0	3.6	3.0	2.6
249	SC3766I	4	37×66	61.1	51.9	2.0	1.8	1.5	1.3
250	SC3766I	8	37×66	43.5	35.2	4.0	3.6	3.0	2.6
251	SC38115I-9L	9	38×115	48.6	41.3	4.5	4.05	3.4	2.9
252	SC3886I-11	11	37.3×86.0	36.0	31.0	5.5	4.95	4.1	3.6
253	SC3950I	8	38.4×49.4	26.1	22.3	4.0	3.6	3.0	2.6
254	SC40100I-9L	9	40.0×100.0	58.0	50.1	4.5	4.05	3.4	2.9
255	SC4020I-9	9	40×19.7	8.8	7.4	4.5	4.05	3.4	2.9
256	SC4025I	10	39.8×24.8	9.9	8.4	5.0	4.5	3.8	3.3
257	SC4025I-9L	9	39.8×24.8	12.2	7.8	4.5	4.05	3.4	2.9
258	SC4045I-8	8	39.5×44.5	22.0	18.7	4.0	3.6	3.0	2.6
259	SC4142I	8	40.7×41.7	22.2	18.0	4.0	3.6	3.0	2.6
260	SC4151I	9	41×50.8	25.3	20.0	4.5	4.05	3.4	2.9
261	SC4155I	7	41.2×55.1	41.4	35.0	3.5	3.15	2.6	2.3
262	SC4155I-12L	12	41.2×55.1	15.5	14.0	6.0	5.4	4.5	3.9
263	SC42128I	5	42×128	146.0	120.0	2.5	2.25	1.9	1.6
264	SC4278I	8	42×78	52.0	44.0	4.0	3.6	3.0	2.6
265	SC4540I	9	44.5×39.5	25.8	20.9	4.5	4.05	3.4	2.9
266	SC4555I9	9	45.0×55.0	25.0	21.0	4.5	4.05	3.4	2.9
267	SC4747I	9	47×47	24.5	20.9	4.5	4.05	3.4	2.9
268	SC4751I-8	8	47×50.2	34.6	29.6	4.0	3.6	3.0	2.6
269	SC4795I-6	6	47×95	102.0	83.0	3.0	2.7	2.3	2.0
270	SC4858I	8	47.9×57.9	43.9	36.8	4.0	3.6	3.0	2.6
271	SC4861I-8	8	48.0×61.0	41.5	35.0	4.0	3.6	3.0	2.6
272	SC4959I	4	49.0×59.0	95.0	76.0	2.0	1.8	1.5	1.3
273	SC50242I-8	8	49.9×241.4	169.0	130.0	4.0	3.6	3.0	2.6
274	SC5050I-9L	9	49.6×49.6	28.4	23.2	4.5	4.05	3.4	2.9
275	SC5158I-9L	9	50.5×58.0	37.2	28.9	4.5	4.05	3.4	2.9
276	SC5276I	9	52×76	49.3	40.5	4.5	4.05	3.4	2.9
277	SC5277I	9	52×77.5	61.0	50.0	4.5	4.05	3.4	2.9
278	SC5277I01	9	52×77.5	61.0	50.0	4.5	4.05	3.4	2.9
279	SC5375I	8	53×75	55.5	47.6	4.0	3.6	3.0	2.6
280	SC5454I	4	54×54	77.2	63.0	2.0	1.8	1.5	1.3

