

NOVASTACK® 35-HDP 12

Plug Part No. 21150-0**E-01

Receptacle Part No. 21151-0**E-01

Instruction Manual

Rev.	ECN	Date	Prepared by	Checked by	Approved by
1	S26135	2026/05/01	S.Abe	-	S.Suzuki
0	S26101	2026/04/01	S.Abe	-	S.Suzuki

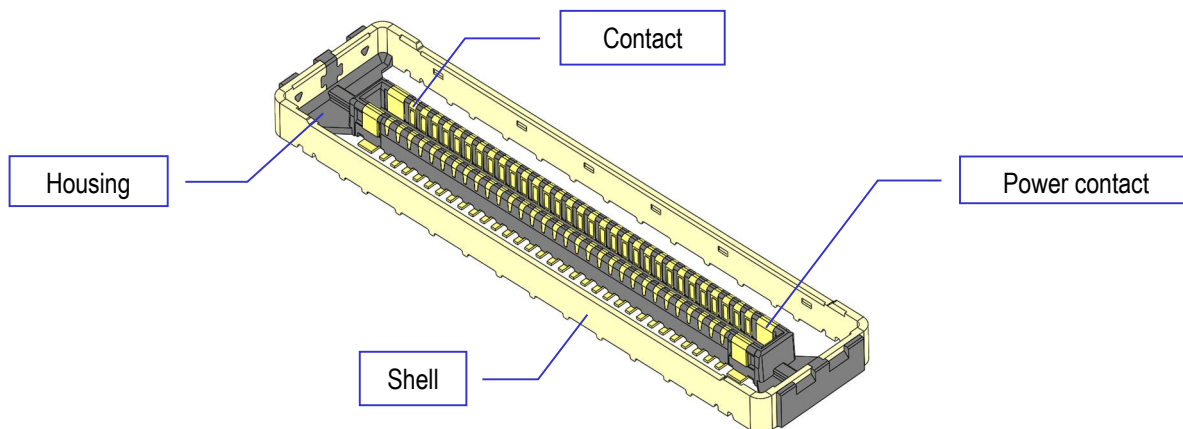
This manual provides the insertion & withdrawal methods and cautions to handle NOVASTACK 35-HDP 12 connector properly.

