

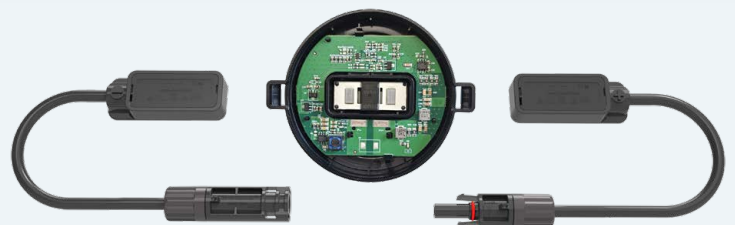
安装说明书（组件制造用）

Installation Instructions (Module Manufacturing)

智能物联网安全监控型 AI 光伏接线盒 (哨兵 007)

Smart IoT Safety Monitoring AI PV Junction Box (Vanguard007)

3Qxy-OM



目录 Contents

1	警告 Warning	01
2	技术参数 Product Specifications	02
3	汇流带规格尺寸及所需工具 Ribbon size and required tools	05
4	密封胶安装 Installation with seal tool	06
5	焊接汇流带 Ribbon Welding	06
6	接线盒的灌胶 Potting Instruction	07
7	安装上盖 Cover Installation	07
8	注意事项 NOTE	08
9	电缆连接 Cable' s connection	09
10	附件 Annex (耐化学品附表 Chemical resistance form)	10
11	联系方式 Contact us	19

1.警告 Warning

1.1 如果所有的零件和工具都不是 QC 订购的，或者你忽略了 QC 的安装说明，我们在你安装产品时无法保证产品的安全性和兼容性。

If all the parts and tools were not the ones that QC ordered, or you ignored QC's installation instruction, we are not able to ensure the safety and compatibility of the products when you install them.

1.2 拆包后，操作人员应检查各部件是否齐全，各部件连接牢固。应在上述情况下进行安装。

After removing the package, the operator should check whether the components are complete, and the parts are firmly connected. The installation should be undertaken in the above situation.

1.3 在正式安装接线盒之前，请确保电池组件没有处于工作状态。如果必须在阳光下安装，请使用可靠的遮阳板覆盖电池，以避免产生的电流对电池造成电击。人体不能同时接触连接系统的正极和负极，否则会触电。

Before installing the junction box, please ensure that the panels are not in working condition. In case that you have to install them under the sunshine, please use reliable sunshield to cover the cells to avoid electric shock by the generated current. Human body should not touch the positive and negative of the connecting system at the same time, or you will be electric shocked.

1.4 在任何情况下，都不能将一套连接器系统的公插头和母插头插合在一起。否则可能导致接线盒和电池板严重损坏，太阳能发电系统无法正常工作。

In no circumstances, you can connect the male and female plug of the same connecting system. Or the junction box and panels may be badly destroyed, and the solar power generation system is not able to work properly.

1.5 接线端子的正负级、电缆的正负级是明确规定的，请用户不要自行调换极性或反接，这样可能会造成严重的后果。The positive and negative poles of the terminal and cable are fixed, please do not exchange it or reverse the polarity, or this may cause serious consequences.

1.6 如果要进行系统维护，请务必使该系统处于停止工作状态后再进行。

Please ensure to work under the situation of unload the power.

1.7 产品如果处于长期户外且未安装状态，请做好连接器防护工作，将连接器端口插上“防尘帽”，防止连接器受到水、尘等的污染，影响产品使用性能。

If the product is outdoors for a long time and has not been installed, protect the connector by inserting a dust-proof cap into the connector port to prevent the connector from being polluted by water and dust, which may affect the product performance.

2.技术参数 Product Specifications

技术参数 Product Specifications	
产品名称 Product Name	3Qxy (1500V)
额定电压 Rated Voltage	IEC 1500V/UL 1500V
额定电流 Rated Current	18A Diode: QCM1845 20A Diode: QCM2545 22A Diode: QCM3045 25A Diode: QCM4045 28.5A Diode: QCM4045B 30A Diode: QCM5045/QCM5045B 32A Diode: QCM5045C 35A Diode: QCM6045
灌胶量 Glue Potting Volume	3*6.3mL
线缆规格 Cable Specification	10AWG/12AWG/4mm ² /6mm ²
应用等级 Application Class	Class A
温度范围 Temperature Range	-40°C ~ +85°C
防护等级 Protection Degree	IP68
汇流带尺寸 Size of Ribbons	Max.8mm
TUV 证书编号 TUV Certificate NO	R50510013 (莱茵) No.B 077362 0009 Rev.06 (南德)
U L 证书编号 UL Certificate NO	E312223
防火等级 Flame Class	5VA

UL 命名 UL Nomenclature

NOMENCLATURE: For Models 3Qxy series is designated as follows:

3Qxy	-	a	b	c	d
I		II	III	IV	V

I – 3Qxy is a main model name.

3Qxy 是一个主型号名称。

x represents rated maximum system voltage.

X 表示额定最大系统电压。

x=2, 1500V system.

y represents rated maximum current.

y 表示额定最大电流。

y=1, 30A DC

y=2, 25A DC

y=3, 20A DC

y=4, 35A DC

y=5, 22A DC

y=6, 18A DC

y=7, 32A DC

y=8, 28.5A DC

II - a represents Enclosure Housing construction.

a 表示箱体结构类型。

a=4, construction 4, Resistance Welding with Housing Width 24.0 mm.

a=5, construction 5, Resistance Welding with Housing Width 28.5 mm.

a=6, construction 6, Resistance Welding with Housing Width 29.4 mm.

III - b represents Diode Module type.

b 表示二极管模块类型。

b=4, QC SOLAR (SUZHOU) CORPORATION, type QCM2545, only can be with a=9 and y=3.

b=5, QC SOLAR (SUZHOU) CORPORATION, type QCM3045, only can be with a=9 and y=5.

b=6, QC SOLAR (SUZHOU) CORPORATION, type QCM4045, only can be with a=9 and y=2.

b=7, QC SOLAR (SUZHOU) CORPORATION, type QCM5045, only can be with a=9 and y=1.

b=8, QC SOLAR (SUZHOU) CORPORATION, type QCM5045B, only can be with a=9 and y=1.

b=12, QC SOLAR (SUZHOU) CORPORATION, type QCM6045, only can be with a=9 and y=4.