创益户内嵌入式太阳能电池片参数表/TRONY indoor embedded solar cells specification

序号 No.	型号 Type No.	串接数 Section Qty.	尺寸 / Size ( W×L )mm	短流 ( uA) Isc TYP.	短流 ( uA) Isc MIN.	成品检验标准 / Product inspection standard			
						开压 ( V ) Voc TYP.	开压 ( V ) Voc MIN.	工压 ( V ) Vop TYP.	工压 ( V ) Vop MIN.
281	SC5454I-7	7	54.0×54.0	49.0	42.8	3.5	3.15	2.6	2.3
282	SC55100I-9L	9	55.0×100.0	61.1	51.9	4.5	4.05	3.4	2.9
283	SC5540I-8	8	55×40	29.5	23.4	4.0	3.6	3.0	2.6
284	SC5556I-5	5	54.8×55.5	72.9	61.7	2.5	2.25	1.9	1.6
285	SC5560I	9	55.1×60.1	48.7	42.3	4.5	4.05	3.4	2.9
286	SC5560I-8	8	55.1×60.1	50.2	43.0	4.0	3.6	3.0	2.6
287	SC5580I-9L	9	55×80	51.9	44.6	4.5	4.05	3.4	2.9
288	SC5649I	9	48.6×56.1	30.3	25.7	4.5	4.05	3.4	2.9
289	SC5649I-8	8	56×49	44.4	37.9	4.0	3.6	3.0	2.6
290	SC5832I-4	4	58×32	56.0	48.3	2.0	1.8	1.5	1.3
291	SC5839I	9	57.5×38.5	28.5	22.9	4.5	4.05	3.4	2.9
292	SC5848I	4	48.0×58.0	99.7	80.2	2.0	1.8	1.5	1.3
293	SC6076I	8	60×76	73.2	61.1	4.0	3.6	3.0	2.6
294	SC6076I	9	60×76	53.0	45.6	4.5	4.05	3.4	2.9
295	SC6148I-8	8	61.0×48.0	39.4	33.1	4.0	3.6	3.0	2.6
296	SC6174I-9	9	60.5×73.5	47.4	41.0	4.5	4.05	3.4	2.9
297	SC62172I	14	62×172	127.6	100.0	7.0	6.3	5.3	4.6
298	SC6565I	9	65×65	48.3	41.5	4.5	4.05	3.4	2.9
299	SC6565I-8	8	65×65	65.8	57.4	4.0	3.6	3.0	2.6
300	SC9482I	9	94×82	114.0	92.8	4.5	4.05	3.4	2.9
301	SCφ29I02	7	32×30	6.9	5.4	3.5	3.15	2.6	2.3
302	SCφ77-5	5	78×78	126.0	103.4	2.5	2.25	1.9	1.6
303	SCφ89-5	5	90×90	174.0	137.7	2.5	2.25	1.9	1.6

注 :

1、上表中尺寸公差是±0.1mm,标准厚度是1.1mm ,另有厚度为0.55mm、0.7mm、2.0mm的产品;

2、上表中各参数是在6000K日光灯光谱、照度为200LUX、温度为25℃的专用检测光源下检测获得;

3、上表所列型号太阳能电池片均为已定型型号，如客户有不同需求，均可另行定做;

4、以上参数仅供客户参考，如有修改，恕不另行通知。

Note :

1, Tolerance of the above table is ± 0.1mm, the standard thickness is 1.1mm, thickness of 0.55mm, 0.7mm, 2,0 mm are also available;

2, Each parameter in the table was obtained by testing with dedicated detection light source of 6000K fluorescent light spectrum, 200LUX in 25 °C temperature;

3, Solar cells listed in the above table are fixed, Trony can customized solar cells according to customer's different needs;

4, Above parameters are for customer reference and are subject to change without notice.



## 户外系列 ■ OUTDOOR SERIES

创益户外嵌入式太阳能电池片，是结合强光电池片工艺和弱光电池工艺研制出的专利产品，适用于室外小功耗用电器件的供电，特别适合在室外花园照明用的庭院灯、草坪灯上使用，为其提供环保的清洁能源。

TRONY outdoor embedded solar cells are patent products combining intense-light solar cell and low-light solar cell technology, they're suitable for outdoor power supply of small electric devices, and particularly suitable to provide environmentally friendly clean energy to outdoor garden lighting and lawn lamps .



### 户外嵌入式太阳能电池片

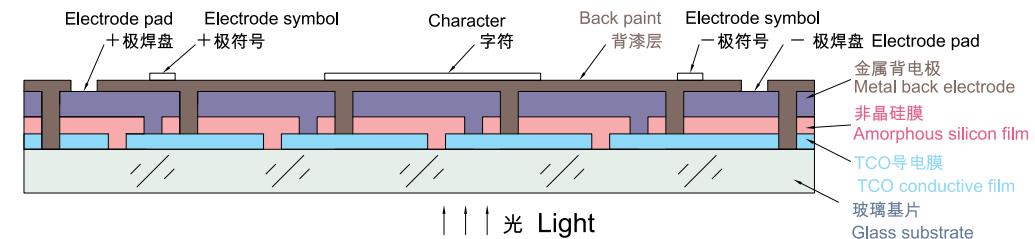
组件功率：0.01~2.0W

尺寸：见后页“创益户外嵌入式太阳能电池片参数表”