1. Connector Name, Part number, Part name

1-1. Plug connector

Product Name : NOVASTACK 35-HDP 12 Plug ass'y

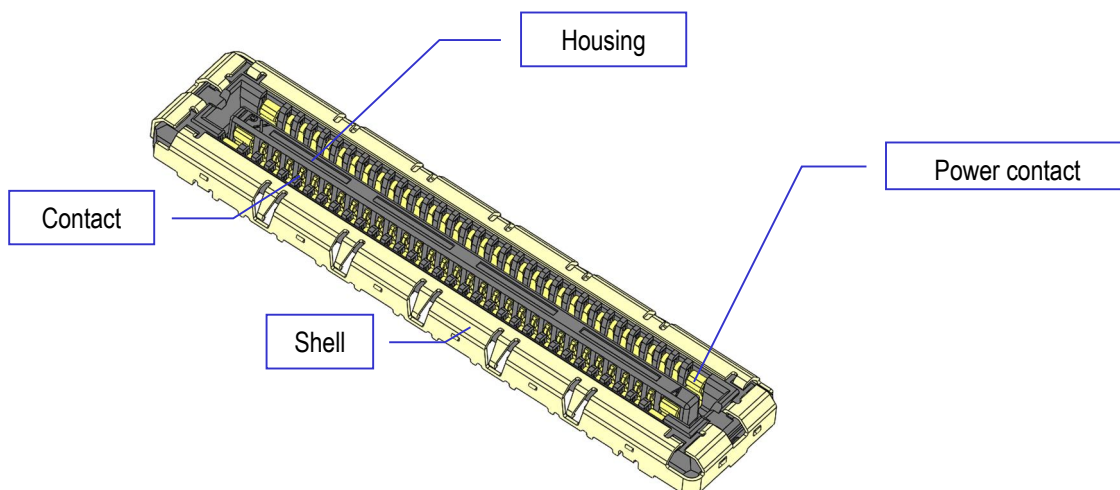
Part No. : 21150-0**E-01



1-2. Receptacle connector

Product Name : NOVASTACK 35-HDP 12 Receptacle ass'y

Part No. : 21151-0**E-01



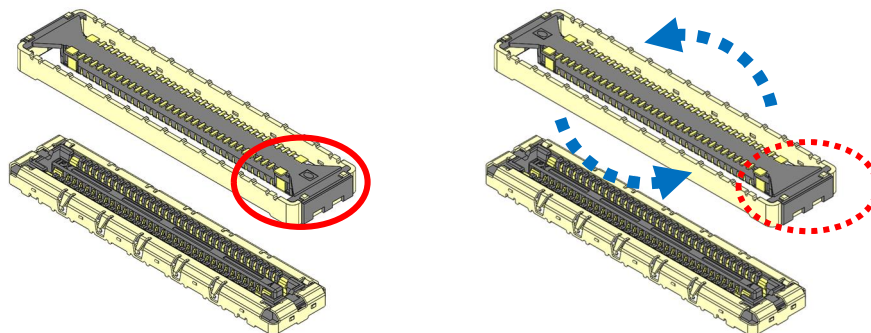
“ ** ” part shows the number of the connector position.

1-3. Connectors Mating Direction

The ends of the connectors are not identical but the plug and the receptacle can be mated in both ways.

The performance of the connector will not be affected by the mating direction of the connectors.

(Red line circle: end with dent Red dotted circle: end without dent)

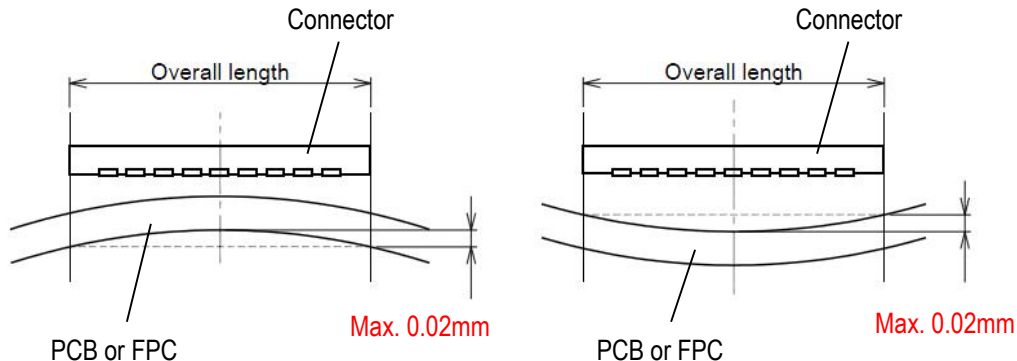


2. Mounting

2-1. The recommended pattern dimensions are shown in the product drawing.