IV - c represents Connector type.

c 表示连接器类型。

c=1, QC SOLAR (SUZHOU) CORPORATION (E340004), type Series QC4.10, followed by -a5, followed by b1, followed by c12 or c13, followed by d1, d3 or d4, and followed by e2, e3 or e4.

c=2, QC SOLAR (SUZHOU) CORPORATION (E340004), type Series QC4.10, followed by -a5, followed by c12 or c13, followed by d1, d3 or d4, and followed by e2, e3 or e4.

c=3, STAUBLI ELECTRICAL CONNECTORS AG(E343181), type PV- KST4/6II-UR (male) and PV-KBT4/6II-UR (female).

c=4, STAUBLI ELECTRICAL CONNECTORS AG(E343181), type PV-KST4-EVO2/6II-UR (male) and PV-KBT4-EVO2/6II-UR (female).

c=5, STAUBLI ELECTRICAL CONNECTORS AG(E343181), type PV-KST4-EVO2/6I-UR (male) and PV-

KBT4-EVO2/6I-UR (female).

c=6, AMPHENOL TECHNOLOGY(SHENZHEN)CO LTD(E469330), female type UTXCFA4AI, UTXCFA4AC or UTXCFA4AM and male type UTXCMA4AI, UTXCMA4AC or UTXCMA4AM.

c=8, TYCO ELECTRONICS CORP (E353372), type PV4-S1M4.0 (Male) and PV4-S1F4.0 (Female).

c=9, STAUBLI ELECTRICAL CONNECTORS AG (E343181), type PV-KST4-EVO2A/6I (male) and PV-KBT4-EVO2A/6I (female), rated 1500V dc, 39 Adc max with 12 AWG PV cable. Outer wire insulation diameter 5.69~6.47 mm OD with 19~65 strands.

c=10, STAUBLI ELECTRICAL CONNECTORS AG (E343181), type PV-KST4-EVO2A/6X (male), PV-KBT4-EVO2A/6X (female), rated 1500V dc, 39 Adc max with 12 AWG PV cable. Outer wire insulation diameter 5.89~7.3 mm OD with 19~65 strands.

c=11, QC SOLAR (SUZHOU) CORP (E340004), type QC4.10 series, followed by -a5, followed by c12 or c13, followed by d1 or d3, followed by e2 or e4 and followed by f1, rated 1500V dc, 35 Adc max with 12 AWG PV cable. Outer wire insulation diameter 5.9~7.2 mm OD with 41~84 strands.

c=12, QC SOLAR (SUZHOU) CORP (E340004), type QC4.10 series, followed by -a5, followed by c12 or c13, followed by d1 or d3, followed by e2 or e4, followed by f1 and followed by g1, rated 1500V dc, 35 Adc max with 12 AWG PV cable. Outer wire insulation diameter 5.9~7.2 mm OD with 41~84 strands.

TUV 命名 TUV Nomenclature

Type Designation: 3Qxy

Remark: 3Qxy (x = K1 or 1 or K3 or 3 or K4 or 4; y = 4) series of Junction Box type. The prefix letter “x” ; “y” denotes different technical meanings.

备注: 3Qxy (x = K1 或 1 或 K3 或 3 或 K4 或 4; y = 4) 系列接线盒类型。前缀字母 “x” 和 “y” 表示不同的技术含义。

1. x=K1 or 1 or K2 or 2 or K3 or 3 or K4 or 4 or K5 or 5 ;

x=K1 或 1 或 K2 或 2 或 K3 或 3 或 K4 或 4 或 K5 或 5;

x=1 Rated voltage and rated current 1500V 20A;

x=2 Rated voltage and rated current 1500V 22A;

x=3 Rated voltage and rated current 1500V 25A;

x=4 Rated voltage and rated current 1500V 30A;

x=5 Rated voltage and rated current 1500V 35A;

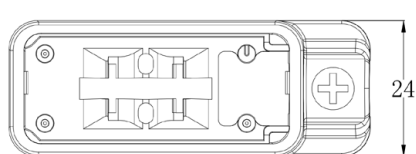
x=6 Rated voltage and rated current 1500V 32A;

x=7 Rated voltage and rated current 1500V 28.5A;

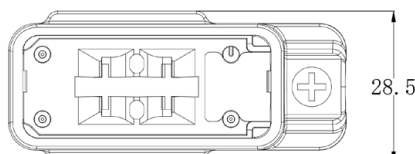
x=8 Rated voltage and rated current 1500V 18A.

2. y=1 or 2 or 3 represents different junction box structure which apply different kinds of bypass diodes. apply to QCM1845; QCM2545; QCM3045; QCM4045; QCM4045B; QCM5045; QCM5045B; QCM5045C; QCM6045.

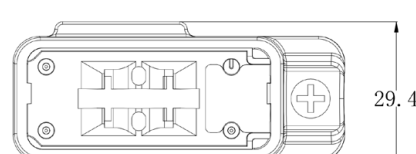
当 y=1、2 或 3 时，代表不同的接线盒结构，这些结构适用于不同种类的旁路二极管，适用于以下型号：QCM1845、QCM2545、QCM3045、QCM4045、QCM4045B、QCM5045、QCM5045B、QCM5045C、QCM6045。



Structure 1: y=1(24mm)

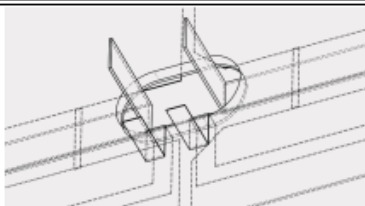


Structure 2: y=2(28.5mm)



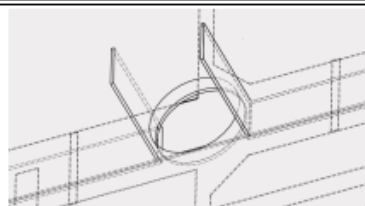
Structure 3: y=3(29.4mm)

3. 汇流带规格尺寸及所需工具 Ribbon size and required tools



Intermediate junction box welding

中间接线盒焊接



Left/Right junction box welding

左/右接线盒焊接

Note: 3Q-OM is suitable for special PV modules.