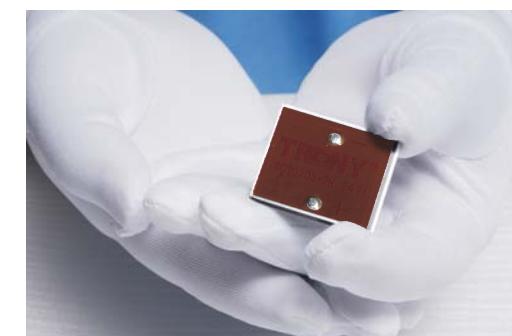
### Outdoor embedded solar cell

Module power: 0.01~2.0W

Size: see pages of “TRONY outdoor embedded solar cells data sheet”



创益户外嵌入式太阳能电池片结构示意图/Trony outdoor embedded solar cell structure diagram



与晶体硅庭院灯太阳能电池片相比较，非晶硅嵌入式太阳能电池片在弱光性能及温度效应方面具有显著的优势。非晶硅嵌入式太阳能电池片优良的弱光性能，足可取代庭院灯的开关控制回路中的光敏电阻，来控制庭院灯的亮灯/灭灯，从而节省了庭院灯的生产成本。

Amorphous silicon embedded solar cells have significant advantages in low-light performance and temperature effect over crystalline silicon solar cells for courtyard lamps. The excellent low-light performance of amorphous silicon solar cells makes it possible to replace photo-resistor in courtyard lamp switch control loop, thus save the production cost of the courtyard lamp.

创益户外嵌入式太阳能电池片参数表/TRONY outdoor embedded solar cells specification

序号 No.	型号 Type	节数 Section Qty.	尺寸/Size: (LxW)mm	尺寸公差 Tolerances (mm)	产品标准/Product Standard		
					Vop(V)	Iop(mA)	弱光性能/Voc(V)
1	SC2020S-3B	3	20.0*20.0	±0.4	1.8	≥ 10.0	≥ 0.3
2	SC2525S-3N	3	24.7*24.7	±0.4	1.8	≥ 10.0	≥ 0.3
3	SC2540S-2N	2	24.5*39.5	±0.5	1	≥ 22.0	≥ 0.3
4	SC2625S-3N	3	25.5*24.7	±0.4	1.8	≥ 11.0	≥ 0.3
5	SC2929S-4N	4	29.0*29.0	±0.5	2	≥ 11.0	≥ 0.3
6	SC3030S-3N	3	29.5*29.5	±0.4	1.8	≥ 15.0	≥ 0.3
7	SC3030S-3NA	3	29.8*29.8	0.4,-0.2	1.8	≥ 15.0	≥ 0.3
8	SC3030S-3NC	3	29.8*29.8	±0.4	1.8	≥ 15.0	≥ 0.3
9	SC3030S-3TA	3	29.8*29.8	±0.4	1.8	≥ 15.0	≥ 0.3
10	SC3030S-4N	4	29.5*29.5	±0.5	2	≥ 12.0	≥ 0.3
11	SC3030S-4NA	4	29.8*29.8	±0.5	2	≥ 12.0	≥ 0.3
12	SC3030S-6N	4	29.8*29.8	±0.5	2	≥ 12.0	≥ 0.3
13	SC3035S	4	29.5*34.5	±0.5	2	≥ 15.0	≥ 0.3
14	SC3060S-4N	4	29.5*59.5	±0.5	2	≥ 25.0	≥ 0.3
15	SC30100S-3N	3	29.8*99.8	±0.5	1.8	≥ 55.0	≥ 0.3
16	SC3124S-4N	4	30.5*23.5	±0.5	2	≥ 10.0	≥ 0.3
17	SC3225S-3N	3	31.5*24.5	±0.4	1.8	≥ 14.0	≥ 0.3
18	SC3333S-4N	4	32.5*32.5	±0.5	2	≥ 14.0	≥ 0.3
19	SC3434S-3N	3	33.9*33.9	0.4,-0.2	1.8	≥ 20.0	≥ 0.3
20	SC3434S-4N	4	33.9*33.9	±0.5	2	≥ 15.0	≥ 0.3
21	SC3523S-3N	3	34.7*22.7	0.4,-0.2	1.8	≥ 14.0	≥ 0.3
22	SC3535S-4N	4	34.5*34.5	±0.5	2	≥ 15.0	≥ 0.3
23	SC3535S-4NA	4	35.0*35.0	±0.4	2	≥ 15.0	≥ 0.3
24	SC3550S-4N	4	34.3*49.4	0.4,-0.2	2	≥ 20.0	≥ 0.3
25	SC3628S-4N	4	35.5*27.5	±0.5	2	≥ 14.0	≥ 0.3
26	SC3630S-4N	4	35.6*29.6	±0.4	2	≥ 13.0	≥ 0.3
27	SC3630S-4NA	4	35.6*29.6	±0.4	2	≥ 13.0	≥ 0.3
28	SC3636S-4N	4	35.5*35.5	±0.5	2	≥ 15.0	≥ 0.3
29	SC3636S-5N	4	35.3*35.3	±0.4	2	≥ 15.0	≥ 0.3
30	SC3725S-3N	3	37.0*25.2	±0.5	1.8	≥ 17.0	≥ 0.3
31	SC3730S-4N	4	37.0*30.0	±0.5	2	≥ 14.0	≥ 0.3
32	SC3737S-3N	3	36.5*36.5	±0.5	1.8	≥ 25.0	≥ 0.3
33	SC3737S-4N	4	36.8*36.8	±0.5	2	≥ 18.0	≥ 0.3
34	SC3737S-4NA	4	36.0*36.0	±0.5	2	≥ 15.0	≥ 0.3
35	SC3737S-4NB	4	36.0*36.0	±0.5	2	≥ 15.0	≥ 0.3
36	SC3830S-3N	3	37.8*29.8	±0.5	1.8	≥ 20.0	≥ 0.3

