NOVASTACK® 35-HDH

Plug Part No. 21003-0**E, Receptacle Part No. 21004-0**E

Instruction Manual

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Rev.	ECN	Date	Prepared by	Checked by	Approved by

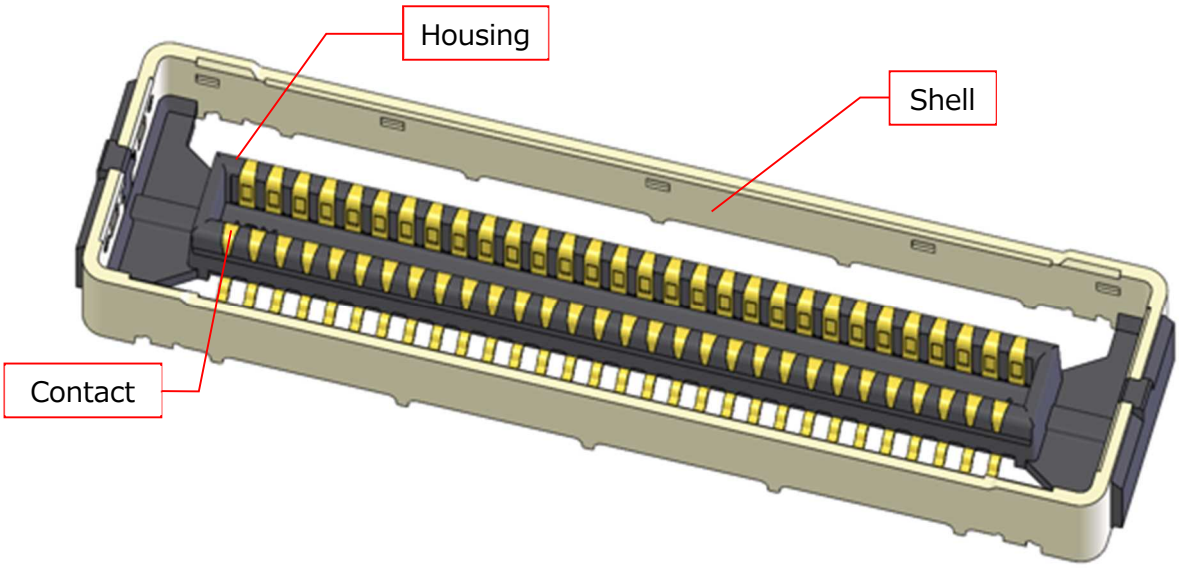
NOVASTACK 35-HDH Instruction Manual

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

1. Connector Name, Part number, Part name

Product Name : NOVASTACK 35-HDH Plug Ass'y

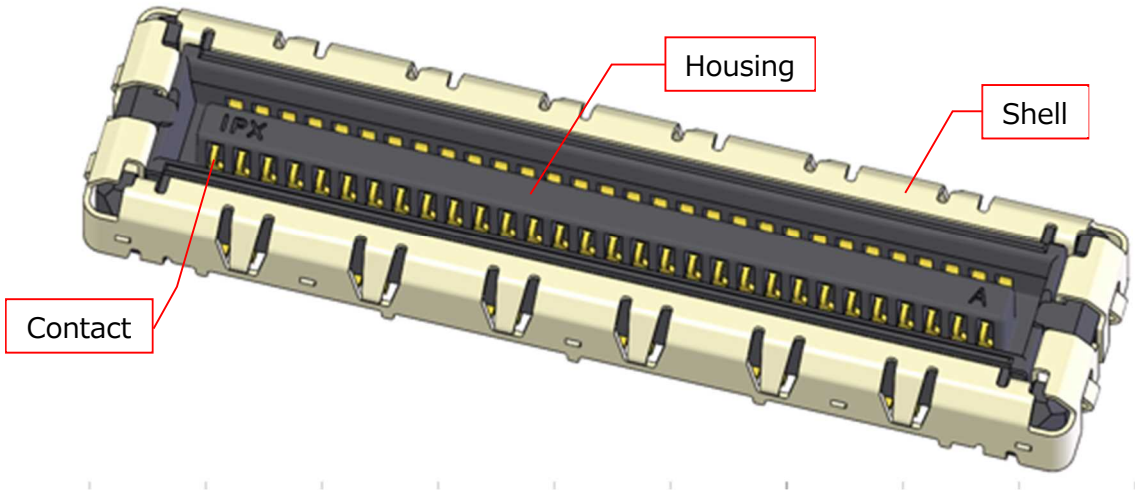
Part No. : 21003-0**E



1-2. Receptacle connector

Product Name : NOVASTACK 35-HDH Receptacle Ass'y

Part No. : 21004-0**E



2. Mounting

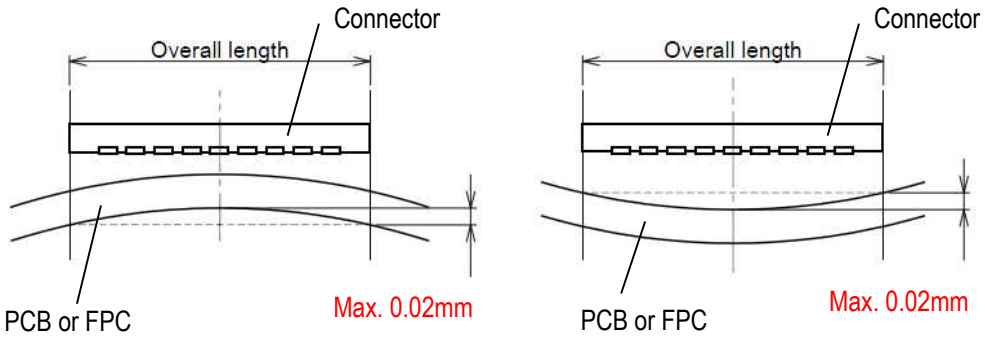
2-1. The recommended pattern dimensions are shown in the product drawing.

2-2. The recommended metal mask thickness and aperture ratio

Refer to the drawing 21003 (plug) and 21004 (receptacle).