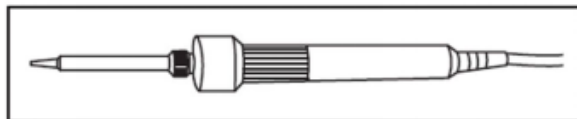
注意：3Q-OM适用于特制光伏组件

Required tools

所需工具

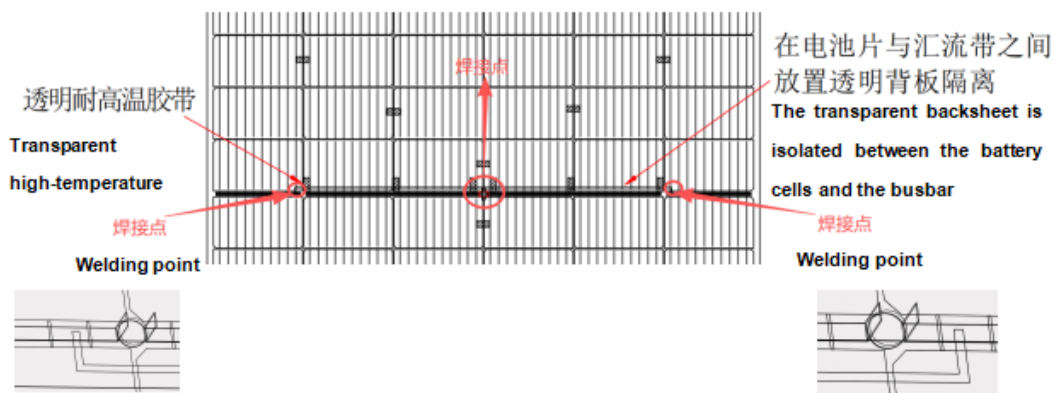
Electric iron, for the solder between ribbons and terminal、PCBA.

电烙铁/自动焊接工站，用于汇流带与端子、PCBA的焊接



Weld the points and place the isolation strips (Insulation)

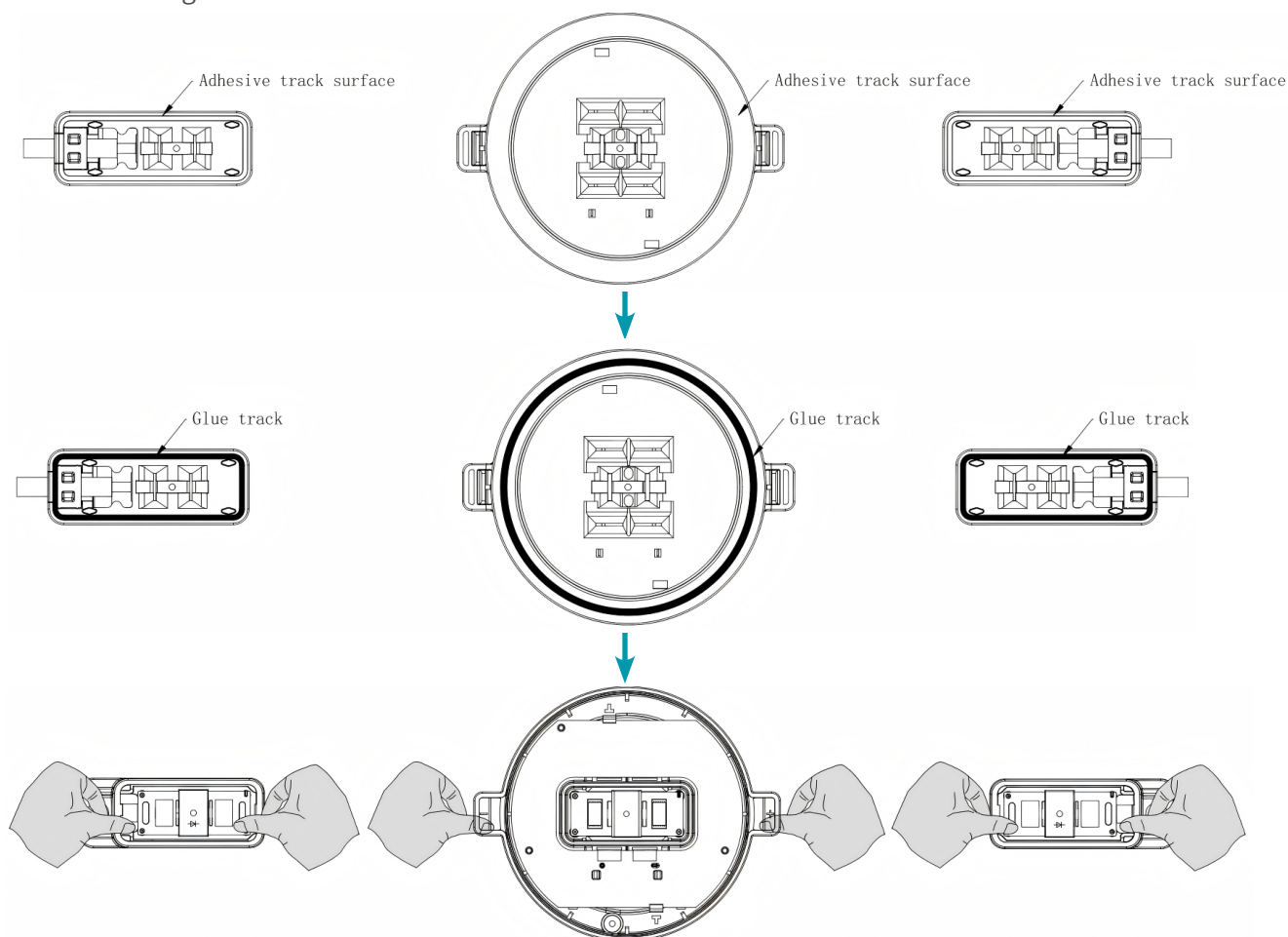
焊接点位以及放置隔离条（绝缘）



4. 密封胶安装 Installation with seal tool

将密封胶均匀地涂抹在盒体背面，如图所示的密封轨迹。硅胶最小厚度为 5mm。外层硅胶宽度至少为 2mm。

Put the Sealing tool to the backside of Box equably, like the sealing contrail marked in the picture. The minimum silicone gel thickness is 5mm. The outer silicone width is at least 2mm.



5. 焊接汇流带 Ribbon Welding

将汇流带剪切到所需长度，插入接线盒的导引孔，然后弯曲，使用电烙铁焊接牢固。

Cut ribbon to the desired length, insert it into the guide hole of junction box, then bend it and welded with electric iron. The tin shall be completed melted when welding.

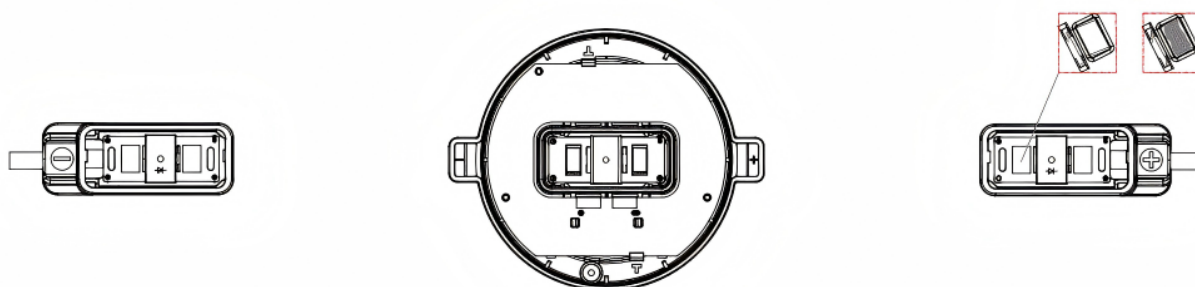
建议焊接温度：280~350℃，焊接时间：1~4S，客户可根据产品实际应用情况进行调整，二极管是电子元器件，焊接过程中，严禁出现过压及超高温造成二极管折弯等异常。

Recommended welding temperature : 280~350℃ , welding time : 1~4S, which can be adjusted according to the actual application of the product. The diode is an electronic component. During welding, do not bend the diode caused by excessive pressure and ultra-high temperature.