创益户外嵌入式太阳能电池片参数表/TRONY outdoor embedded solar cells specification

序号 No.	型号 Type	节数 Section Qty.	尺寸/Size: (LxW)mm	尺寸公差 Tolerances (mm)	产品标准/Product Standard		
					Vop(V)	Iop(mA)	弱光性能/Voc(V)
37	SC3837S-4N	4	38.0*37.0	±0.4	2	≥ 18.0	≥ 0.3
38	SC3838S-3N	3	37.6*37.6	±0.5	1.8	≥ 25.0	≥ 0.3
39	SC3839S-4N	4	37.8*38.7	±0.5	2	≥ 19.0	≥ 0.3
40	SC38167S-4N	4	38.0*167.0	±0.5	2	≥ 100.0	≥ 0.3
41	SC3939S-3NA	3	38.7*38.7	0.4,-0.2	1.8	≥ 25.0	≥ 0.3
42	SC3939S-3T	3	39.0*39.0	±0.5	1.8	≥ 25.0	≥ 0.3
43	SC3939S-3N	3	39.0*39.0	±0.4	1.8	≥ 25.0	≥ 0.3
44	SC3939S-4N	3	39.0*39.0	±0.4	1.8	≥ 25.0	≥ 0.3
45	SC3939S-4NA	4	38.7*38.7	±0.5	2	≥ 20.0	≥ 0.3
46	SC3939S-5N	4	39.0*39.0	±0.5	2	≥ 20.0	≥ 0.3
47	SC3978S-4N	4	39.1*77.6	0.4,-0.1	2	≥ 45.0	≥ 0.3
48	SC4015S-3N	3	39.1*15.0	0.4,-0.2	1.8	≥ 11.0	≥ 0.3
49	SC4018S-3N	3	39.6*17.6	0.4,-0.1	1.8	≥ 12.0	≥ 0.3
50	SC4030S-3N	3	39.9*29.9	0.4,-0.2	1.8	≥ 20.0	≥ 0.3
51	SC4030S-3T	3	39.8*29.8	0.4,-0.2	1.8	≥ 20.0	≥ 0.3
52	SC4030S-4	4	39.5*29.5	±0.5	2	≥ 15.0	≥ 0.3
53	SC4040S-3N	3	40.0*40.0	0.4,-0.2	1.8	≥ 25.0	≥ 0.3
54	SC4040S-3NA	3	39.8*39.8	0.4,-0.2	1.8	≥ 25.0	≥ 0.3
55	SC4040S-3NB	3	39.8*39.8	±0.5	1.8	≥ 25.0	≥ 0.3
56	SC4040S-4N	4	39.5*39.5	±0.5	2	≥ 23.0	≥ 0.3
57	SC4040S-4NA	4	39.5*39.5	±0.5	2	≥ 23.0	≥ 0.3
58	SC4040S-5N	4	39.9*39.9	±0.4	2	≥ 23.0	≥ 0.3
59	SC4040S-9N	9	39.5*39.5	±0.5	4.5	≥ 9.0	≥ 0.3
60	SC4060S-4N	4	39.5*59.5	±0.5	2	≥ 30.0	≥ 0.3
61	SC4125S-4N	4	41.0*25.0	±0.5	2	≥ 14.0	≥ 0.3
62	SC4126S-3N	3	40.6*25.4	0.4,-0.2	1.8	≥ 20.0	≥ 0.3
63	SC4136S-4N	4	40.4*36.0	±0.4	2	≥ 20.0	≥ 0.3
64	SC4147S	4	46.5*40.5	±0.5	2	≥ 20.0	≥ 0.3
65	SC4325S-3N	3	43.0*25.0	±0.5	1.8	≥ 18.0	≥ 0.3
66	SC4343S-4N	4	43.0*43.0	±0.5	2	≥ 30.0	≥ 0.3
67	SC4444S-3N	3	44.0*44.0	±0.4	1.8	≥ 40.0	≥ 0.3
68	SC4527S-9N	9	44.3*26.8	±0.5	4.5	≥ 7.0	≥ 0.3
69	SC4545S-3T	3	44.5*44.5	±0.5	1.8	≥ 35.0	≥ 0.3
70	SC4545S-4T	4	44.5*44.5	±0.5	2	≥ 30.0	≥ 0.3
71	SC4545S-3N	3	44.5*44.5	0.4,-0.2	1.8	≥ 35.0	≥ 0.3
72	SC4545S-4N	4	44.5*44.5	±0.5	2	≥ 30.0	≥ 0.3