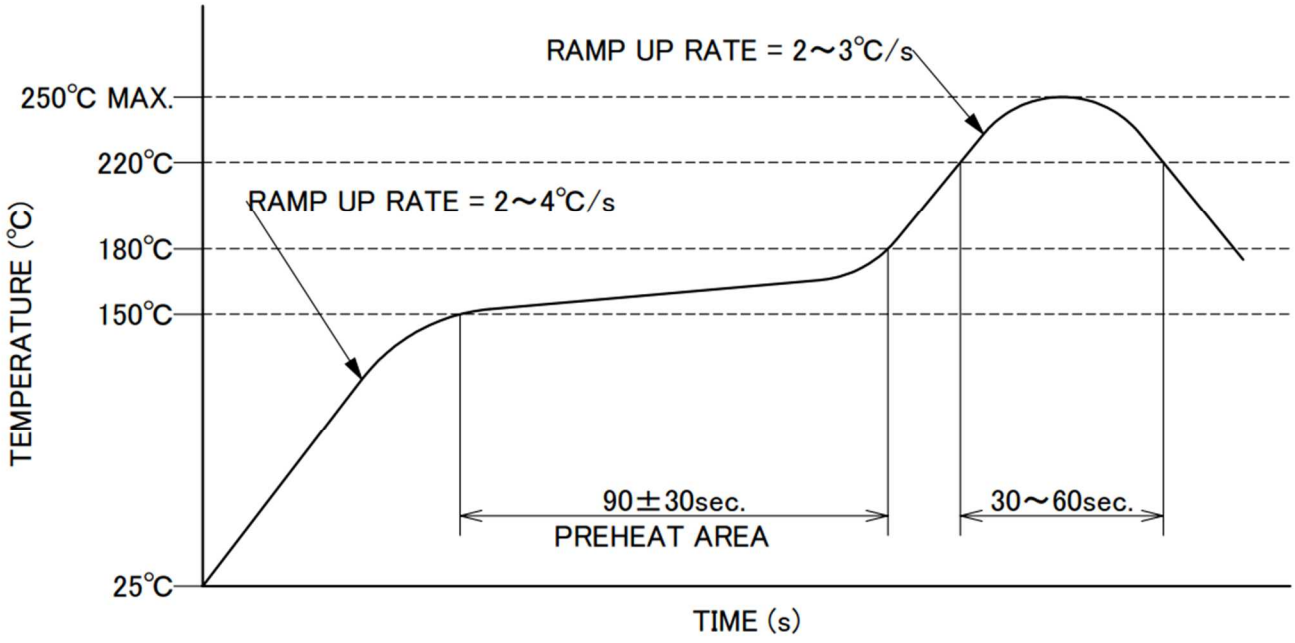
2-3. Warp of PCB or FPC

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



2-4. Recommended reflow temperature profile

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



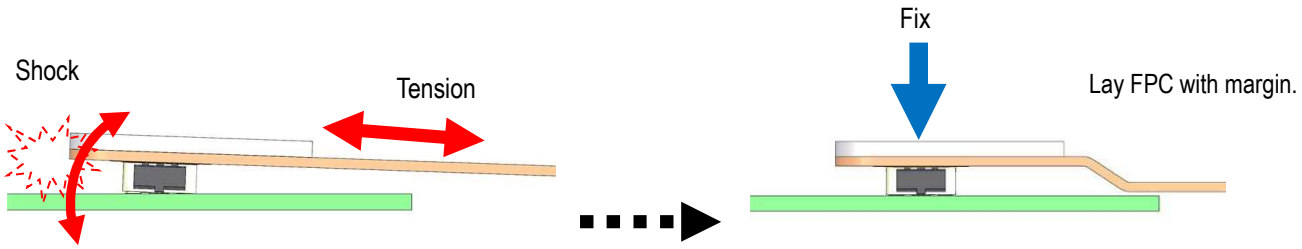
Recommended Reflow Temperature Profile