注意：接线盒出厂时，汇流带焊接位置仅是预涂锡。客户应根据产品实际应用要求进行锡量的增补。

Notice : Ribbon's soldering position just pre-tin before leaving factory. Customers could add the amount of tin

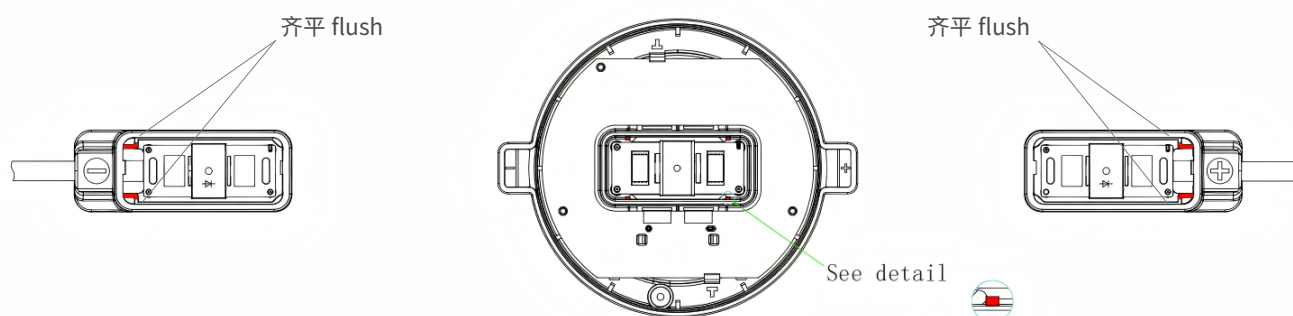
according to products practical required.



6. 接线盒的灌胶 Potting Instruction

接线盒灌胶面需与红色面齐平，如图一所示，灌胶量推荐值为 6.3mL 左右。

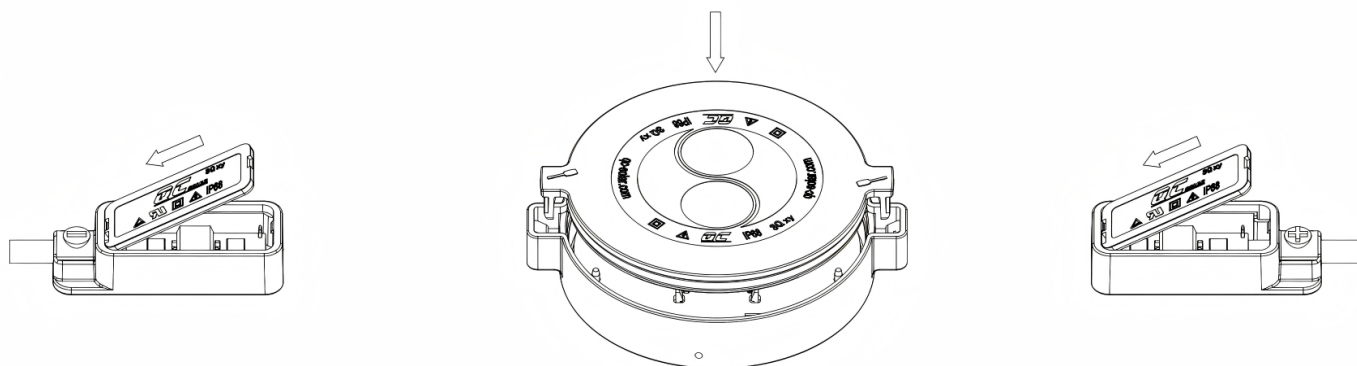
Junction box potting sealant should be flush with red face, as shown in Picture 1. Recommended potting amount around 6.3 ml.



7. 上盖安装 Cover Installation

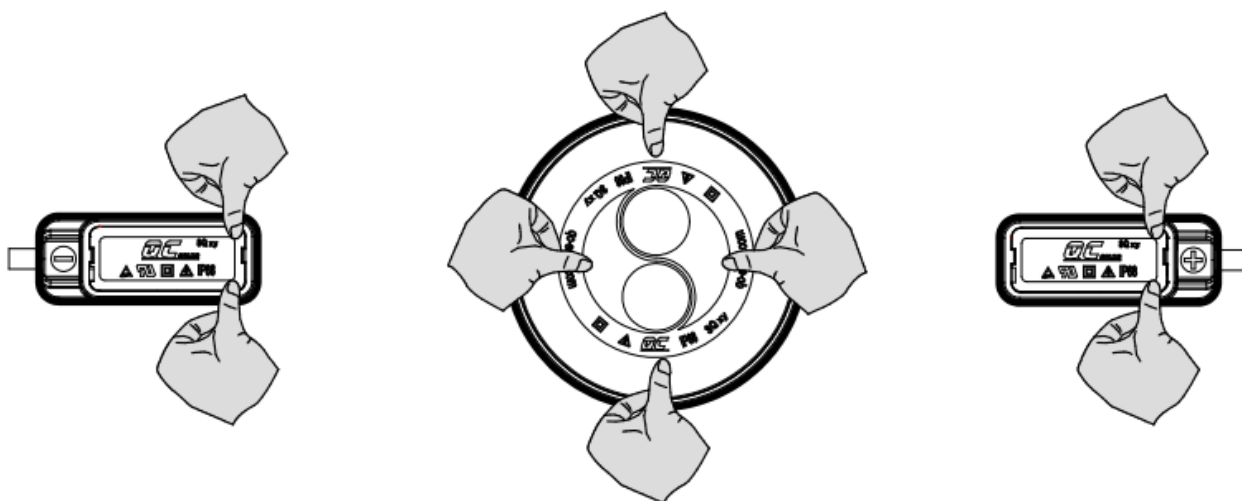
1) 将盖子倾斜插入外壳，然后向箭头所示方向用力将盖子推入外壳。

Insert the cover to the housing at an angle, then push the cover to the housing with the direction force.