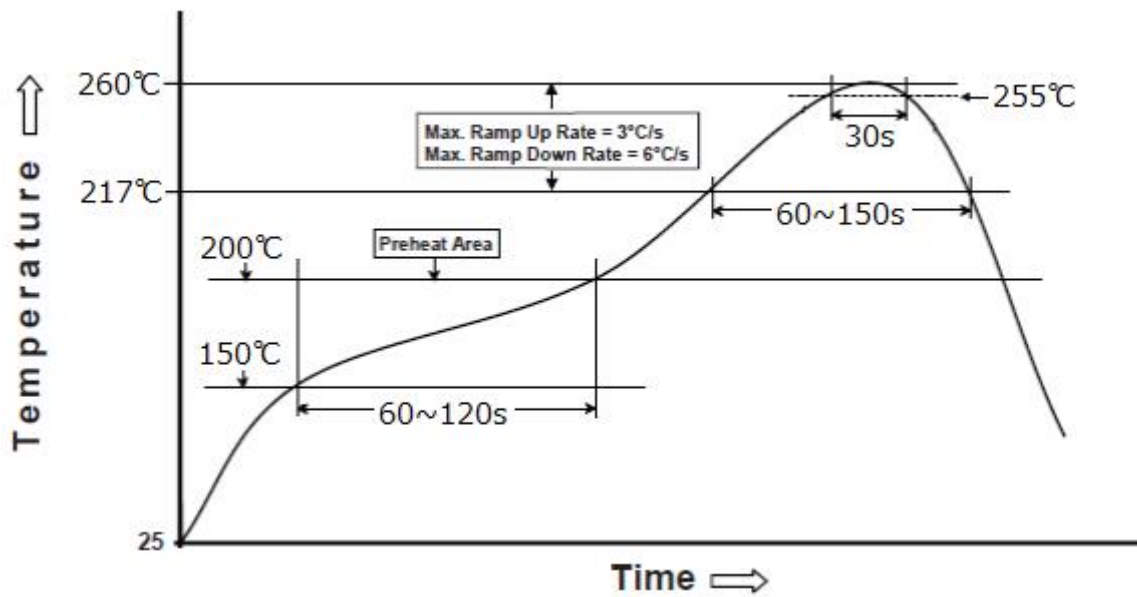
2-2. Warp of PCB or FPC

Please keep the warp of PCB or FPC on 0.02 mm or less for the overall length of the connector.



2-3. Recommended reflow temperature profile

(Temperature: the top surface temperature of the printed circuit board near the connector terminal.)