3. Cautions for Handling the Component

3-1. Using for board to FPC connection.

①FPC shall not be tensed to withstand in case of a shock or a tension is applied.

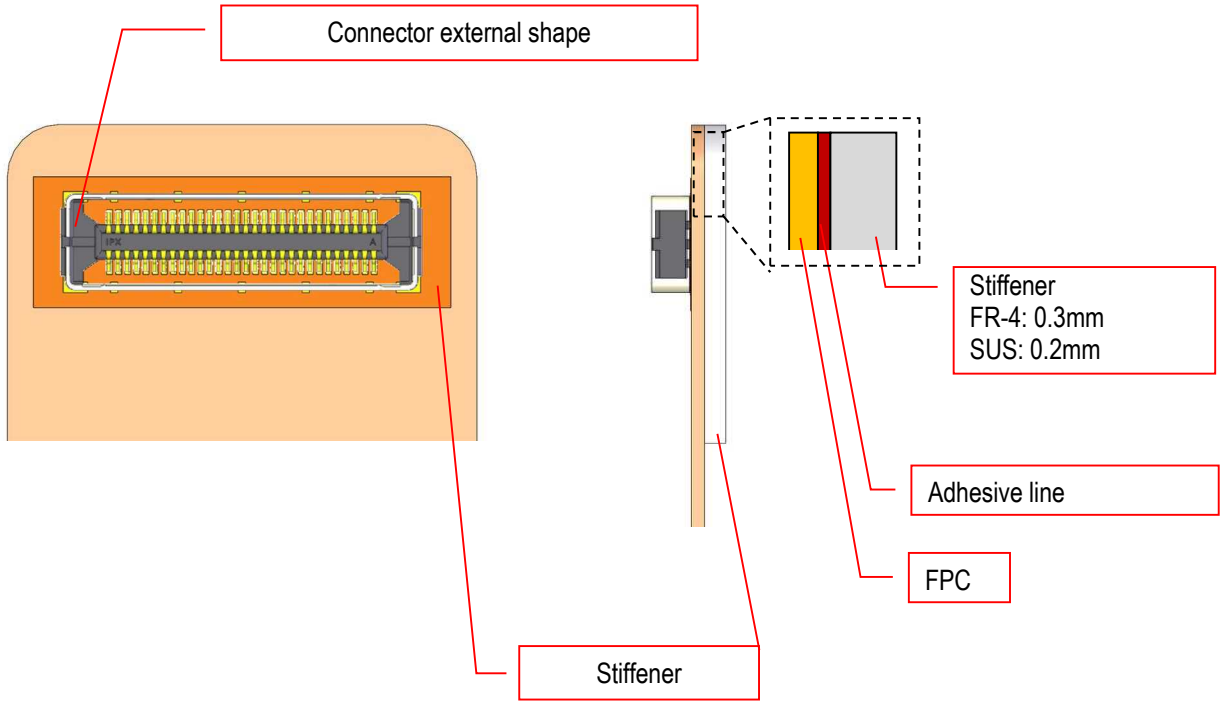
The FPC shall be fixed toward the mating direction for the maintenance.



