Solreach.

Original Junction Box

Solar Cables | Photovoltaic

Product

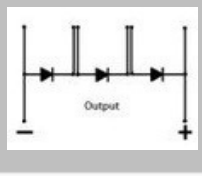
Product Overview

This junction box adopts split design to ensure high power output in different environments. The low temperature coefficient reduces the influence of temperature on power. Horizontal outlet mode, customers can reduce the bending of the wire, thus reducing the bending stress, while saving the cable consumption. The design is simple, so that the power loss in the circuit of the battery board is minimized. At the same time, the "hot spot effect" is divided into three parts, which reduces the damage of high temperature to the battery panel. High over current capability is suitable for all conventional and efficient components.

Main Technical Specifications

Rated Current	20A,25A,30A,35A	Max Working Voltage	100V
Rated Voltage	DC1500V	Ambient Temperature	-40~+85℃
Degree of Protection	IP68	Flame Class	UL94 - V0
Pollution Degree	Class A	Connecting Capacity	1x4mm2 ,12AWG

Number of Diodes and Connection Mode

Diod Model	Rated Current	Rated Voltage	Rated Current	Number	Connection Mode
MK4045	40A	45V	20A	3	
MK5045	50A	45V	25A	3	
MK6045	60A	45V	30A	3	
CDMK6545	65A	45V	35A	3	

Installation Instructions

1. Get a junction box and its base by a clean soft cloth with alcohol.

2. Panel back-sheet Upon, dry, no oil and other dirty. Clean the back-sheet area by a clean soft cloth with alcohol.

3. Stroke straight the rubber by a pincers, keep vertical against the back-sheet.

4. Get a bottle silicon, cut the mouth of the bottle, making sure the diameter is 4mm, insert it into the air gun, screw cover, no cut on mouth of the air gun.

5. Put the junction box on working desk, get the air gun and keep vertical against the junction Box gun and keep vertical against the junction box base, gluing around the junction box base edge circle.

6. Get the rubber through the junction box base hole, press hardly the junction box on the back-sheet till the silicon overflow around.

7. Place panels across in the. air currents 10 hours till the silicon cures then close the cover

8. Check the reliability of each terminal connection, and press the raised bus bar on the connection terminal by hand.

9. Cover the junction box with a click sound, the should not be pick out by hands.

Junction Box Installation

Step1: Put the bottom of the junction box up on the glue applicator, and the glue applicator will automatically put the back plate glue into the silicone slot at the bottom of the junction box (the silicone slot is the white seat in the figure)

Step2: Place the electric soldering iron on the bus bar and the tin block, so that the tin block melts and the busbar is bonded to the metal, which can be cooled and solidified.

Step3: Place the AB glue mixing pipe in the box and start to inject glue until the glue is filled to the overflow position.

Step4: After AB glue curing Base buckle slot on the cover snaps alignment,

surrounded by pre-force, the top cover is pressed into the base,

Caution

1. Gently holding and releasing in transportation, no damage to product.

2. When installing the junction box, making sure the solar panel is not working and you can't touch the plus and minus rails at the same time avoiding an electronic shock and diode disruption.

3. Do not connect the plus and the minus together of the same junction box at any time.

4. Do not insert and withdrawal the plus and minus connector frequently except repairs because the sealing performance will be cut down.

5. When installation, evenly smear the silica adhesive on the base of the junction box in order to

prevent leakage.

6. Keep the rubber clean and no adhesive when assembly, or it affect the efficiency of the panel.

7. Keep paraffin away from PV junction box and connector, such as, oil , lubricant, electric revival and other paraffin substance.