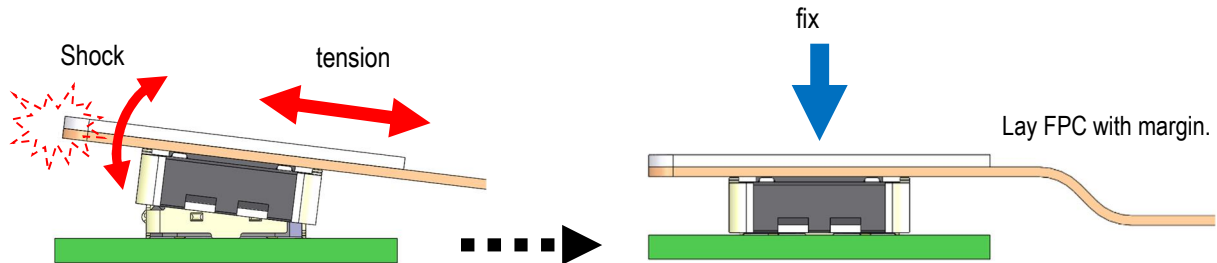


Recommended Reflow Temperature Profile

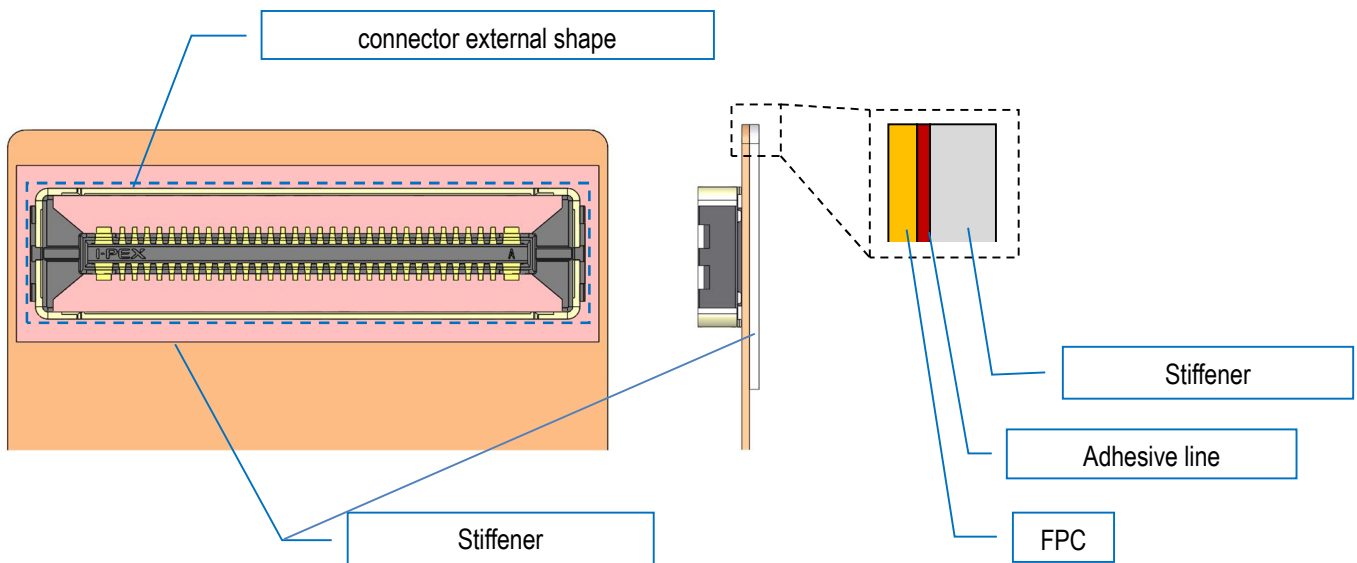
3. Cautions for Handling the Component

3-1. Using for board to FPC connection.

- ① FPC shall not be tensed to withstand in case of a shock or a tension is applied.
The FPC shall be fixed toward the mating direction for the maintenance.

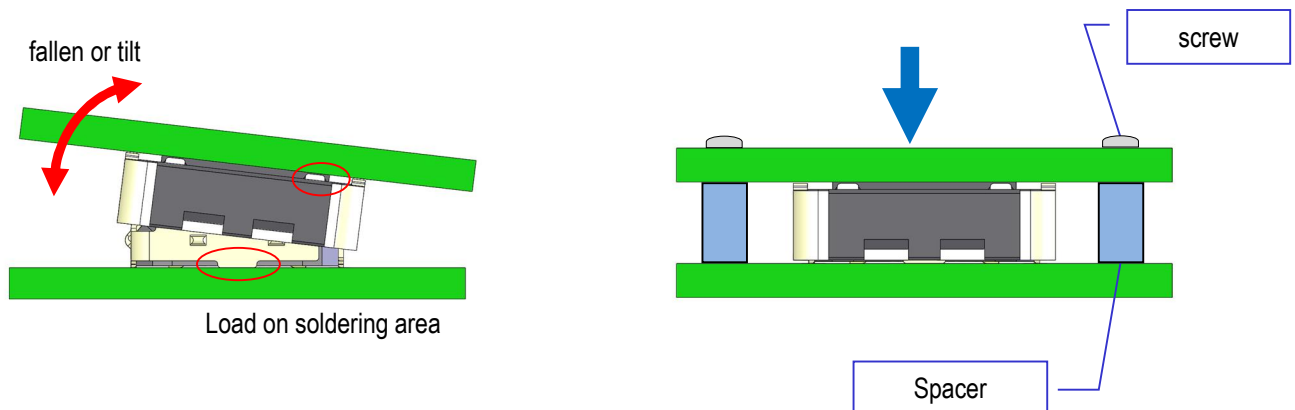


- ② FPC shall be used with the stiffener to prevent the connector on the FPC side from the breakage during insertion and extraction.
Recommended stiffener size: Larger than the connector external shape including footprint pattern.