②FPC shall be used with the stiffener to prevent the connector on the FPC side from the breakage during insertion and extraction.

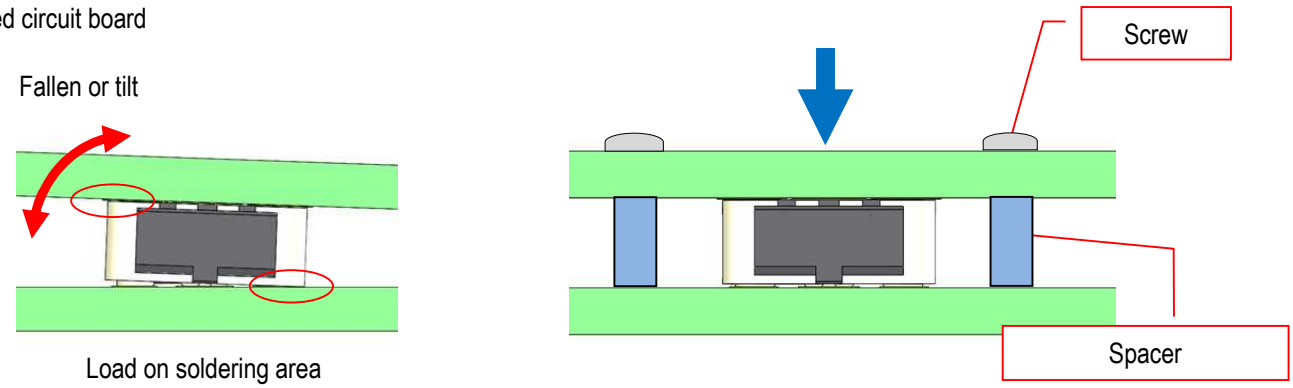
Recommended stiffener size: Larger than the connector external shape including footprint pattern

Recommended thickness of the FPC and a stiffener: Thicker than 0.3mm or more



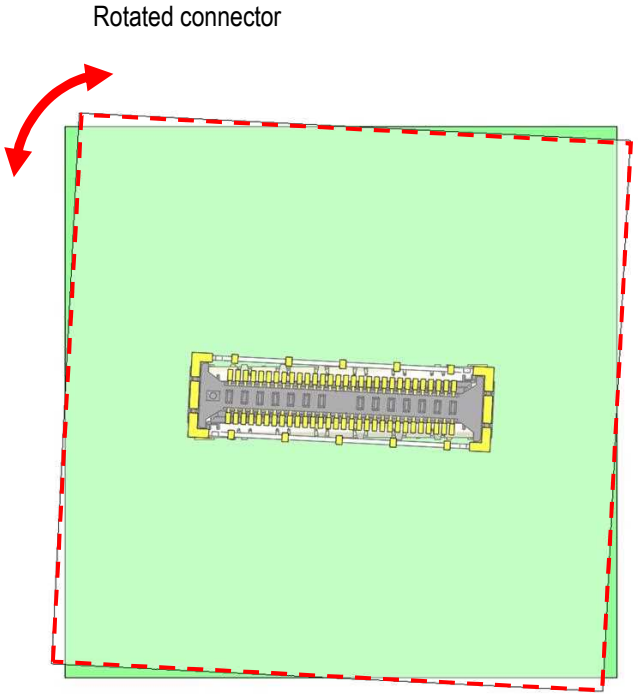
3-2. Using for board to board connection.