创益户外嵌入式太阳能电池片参数表/TRONY outdoor embedded solar cells specification

序号 No.	型号 Type	节数 Section Qty.	尺寸/Size: (LxW)mm	尺寸公差 Tolerances (mm)	产品标准/Product Standard		
					Vop(V)	Iop(mA)	弱光性能/Voc(V)
73	SC4652S-4N	4	45.5*51.5	±0.5	2	≥ 25.0	≥ 0.3
74	SC4741S-3N	3	46.5*40.5	±0.5	1.8	≥ 30.0	≥ 0.3
75	SC4741S-3NA	3	46.9*40.9	0.4,-0.2	1.8	≥ 35.0	≥ 0.3
76	SC4747S-9N	9	46.8*46.8	±0.5	4.5	≥ 13.0	≥ 0.3
77	SC4747S-9NA	9	47.0*47.0	±0.5	4.5	≥ 12.0	≥ 0.3
78	SC4928S-9N	9	48.6*27.7	±0.5	5	≥ 8.0	≥ 0.3
79	SC5025S-4N	4	49.5*24.5	±0.5	2	≥ 15.0	≥ 0.3
80	SC5030S-4N	4	49.5*29.5	±0.5	2	≥ 22.0	≥ 0.3
81	SC5032S-3N	3	50.0*32.0	±0.4	1.8	≥ 27.0	≥ 0.3
82	SC5035S-4N	4	50.0*35.0	±0.5	2	≥ 20.0	≥ 0.3
83	SC5050S-3N	3	49.5*49.5	±0.5	1.8	≥ 45.0	≥ 0.3
84	SC5050S-3NA	3	49.8*49.8	0.4 , -0.2	1.8	≥ 45.0	≥ 0.3
85	SC5050S-4	4	49.5*49.5	±0.5	2	≥ 35.0	≥ 0.3
86	SC5050S-4N	4	49.5*49.5	±0.5	2	≥ 35.0	≥ 0.3
87	SC5050S-5N	4	49.8*49.8	±0.5	2	≥ 35.0	≥ 0.3
88	SC5060S	4	49.5*59.5	±0.5	2	≥ 45.0	≥ 0.3
89	SC5060S-4N	4	50.0*60.0	±0.4	2	≥ 45.0	≥ 0.3
90	SC5075S-4N	4	50.0*75.0	±0.5	2	≥ 50.0	≥ 0.3
91	SC5080S-4T	4	49.3*79.8	0.4,-0.2	2	≥ 65.0	≥ 0.3
92	SC5080S-8T	8	49.3*79.8	0.4,-0.2	4.5	≥ 28.0	≥ 0.3
93	SC50130S-4N	4	50.0*130.0	±0.5	2	≥ 85.0	≥ 0.3
94	SC5118S-3N	3	50.5*17.5	±0.4	1.8	≥ 16.0	≥ 0.3
95	SC5151S-3N	3	50.4*50.4	0.4,-0.2	1.8	≥ 45.0	≥ 0.3
96	SC5231S-4N	4	51.5*30.5	±0.5	2	≥ 22.0	≥ 0.3
97	SC5231S-4NA	4	51.5*30.5	±0.5	2	≥ 22.0	≥ 0.3
98	SC5248S-4N	4	51.9*47.9	±0.5	2	≥ 35.0	≥ 0.3
99	SC5252S-4N	4	51.5*51.7	±0.5	2	≥ 40.0	≥ 0.3
100	SC5257S-4N	4	51.5*57.0	±0.5	2	≥ 40.0	≥ 0.3
101	SC5353S-4N	4	52.5*52.5	±0.5	2	≥ 38.0	≥ 0.3
102	SC5424S-3NA	3	53.6*23.6	±0.4	1.8	≥ 20.0	≥ 0.3
103	SC5431S-12N	12	53.5*30.5	±0.5	6	≥ 8.0	\
104	SC5454S-4T	4	54.0*54.0	±0.5	2	≥ 40.0	≥ 0.3
105	SC5454S-4N	4	54.0*54.0	±0.5	2	≥ 40.0	≥ 0.3
106	SC5524S-8N	8	54.5*23.5	±0.5	4.2	≥ 9.0	≥ 0.3
107	SC5530S-4N	4	54.5*29.5	±0.5	2	≥ 20.0	≥ 0.3
108	SC5555S-4T	4	54.5*54.5	±0.5	2	≥ 40.0	≥ 0.3