Quality Guarantee

◆ Solreach Provides quality assurance services as required;

◆ We guarantee that the products and solar cell components can be long-term safety with outdoor use, if the product problem by itself, the company guarantees to replace or repair the problem products;

◆We do not assume the user side as maintenance, replacement of the scene labor cost and transportation costs and other indirect costs;

◆ Terms of quality assurance about causes damage, injury, failure does not assume any responsibility:

◆ Failure to not comply with the company operations manual caused;

◆ Improper use or neglect caused;

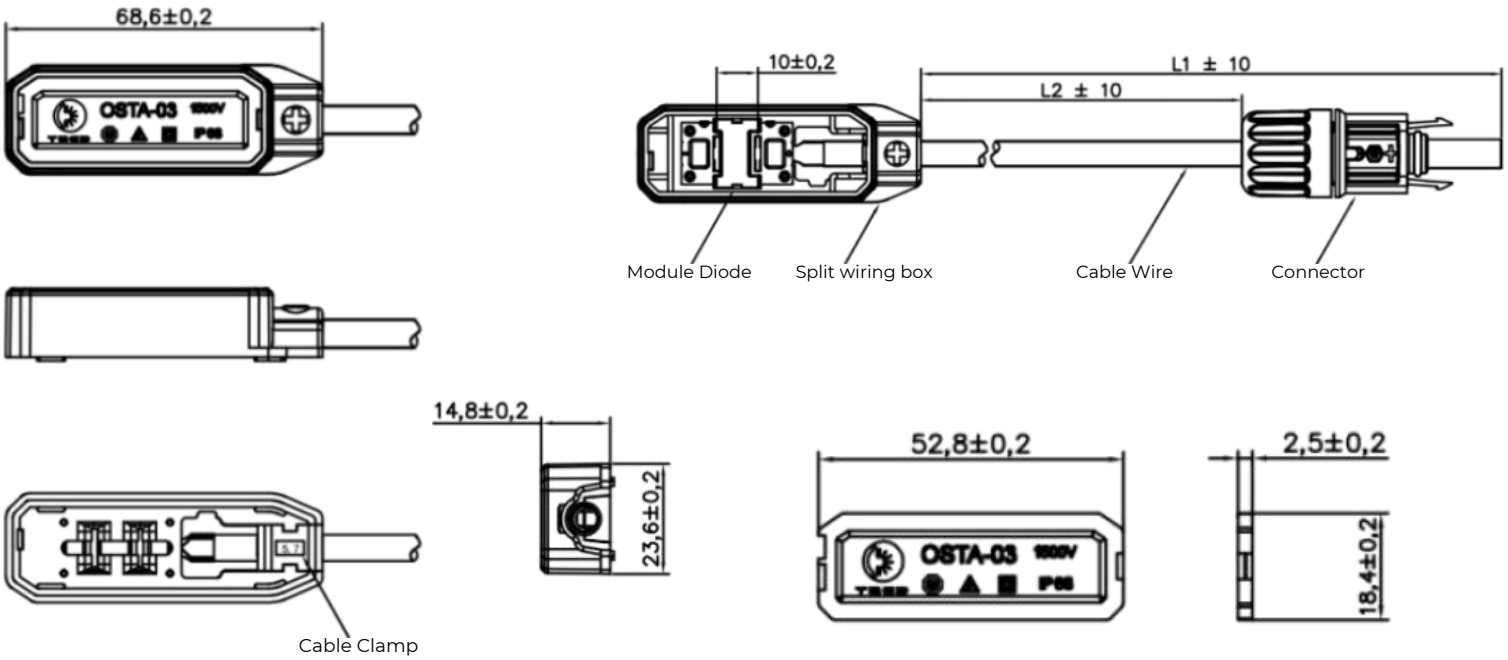
◆ Power impact, lightning, fire, flood, earthquake, hurricanes and other causes not under controls broken cases;

◆ In addition to the explicit and implicit guarantees, We have no other meaning attached to quality assurance, and any implied warranties are limited to the terms and period of quality assurance;

◆ We do not take the responsibility to purchase or the indirect purchaser because of negligence, improper operation of personal personal injury caused;