①To 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



②Do not turn the connector on the printed circuit board in case of using a screw.

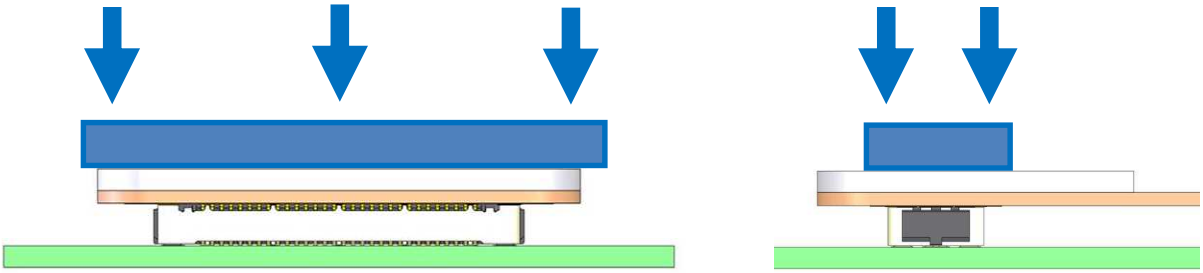
If the printed circuit boards were fixed in a wrong position, the connectors may get damaged.



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）

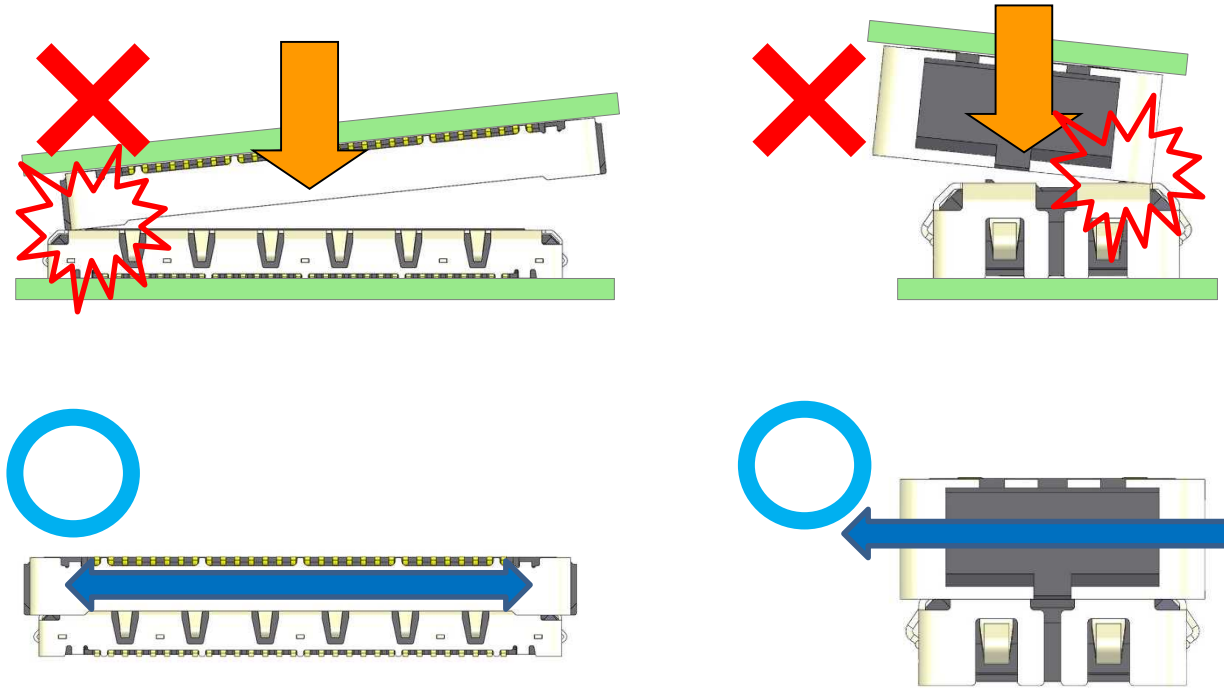


4. Mating and Unmating

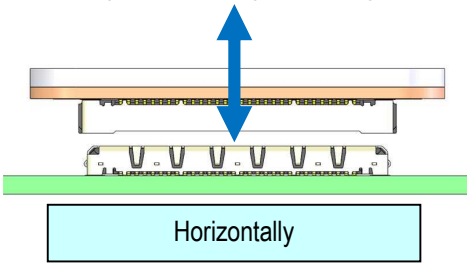
4 -1. When aligning the mating position, do not push it into that place forcibly, but find the lead-in position.

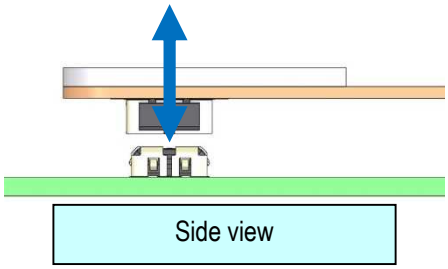
Pushing it into the place forcibly will cause the housing to be scraped or the shell to be deformed.

Therefore, non-conductivity or solder peeling may occur.