2) 按压上盖，使上盖完全卡入底座。

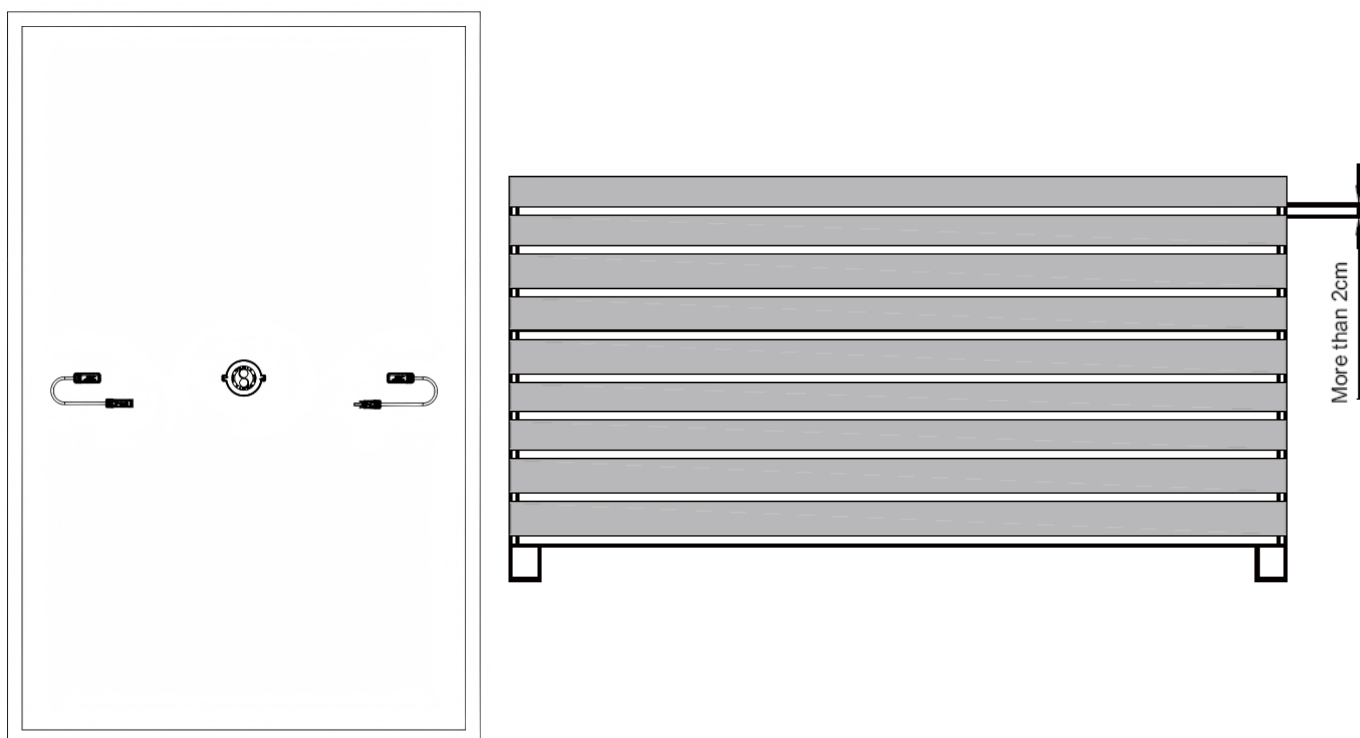
Press the cover to the bottom completely.



8. 注意事项 NOTE

太阳能组件粘接完接线盒后，组件与组件间需留有大于 2cm 的间隙；组件需在通风处静置 12 小时以上或至硅胶完全凝固后方可装箱，因为组件边框粘胶和接线盒粘胶在凝固时可能会释放一些腐蚀气体，该气体可能会对塑料或人体产生不良影响，严重时可能会导致接线盒或连接器产生开裂现象（如有疑问请咨询快可光伏或硅胶厂家）。

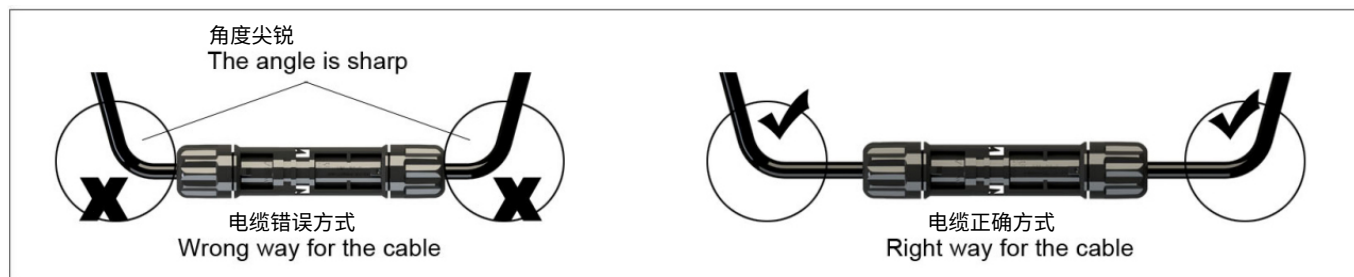
After installation of the J-Box to PV Module with silicon, we should keep more than 2 cm to each module; We should wait 12 hours to the solidification of the silicon, and after this, module could be packaged, because silicon of the J-box and Module installation may release some harmful corrosive air and that could be harmful to plastics and human beings. When the band begins to play, it may lead broken of the Nut of the QC connector and J-box.



9. 电缆连接 Cable's connection

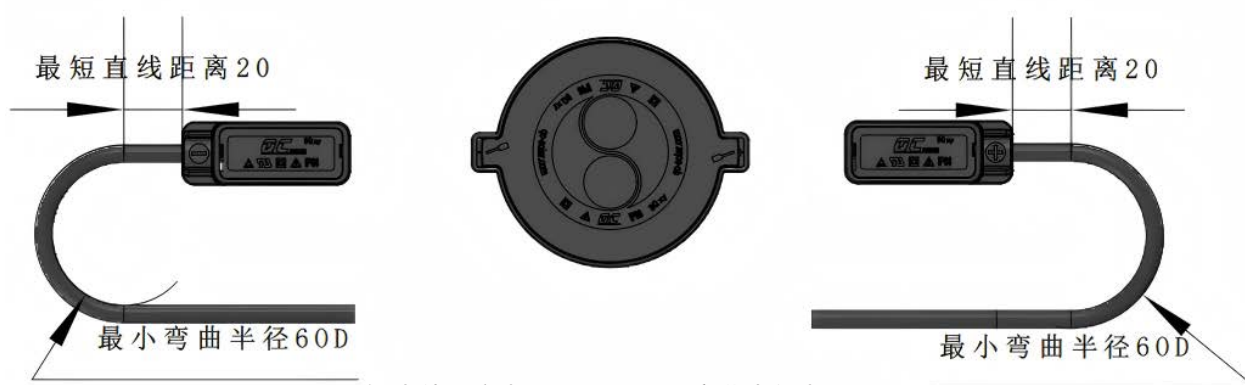
请参阅制造商提供的关于最小弯曲半径的详细说明。

Please refer to the detailed instruction ones of the min bend radius given by manufacturer.