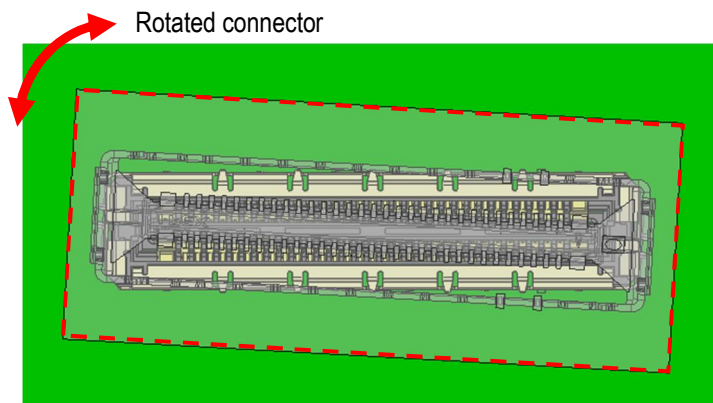


3-2. Using for board to board connection.

- ① To prevent the accidental removal or slant mating, spacers are recommended to fix the space in between the two printed circuit board. There spacers will also help to prevent the damage to the connectors and to the soldered area which might have been caused by the too large printed circuit board or unbalanced shape printed circuit board.



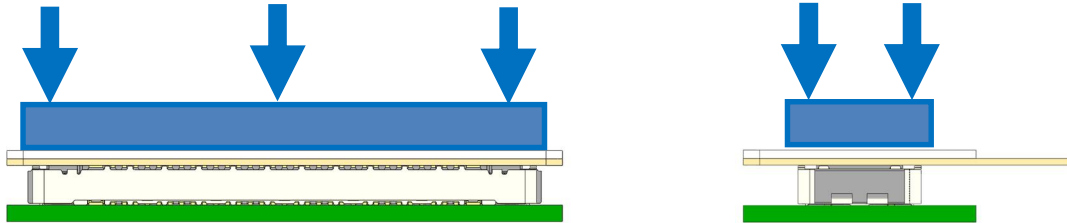
- ② Do not turn around the connector on the printed circuit board in case of using a screw. If the printed circuit boards were fixed in a wrong position, the connectors may get damaged.



3-3. Press load

To prevent the coming off of the mated connectors (the load which a connector can apply), press the entire upper surface of the connector with the load calculated in below formula.

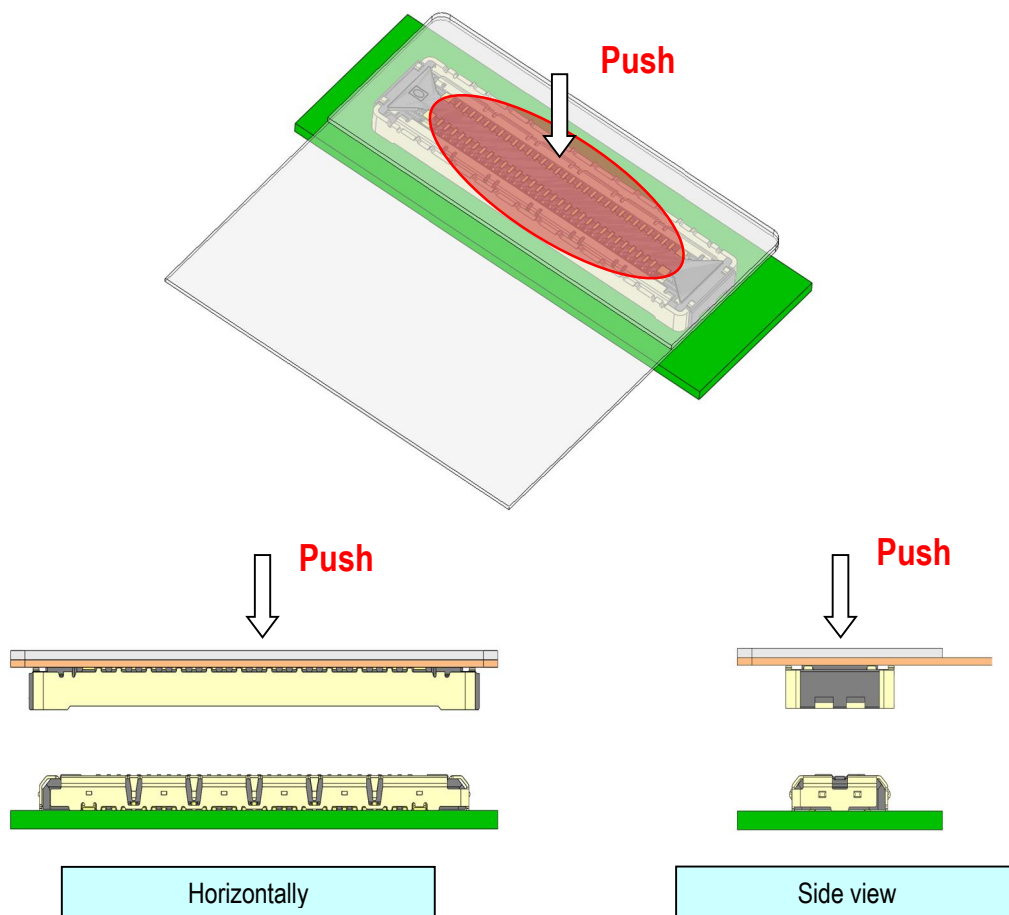
(Maximum Press load : number of pin×1.0N or under)