创益户外嵌入式太阳能电池片参数表/TRONY outdoor embedded solar cells specification

序号 No.	型号 Type	节数 Section Qty.	尺寸/Size: (LxW)mm	尺寸公差 Tolerances (mm)	产品标准/Product Standard		
					Vop(V)	Iop(mA)	弱光性能/Voc(V)
109	SC5580S-4N	4	54.5*79.5	±0.5	2	≥ 70.0	≥ 0.3
110	SC5754S-3N	3	56.6*53.6	0.4,-0.2	1.8	≥ 50.0	≥ 0.3
111	SC5852S-3N	3	57.5*52.5	0.4,-0.2	1.8	≥ 52.0	≥ 0.3
112	SC5852S-4N	4	57.7*51.7	±0.5	2	≥ 40.0	≥ 0.3
113	SC5919S-9N	9	59.0*19.0	±0.5	4.5	≥ 7.0	≥ 0.3
114	SC6045S-5N	5	60.0*45.0	±0.5	2.8	≥ 30.0	≥ 0.3
115	SC6060S-6N	6	59.5*59.5	±0.5	3.3	≥ 35.0	≥ 0.3
116	SC6091S-4T	4	59.7*90.5	±0.5	2	≥ 80.0	≥ 0.3
117	SC60100S-6N	6	59.5*99.5	±0.5	3.3	≥ 50.0	≥ 0.3
118	SC60120S	4	59.5*119.5	±0.5	2	≥ 80.0	≥ 0.3
119	SC6535S-7N	7	64.8*34.8	±0.5	3.8	≥ 20.0	≥ 0.3
120	SC6878S-8N	8	67.5*77.5	±0.5	4.5	≥ 30.0	≥ 0.3
121	SC6969S-4T	4	68.8*68.8	0.4,-0.2	2	≥ 70.0	≥ 0.3
122	SC6969S-8T	8	68.8*68.8	0.4,-0.2	4.5	≥ 38.0	≥ 0.3
123	SC7030S-4	4	69.3*29.3	±0.5	2	≥ 40.0	≥ 0.3
124	SC7030S-7	7	69.3*29.3	±0.5	3.5	≥ 24.0	≥ 0.3
125	SC7070S-4N	4	69.5*69.5	±0.5	2	≥ 50.0	≥ 0.3
126	SC7070S-6	6	69.5*69.5	±0.5	3.3	≥ 40.0	≥ 0.3
127	SC70152S-6N	6	70.0*152.0	±0.5	3.3	≥ 90.0	≥ 0.3
128	SC7260S-8N	8	72.0*60.0	±0.4	4.2	≥ 35.0	≥ 0.3
129	SC7575S-9N	9	74.5*74.5	±0.5	4.5	≥ 35.0	≥ 0.3
130	SC8090S-7N	7	80.0*90.0	±0.5	3.8	≥ 60.0	≥ 0.3
131	SC80120S	7	80.0*120.0	±0.5	3.5	≥ 50.0	≥ 0.3
132	SC80120S-7N	7	80.0*120.0	±0.5	3.5	≥ 50.0	≥ 0.3
133	SC80125S-7N	7	80.0*125.0	±0.5	3.8	≥ 65.0	≥ 0.3
134	SC80125S-8	8	79.5*124.6	±0.5	4.2	≥ 65.0	≥ 0.3
135	SC8181S-4N	4	81.0*81.0	±0.5	2	≥ 90.0	≥ 0.3
136	SC81190S-9N	9	80.5*189.5	±0.5	4.5	≥ 100.0	≥ 0.3
137	SC8386S-9N	9	83.0*85.5	±0.5	4.5	≥ 51.0	\
138	SC83109S-4T	4	83.0*109.0	±0.5	2	≥ 125.0	≥ 0.3
139	SC83109S-8T	8	83.0*109.0	±0.5	4.5	≥ 66.0	≥ 0.3
140	SC83109S-8N	8	83.0*109.0	±0.5	4.5	≥ 66.0	≥ 0.3
141	SC8684S	10	86.0*84.0	±0.5	5	≥ 40.0	≥ 0.3
142	SC86116S-8N	8	85.6*115.2	±0.5	4.5	≥ 80.0	≥ 0.3
143	SC8787S-9N	9	87.0*87.0	±0.5	4.5	≥ 50.0	≥ 0.3
144	SC9030S-10N	10	90.0*30.0	±0.5	5.5	≥ 15.0	\