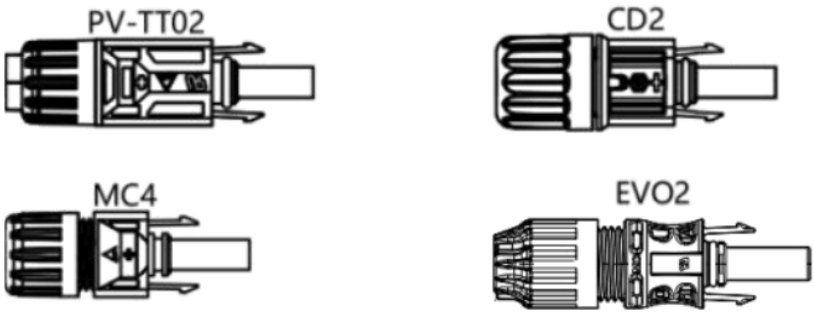
◆ We do not give guarantee when our produces failures is caused by other system parts failures.

Product Design



Connector Selection:

OSTA-03Wiring boxes can be matched with connectors ;PV-TT02-(1500V、TUV、UL);
CD2-(1500V、TUV、ETL);MC4-(1000V、TUV、UL);
EVO2-(1500V、TUV、UL);



Product technical requirements:

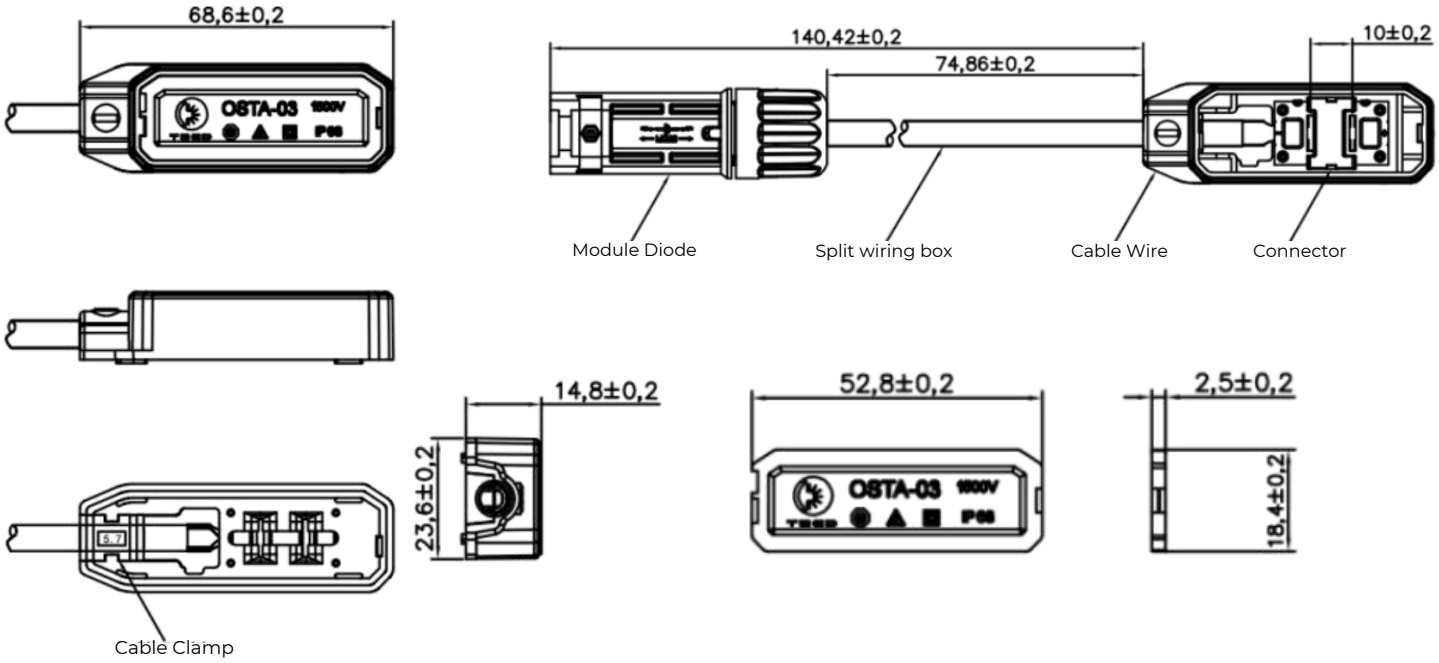
1. Injection-molded parts should have a smooth appearance without flash, burrs, material deficiency, oil stains, mechanical abrasions, obvious flow marks, shrinkage, or indentation. The gate should be smooth without any sharp edges.