4. Mating and Unmating

4-1. Mating method

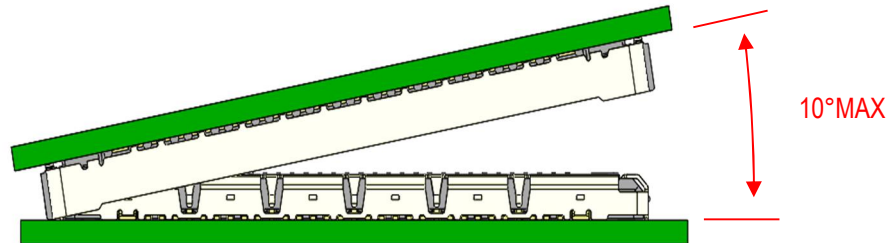
In the insertion, please push the connector center so that a connector does not incline. Please mate the connector within the proper mating position, as excessive twisting, tilting, or misalignment during mating may cause damage to the connector.



※Caution 1

Insertion angle shall not be slanted more than 10 degrees.

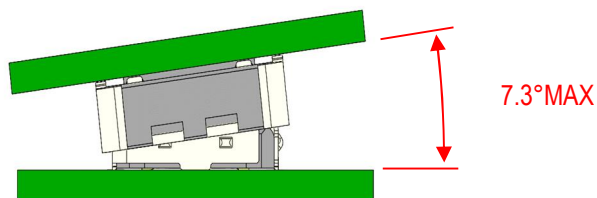
Slanted degree over 10 degrees may cause the deformation of the connector.



※Caution 2

At starting the insertion, please keep the slant 7.3 degrees or less in direction of depth.

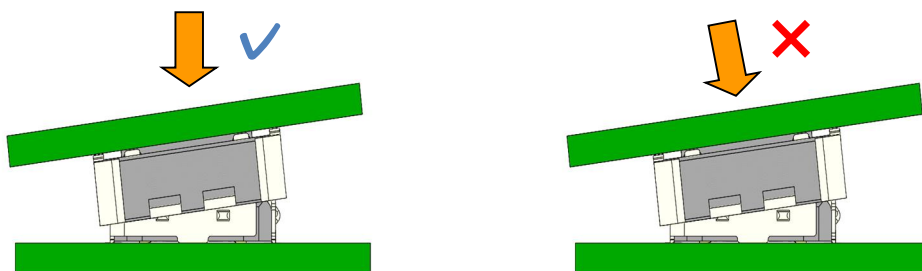
By inserting with the slant more than 7.3 degrees, deformation of the connector will occur.