创益户外嵌入式太阳能电池片参数表/TRONY outdoor embedded solar cells specification

序号 No.	型号 Type	节数 Section Qty.	尺寸/Size: (LxW)mm	尺寸公差 Tolerances (mm)	产品标准/Product Standard		
					Vop(V)	Iop(mA)	弱光性能/Voc(V)
145	SC9035S-7N	7	89.7*34.8	±0.5	3.8	≥17.0	\
146	SC9070S-8N	8	89.5*69.5	±0.5	4.2	≥40.0	\
147	SC9099S-9N	9	90.0*99.0	±0.5	4.5	≥65.0	\
148	SC9234S-13N	13	91.4*33.2	±0.5	6.5	≥12.0	\
149	SC9599S-9N	9	95.0*99.0	±0.5	5	≥80.0	\
150	SC10028S-9N	9	99.5*27.5	±0.5	5	≥7.0	\
151	SC10050S-12	12	100.0*50.0	±0.5	6.5	≥23.0	\
152	SC10069S-9N	9	100.0*69.0	±0.5	4.5	≥45.0	\
153	SC10096S-8N	8	99.2*95.1	0.4,-0.2	4.2	≥70.0	\
154	SC100102S-9N	9	99.7*102.0	±0.5	4.5	≥70.0	\
155	SC110120S-10L	10	109.5*119.5	±0.5	4.5	≥80.0	\
156	SC110150S-8L	8	109.5*149.5	±0.5	4.2	≥130.0	\
157	SC110150S-13L	13	110.0*150.0	±0.5	7	≥80.0	\
158	SC115115S-11N	11	114.0*114.0	±0.5	6	≥60.0	\
159	SC13528S-10N	10	135.0*28.0	±0.5	4	≥0.5	\
160	SC14082S-8N	8	139.6*81.6	0.4,-0.2	4.2	≥90.0	\
161	SC149199S-11N	11	149.0*199.0	±0.5	6	≥140.0	\
162	SC149199S-12N	12	149.0*199.0	±0.5	6.5	≥140.0	\
163	SC149199S-16N	16	149.0*199.0	±0.5	8	≥100.0	\
164	SC150115S-16N	16	150.5*114.5	±0.5	8.5	≥80.0	\
165	SC150150S-14N	14	148.5*148.5	±0.5	8	≥90.0	\
166	SC150165S-9	9	150.0*165.0	±0.5	5	≥200.0	\
167	SC150165S-14N	14	150.0*165.0	±0.5	7.5	≥105.0	\
168	SC15519S-11N	11	155.0*18.5	±0.5	5.5	≥17.0	\
169	SC161131S-10N	10	161.0*131.0	±0.5	4.5	≥2.25	\
170	SC165133S-15N	15	164.7*133.0	±0.5	9	≥80.00	\
171	SC165135S-15N	15	164.7*134.8	±0.5	9	≥80.0	\
172	SC167200S-12L	12	167.0*200.0	±0.5	7	≥190.0	\
173	SC167200S-15	15	167.0*200.0	±0.5	9	≥150.0	\
174	SC167300S-12	12	167.0*300.0	±1.0	7	≥270.0	\
175	SC167300S-15	15	167.0*300.0	±1.0	9	≥170.0	\
176	SC167400S-15	15	167.0*400.0	±1.0	9	≥300.0	\
177	SC19356S-10N	10	193.0*55.5	±0.5	5	≥0.5	\
178	SC200330S-15	15	200.0*330.0	±1.0	9	≥310.0	\
179	SC217405S-26N	26	217.0*405.0	±1.0	15	≥250.0	\
180	SC240330S-16L	16	240.0*330.0	±1.0	9	≥330.0	\