接合状态。

The state after connection.



最短直线距离为 20mm，最小弯曲半径为 6*OD
The minimum linear distance is 20mm and the minimum bending radius is 6*OD

10. 附件 Annex

耐化学品附表 Chemical resistance form

表 10.1

成分 Ingredient	材料 Material	制造商 Manufacturer	临界应力 (%) Critical Stress (%) 23°C	等级 Grade
填充剂 Filler	PV7010	东丽道康宁 (Dow Corning)	> 1.0	A
	KE200/CX 200	信越化学 (Shin-Etsu Chemical)	> 1.0	A
	KE210F/CAT 210	信越化学 (Shin-Etsu Chemical)	> 1.0	A
	PU552FL/300M	德国威孚化学 (WEVO-CHEMIE Gmbh)	0.5-1.0%	B
	RAKU-SIL A/B	德国蓝浦 (RAMPF)	> 1.0	A
	VU4459/41 SV-HF	德国彼德仕公司 (LACKWERKE PETERS Gmbh)	0.2-0.5	C
表面活性剂 Surfactant	Charmy V quick	花王 (Kao)	> 1.0	A
导热复合物 Heat reactivator	SC102 compound	东丽道康宁 (Dow Corning)	0.5-1.0%	B
脱模剂 Mold release	Telicoat A	极东油化 (Kukdong oil&chem)	> 1.0	A
	KF-96SP	信越化学 (Shin-Etsu Chemical)	> 1.0	A
	Telicoat S-6	极东油化 (Kukdong oil&chem)	0.2-0.5	C
	Snowwhite EC	荷兰 (Sonneborm Refined Products B.V)	0.5-1.0%	B
	PANDO 39D	三键化工 (Three Bond)	> 1.0	A
防锈剂 Antirust	WD40	WD-40 Products LTD	0.5-1.0	C
	Antikor RS Aerosol	buchem: chemie + technik GmbH & Co.KG	0.2-0.5	C
	D1 MIST	山一化学 (Yamaichikagaku)	0.2-0.5	C
	Barrier Guard PART II	山一化学 (Yamaichikagaku)	0.5-1.0%	B
	TFP Spray	住矿润滑剂 (SUMICO LUBRICANT CO.,LTD)	0.2-0.5	C

成分 Ingredient	材料 Material	制造商 Manufacturer	临界应力 (%) Critical Stress (%) 23°C	等级 Grade
胶带粘胶剂 Adhesive	CEMEDINE SuperX No.8008	施敏打硬 (CEMEDINE CO.,LTD)	0.5-1.0%	B
	CEMEDINE SuperX No.8008Y6	施敏打硬 (CEMEDINE CO.,LTD)	> 1.0	A
	CEMEDINE SuperX SX720B	施敏打硬 (CEMEDINE CO.,LTD)	0.2-0.5	C
	Chemlok 487A/B	LORD Corporation	< 0.2	D
	Chemlok 7701	LORD Corporation	< 0.2	D
	Scotch Mending tape	3M	> 1.0	A
	Scotch 透明美色	3M	> 1.0	A
	CUT ACE(Floor Masking)	住化 (SUMIKA PLASTECH)	> 1.0	A
	PVC Tape No21	日东电工 (Nitto Denko Corporation)	0.2-0.5	C
	NICETACK	米其邦 (Nichiban Co., LTD)	> 1.0	A
	Packing cloth tape	寺冈制作所 (TERAOKA SEISAKUSHO CO., LTD)	> 1.0	A
醇酸碱 ALK	甲醇 (Methanol)	/	> 1.0	A
	乙醇 (Ethyl alcohol)	/	> 1.0	A
	25% 氨水溶液 (25% Ammonium water)	/	> 1.0	A
	氯化钠固体 (Sodium chlorid)	/	> 1.0	A
	60% 磷酸溶液 (60% phosphoric acid water)	/	> 1.0	C
	磷酸铵 Ammonium Phosphate	/	> 1.0	A
	50% 硫酸溶液 (50% sulfuric acid water)	/	> 1.0	A
其它 Others	妮维雅 NIVEA	妮维雅花王 (NiveaKao)	0.5-1.0	C
	橄榄油 (Olive oil)	日清奥利友 (Nissin-oilio)	0.5-1.0	C
	黄油 (Butter)	Megmilk snow brand	0.2-0.5	C

成分 Ingredient	材料 Material	制造商 Manufacturer	临界应力 (%) Critical Stress (%) 23°C	等级 Grade
其它 Others	人造黄油 (margarine)	Megmilk snow brand	0.2-0.5	C
	凡士林 (Vaseline)	联合利华 (Unilever)	0.2-0.5	C

表 10.2 油类物质 Oil-speculation

化学品名称 Name for chemicals	制造商 Manufacturers	商标 Trademark	使用温度 Service temperature (°C)	临界应力 (%) Critical Stress (%)	评判等级 Grade of Judgment
PUNCH OIL 703M	埃索石油 (Esso)	540Z	23	0.13	D
L702G (冲压油) (Stamping oil)	日兴产业 (NIKKO SANGYO)	540Z	23	0.60	B
DIAMOND LUBE L521	三菱石油 (Mitsubishi oil)	540Z	23	0.30	C
LATHCUT SP (防锈油) (Antirust oil)	山一化学 (YAMAICHI)	540Z	23	0.30	C

表 10.3 润滑脂类物质 Grease 1- speculation

化学品名称 Name for chemicals	制造商 Manufacturers	商标 Trademark	使用温度 Service temperature (°C)	临界应力 (%) Critical Stress (%)	评判等级 Grade of Judgment
SUNCALL FG-84M	三启化学 (CELL INSPIRE CHEMISTRY)	540Z	23	0.85	B
SUNCALL MEN-135G	三启化学 (CELL INSPIRE CHEMISTRY)	540Z	23	1.20	A
FLOIL G-311S	关东化成工业 (KANTO KASEI)	540Z	23	1.33	A
FLOIL G-526	关东化成工业 (KANTO KASEI)	540Z	23	0.60	B