※Caution3

Pressing straight from upper side, the posture becomes stable by guide function of connector.

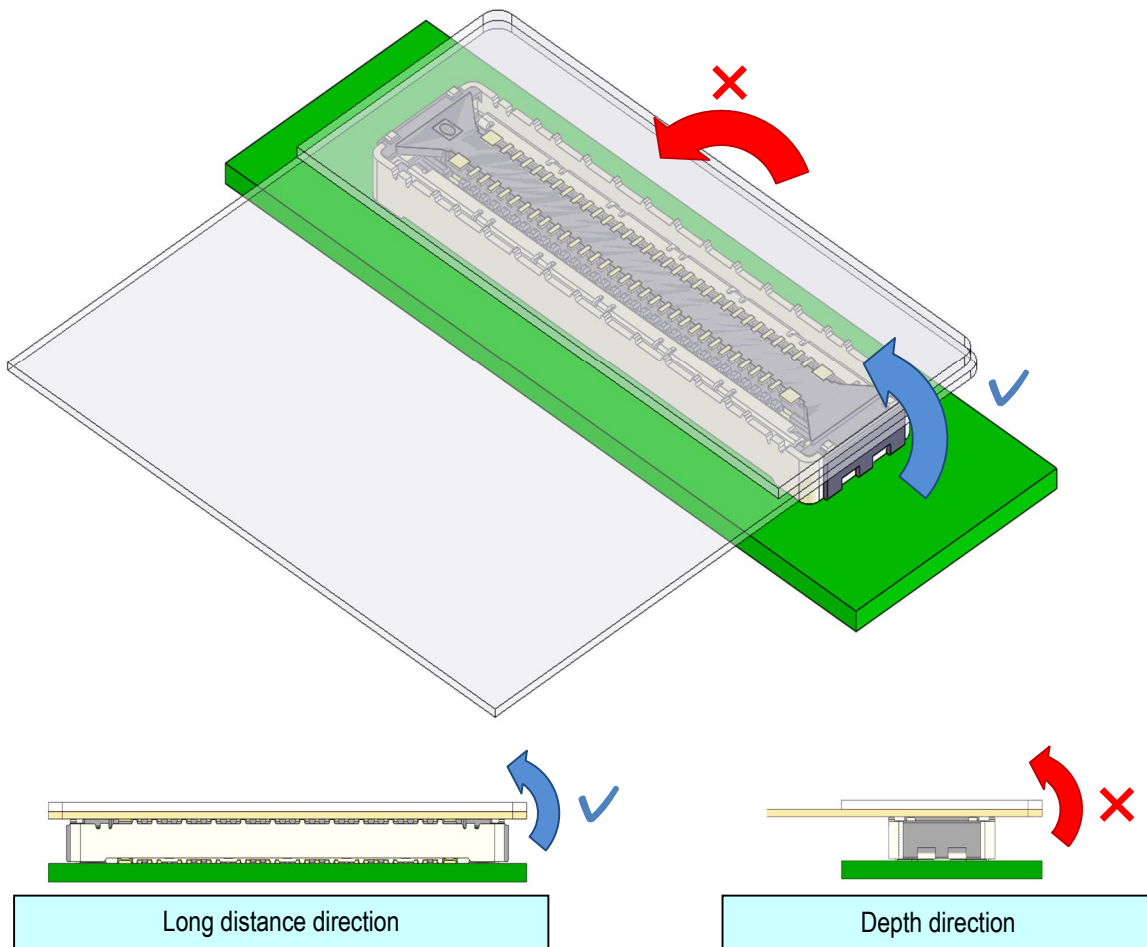
Do not insert forcibly from oblique direction.



4-2. Unmating method

In the withdrawal, please raise the one side of the board or FPC in the long distance direction.

Please do not raise a board or FPC in the depth direction. It causes the deformation of the connector.



※Caution4

Do not mate or unmate when the connector is turned around.