创益户外嵌入式太阳能电池片参数表/TRONY outdoor embedded solar cells specification

序号 No.	型号 Type	节数 Section Qty.	尺寸/Size: (LxW)mm	尺寸公差 Tolerances (mm)	产品标准/Product Standard		
					Vop(V)	Iop(mA)	弱光性能/Voc(V)
181	SC305150S-29N	29	305.0*150.0	±1.0	17	≥106.0	\
182	SC305381S-29N	29	305.0*381.0	±1.0	17	≥265.0	\
183	SC330300S-28	28	330.0*300.0	±1.0	16	≥260.0	\

注：

- 1、上表中各参数是在：AM1.5太阳光谱，辐射照度1KW/m<sup>2</sup>, 温度为25℃标准条件下测得；  
 2、上表所列型号太阳能电池片均为已定型型号，如客户有不同需求，均可另行定做；  
 3、以上参数仅供客户参考，如有修改，恕不另行通知。

Note :

- 1, Each parameter in the table was measured under the standard conditions: AM1.5 solar spectrum, 1KW / m<sup>2</sup>, temperature 25 °C.  
 2, Solar cells listed in the above table are fixed, Trony can customized solar cells according to customer's different needs ;  
 3, Above parameters are for customer reference and are subject to change without notice.



## 专利 & 专家

PATENTS & EXPERTS

创益以多项技术创新荣获国内外专利奖项，并承担国家级重大科研项目。《内联式非晶硅太阳能电池及制造方法》(ZL95104992.5)获2005年中国专利金奖和巴黎国际发明金奖，《一种太阳能光伏中空玻璃及其制造方法》(ZL200410028002.8)获2009年中国专利优秀奖；《一种用于幕墙玻璃的组合式光电模板》(ZL200510034904.7)获2011年中国专利优秀奖。创益已授权的专利有220项，其中发明专利52项。同时已申请包括美国、日本、德国等国外专利10项，其中授权5项。创益专利申请数在我国太阳能行业名列前茅，属于广东第一，并于2010年6月荣获“广东省知识产权示范企业”称号。

TRONY has been granted with patent prizes at home and abroad relying on many technical innovations and bears state-level major science research programs: "An invention patent Inline Amorphous Silicon Solar Energy Cell and Manufacturing Method"(ZL95104992.5)was awarded Chinese Gold Prize of Invention Patent in 2005 and International Gold Prize of Invention Patent in Paris in 2004. "An invention patent A Solar Energy PV Sealed Insulating Glass Unit" and Its Manufacturing Method ( ZL200410028002.8)was awarded Chinese Patent Excellent Prize in 2009, "A Modular Optoelectronic Template For Curtain Wall Glass " (ZL 200510034904.7) was granted with China Patent Excellence Award in 2011. Trony has been granted 220 patents(including 52 invention patents) and applied for 10 foreign patents(among which 5 patents were authorized) in countries such as United States, Japan, Germany, etc.. Trony leads patent application quantity in the solar energy industry of China, is No. 1 in Guangdong province and has won "Guangdong Provincial Intellectual Property demonstration enterprise" title in June, 2010.



## 权威认可

AUTHORITATIVE CERTIFICATIONS

创益始终坚持“质量第一”的经营方针，以对客户负责任的态度赢得市场，产品质量可靠，公司1999年在国内同行业中首家通过ISO9001国际质量管理体系认证。截至目前，公司不仅通过了TUV莱茵ISO9001、ISO14001等国际管理体系认证，还取得了CQC、CE、KAS、CCC等国际知名认证机构的权威产品认证。

TRONY always adhere to the "quality first" business principles, holds responsible attitude to customers to win market, the company is the first domestic company in the industry to pass ISO9001 international quality management system certification in 1999. Up to now, the company not only passed the international management system certification of TUV Rheinland ISO9001, ISO14001, etc., and also achieved the authoritative product certification of the internationally renowned certification body such as CQC, CE, KAS, CCC, etc.