表 10.4 有机溶剂、酸碱其他 Organic solvents, Acids, Bases and others

化学品名称 Name for chemicals	商标 Trademark	使用温度 Service temperature (°C)	临界应力 (%) Critical Stress (%)	评判等级 Grade of Judgment
脂肪烃 (Aliphatic hydrocarbon)				
正庚烷 (Normal heptane)	340Z, 540Z, G701V	23	0.2	C
液体石蜡 (Paraffin oil)	340Z, 540Z, G701V	23	0.39	C
正己烷 (Normal hexane)	340Z, 540Z, G701V	23	0.15	D
环己烷 (Cyclohexane)	340Z, 540Z, G701V	23	0.1	D
卤代烃 (Halohydrocarbon)				
氟里昂 (Freon)	340Z, 540Z, G701V	23	<0.10	D
四氯化碳 (Carbon tetrachloride)	340Z, 540Z, G701V	23	<0.10	D
氯仿 (Chloroform)	340Z, 540Z, G701V	23	<0.10	D
酮 (Ketone)				
丙酮 (Acetone)	340Z, 540Z, G701V	23	<0.10	D
丁酮 (Butanone)	340Z, 540Z, G701V	23	<0.10	D
芳烃 (Aromatic hydrocarbon)				
甲酚 (Cresol)	340Z, 540Z, G701V	23	0.8	B
甲苯 (Toluene)	340Z, 540Z, G701V	23	<0.10	D
二甲苯 (Xylene)	340Z, 540Z, G701V	23	<0.10	D
酒精 (Ethyl alcohol)				
甲醇 (methyl alcohol)	340Z, 540Z, G701V	23	1.2	A
乙醇 (ethyl alcohol)	340Z, 540Z, G701V	23	1.2	A
异丙醇 (Isopropanol)(IPA)	340Z, 540Z, G701V	23	0.9	B

化学品名称 Name for chemicals	商标 Trademark	使用温度 Service temperature (°C)	临界应力 (%) Critical Stress (%)	评判等级 Grade of Judgment
酸、碱、盐 (Acid, alkali, salt)				
盐酸 (50% 溶液) Hydrochloric acid (50% solution)	340Z, 540Z, G701V	23	1.50<	A
硫酸 (50% 溶液) Sulfuric acid (50% solution)	340Z, 540Z, G701V	23	1.50<	A
硝酸 (50% 溶液) Nitric acid (50% solution)	340Z, 540Z, G701V	23	1.50<	A
磷酸 (60% 溶液) Phosphoric acid (60% solution)	340Z, 540Z, G701V	23	1.50<	A
醋酸 (50% 溶液) Acetic acid (50% solution)	340Z, 540Z, G701V	23	1.50<	A
氨 (10% 溶液) Ammonia (10% solution)	340Z, 540Z, G701V	23	1.50<	A
氢氧化钠 (10%溶液) Sodium hydroxide (10% solution)	340Z, 540Z, G701V	23	1.50<	A
氯化钠 (饱和溶液) Sodium chloride (saturated solution)	340Z, 540Z, G701V	23	1.50<	A
磷酸铵 (饱和溶液) Ammonium phosphate (saturated solution)	340Z, 540Z, G701V	23	1.50<	A
其他有机溶剂 (Other organic solvents)				
煤油 (kerosene)	340Z, 540Z, G701V	23	0.2	C
乙酸乙酯 (Ethyl acetate)	340Z, 540Z, G701V	23	<0.10	D
磷酸三丁酯 (Tri-n-butyl phosphate) (TBP)	340Z, 540Z, G701V	23	0.11	D
汽油 (Gasoline)	340Z, 540Z, G701V	23	<0.10	D
清漆 (Varnish)	540Z, X502Z	23	0.18	D

表 10.5 润滑剂 Lubricant

化学品名称 Name for chemicals	制造商 Manufacturers	商标 Trademark	使用温度 Service temperature (°C)	临界应力 (%) Critical Stress (%)	评判等级 Grade of Judgment
DRYSURF A-1266	HARVES	540Z	23	1.50<	A
CFD-005HY-10	三启化学 (CELL INSPIRE CHEMISTRY)	540Z	23	0.38	C

表 10.6 橡胶、聚氯乙烯 (PVC)、增塑剂 Rubber, polyvinyl chloride (pvc), plasticizer

化学品名称 Name for chemicals	商标 Trademark	使用温度 Service temperature (°C)	临界应力 (%) Critical Stress (%)	评判等级 Grade of Judgment
氯丁橡胶 (非移行型) (Chloroprene rubber) (nontransitional form)	540V, 540Z, 500V	23	1.05	A
软质 PC (Soft PC)	540V, 540Z, 500V	23	0.5	B
偏苯三酸三辛酯 (Trioctyl Trimellitate) (TOTM)	540V, 540Z, 500V	23	0.6	B
邻苯二甲酸衍生物 (O-Phthalic acid derivatives)	540V, 540Z, 500Z	65	<0.10	D
低分子量聚酯 (Low molecular weight polyester)	540V, 540Z, 500Z	65	0.3	C
低分子量聚酯 (Low molecular weight polyester)	540V, 540Z, 500Z	95	0.2	C
邻苯二甲酸二辛酯 (Diocetyl-Phthalate) (DOP)	540V, 540Z, 500Z	23	0.13	D

表 10.7 脱模剂 Release agent

化学品名称 Name for chemicals	制造商 Manufacturers	商标 Trademark	使用温度 Service temperature (°C)	临界应力 (%) Critical Stress (%)	评判等级 Grade of Judgment
PELICOAT F	中京化成 (CHUKYOKA)	540V,540Z	23	<0.10	D
PELICOAT H	中京化成 (CHUKYOKA)	540V,540Z	23	0.49	C
PELICOAT S-3-5	中京化成 (CHUKYOKA)	540V,540Z 500V,500Z	23	0.4	C

化学品名称 Name for chemicals	制造商 Manufacturers	商标 Trademark	使用温度 Service temperature (°C)	临界应力 (%) Critical Stress (%)	评判等级 Grade of Judgment
PELICOAT B	中京化成 (CHUKYOKA)	540V, 540Z 500V, 500Z	23	1.50<	A
A-F-L (PAINTABLE)	日本工材 (Japanese industrial materials)	540V, 540Z 500V, 500Z	23	0.30	C
硬脂酸锌 (Zinc stearate)	/	540V, 540Z 500V, 500Z	23	1.50<	A

表 10.8 焊料 Solder

化学品名称 Name for chemicals	制造商 Manufacturers	商标 Trademark	使用温度 Service temperature (°C)	临界应力 (%) Critical Stress (%)	评判等级 Grade of Judgment
JS-75	三荣化学 Sanrong Chemical	540V, 540Z 500V	23	0.55	B
CF-100VS	田村化研 Tamura	540V, 540Z 500V, 500Z	23	0.55	B