2. Diodes should have clear and legible markings, with smooth and intact encapsulation, free from defects, cracks, or oxidation on metal parts.

3. When riveting cables to diodes, there should be no exposed copper wires, and the number of broken strands should not exceed 3.

4. After ultrasonic completion, the connection force between the cable clamp and the box body should be greater than 120N, and there should be no displacement of the cable under a force of 150N.

5. The tensile force between the cable and the terminal should be greater than 310N.



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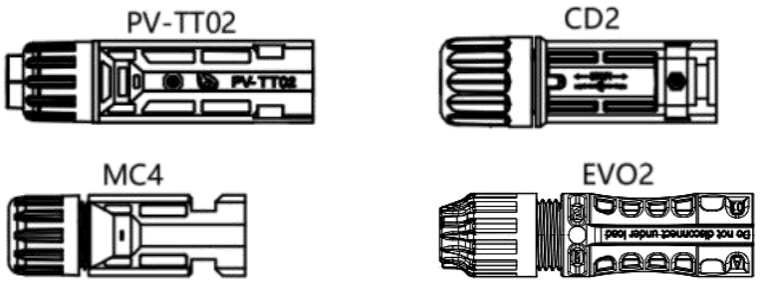

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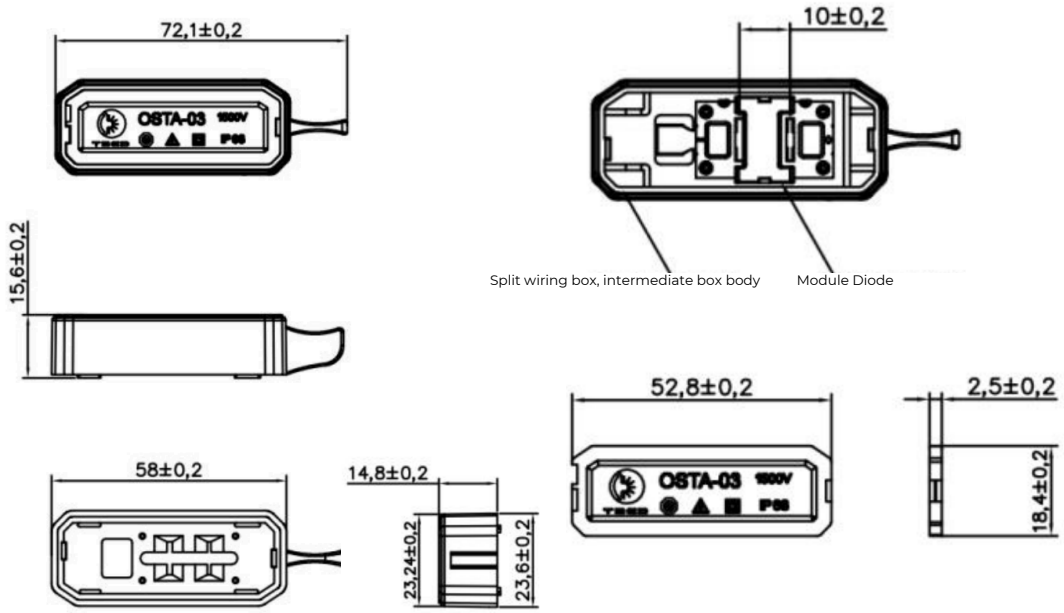

Product technical requirements:

1. For injection-molded parts, the appearance should be smooth without flash, burrs, material deficiency, oil stains, mechanical abrasions, obvious flow marks, shrinkage, or indentation.
2. Diodes should have clear and easily distinguishable markings, with smooth and intact encapsulation, free from defects, cracks, or oxidation on metal parts. The gate should be smooth without any sharp edges.

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Global Leader of PV Junction Box Manufacturer

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