表 10.9 日用品、表面活性剂、食品 Daily necessities, surfactants, foodstuffs

化学品名称 Name for chemicals	制造商 Manufacturers	商标 Trademark	使用温度 Service temperature (°C)	临界应力 (%) Critical Stress (%)	评判等级 Grade of Judgment
MAMALEMON	狮王 (Lion)	540V, 540Z 500V, 500Z	23	1.50<	A
EMERON 身体乳 (EMERON body lotion)	狮王 (Lion)	540V, 540Z 500V	23	0.55	B
得斯清 (SHINEUP CLOTH)	得斯清 (DUSKIN)	540V, 540Z 500V, 500Z	23	1.50<	A
得斯清 (NEW HOME DUSKIN)	得斯清 (DUSKIN)	540V, 540Z 500V, 500Z	23	0.51	B
液体得斯清 (原液) Liquid DUSKIN (stock solutio)	得斯清 (DUSKIN)	540V, 540Z 500V, 500Z	23	0.33	C
液体得斯清 (10 倍稀释溶液) Liquid Desqing (10x Diluted Solution)	得斯清 (DUSKIN)	540V, 540Z 500V, 500Z	23	0.60	B

化学品名称 Name for chemicals	制造商 Manufacturers	商标 Trademark	使用温度 Service temperature (°C)	临界应力 (%) Critical Stress (%)	评判等级 Grade of Judgment
NORITAKE COOL S-100NT (研磨液: 5% 溶液) (Grinding fluid: 5% solution)	NORITAKE	540V,540Z 500V,500Z	23	1.45	A
车窗清洗液 (Windshield washer fluid)	AUTOBACS SEVEN	540V,540Z 500V,500Z	23	1.50<	A
METASHAN/ 汽车清洗剂 (10% 溶液) (car cleaning agent)	桑泰克 (SUNTEC)	540V,540Z 500V,500Z	23	1.20<	A

表 10.10 粘着剂、密封剂、胶带 Adhesives, sealants, adhesive tapes

化学品名称 Name for chemicals	制造商 Manufacturers	商标 Trademark	使用温度 Service temperature (°C)	临界应力 (%) Critical Stress (%)	评判等级 Grade of Judgment
高接触 High-touch	施敏打硬 (CEMEDINE CO., LTD)	540V,540Z 500V	23	<0.10	D
3000RS	施敏打硬 (CEMEDINE CO., LTD)	540V,540Z 500V	23	1.50<	A
SE9166 (硅类) SE9166 (Silicon Type)	道康宁 (Dow Corning)	540V,540Z	23	1.50<	A
TSE3944-W	东芝硅 (TOSHIBA Si)	540V,540Z	23	1.50<	A
TSE3945	东芝硅 (TOSHIBA Si)	540V,540Z	23	1.50<	A
LOCTITE No.3-C	乐泰化学 (LOCTITE Chemical)	540V,540Z	23	1.50<	A
LOCTITE No.3-C (H)	乐泰化学 (LOCTITE Chemical)	540V,540Z	23	1.50<	A
ARON ALPHA 802	东亚合成 (Toagosei Company)	540V,540Z 500V	23	1.50<	A
ARON ALPHA 201	东亚合成 (Toagosei Company)	540V,540Z 500V	23	0.30	C
1401	THREEBOND	540V, 540Z 500V	23	1.50<	A
2500	THREEBOND	540V, 540Z 500V	23	0.20	C
1324N	THREEBOND	540V, 540Z 500V	23	0.26	C

化学品名称 Name for chemicals	制造商 Manufacturers	商标 Trademark	使用温度 Service temperature (°C)	临界应力 (%) Critical Stress (%)	评判等级 Grade of Judgment
CYANON TG	高压气体工业 (High Pressure Gas Industrial)	540V, 540Z 500V	23	1.50<	A
寅式盐 45 (412635) Celite 45 (412635)	信越硅 (Shin-Etsu Si)	540V, 540Z 500V	23	1.30	A
三悠树脂 UF820	三悠树脂 (Sanyu Resin)	540V, 540Z 500V, 500Z	23	0.55	B

临界点说明 Chemical resistance form

临界应力 (%) Critical Stress (%)	注释 Remark	等级 Grade
> 1.0	开裂的次要因素。 Secondary factor of cracking.	A
1.0-0.5	基本上在应力集中区域，会有一些开裂。需要特别注意化学品的使用。 Basically, there will be some cracking in the stress concentration area. Need to pay special attention to the use of chemicals.	B
0.5-0.2	不管有静态或动态的应力，都存在开裂的风险。特别注意不要与化学品接触。 Regardless of the static or dynamic stress, there is a risk of cracking. Special attention should not be in contact with chemicals.	C
< 0.2	与化学品接触，会有很高的开裂风险。 Exposure to chemicals will have a high risk of cracking.	D

备注：对于上表未列明的化学品，需经确认无影响后再使用

Remarks: For chemicals not listed in the above table, they must be confirmed to have no effect before use.

11.联系方式 Contact us

如本说明书所述内容与您收到的产品不符，请以实收产品为准。本说明书可以根据顾客要求配发，在公司网站可以提供有条件下载服务，如果您需要更多的说明书，请来电与我们联系，所有公司技术资料仅作为使用产品时的参考用，不得利用它进行其他的商业活动。

If the product is not match with what described in the manual, please regard what you received as the right one. This manual can be dispensed according to customers' requirements, the company's Web site can provide conditional download service, if you need more brochures, please contact us. All technical data is only as a reference when using the product, it can not be used for other business activities.

苏州快可光伏电子股份有限公司拥有本说明书著作权及最终解释权。

QC Solar (Suzhou) Corporation has the explanation rights for this instruction.

苏州快可光伏电子股份有限公司有权随时对本说明书中可能出现的打印错误、产品技术改进、创新等方面做出修改，这些改动恕不另行通知，同时各语言版本翻译的不详之处以中文版为准。

QC Solar (Suzhou) Corporation has the rights to make certain amendment for the printing errors, improvements and innovation for the products, and there will be no prior notice when these changes happen. If there was any misunderstanding for the version in different language, please regard Chinese version as the right one.

本公司愿以光伏互连产品系统为全球环保、能源事业作出贡献。

QC Solar is willing to make the contribution for global environment protection and energy by offering the products of solar connecting system.

快速可靠, 成就客户!

Quick and reliable, QC Solar devotes to satisfying customers.



苏州快可光伏电子股份有限公司
QC Solar (Suzhou) Corporation

 中国苏州工业园区新发路 31 号 (No.31,Xinfa Road,SIP,Suzhou,China, 215123.)

 0086-0512-62603392

 market@quick-contact.com

 www.quick-contact.com



快可官方微信