4 -2. Always mate and unmate the connectors horizontally. An excessive twisting or slanting when mating and unmating will damage the connectors.

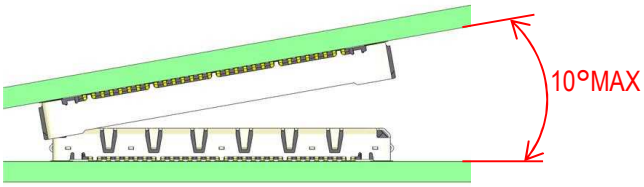




4-3. Cautions

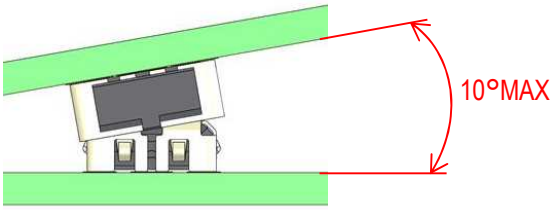
[Caution 1]

At starting the insertion, please keep the slant 10 ° or less in direction of width.
By inserting with the slant more than 10°, deformation of the connector will occur.



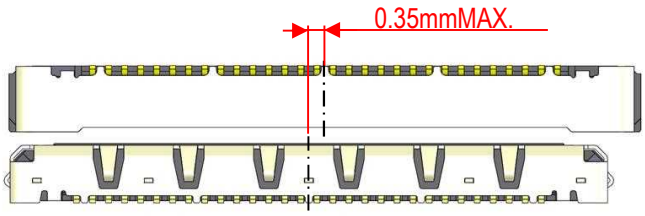
[Caution 2]

At starting the insertion, please keep the slant 10 ° or less in direction of depth.
By inserting with the slant more than 10°, deformation of the connector will occur.



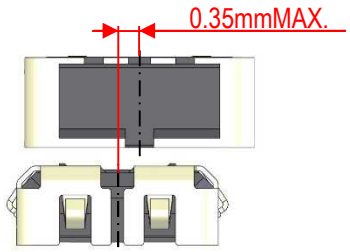
[Caution3]

At starting the insertion, please keep the offset 0.35mm or less in direction of width.
By inserting with the offset more than 0.35mm, deformation of the connector will occur.



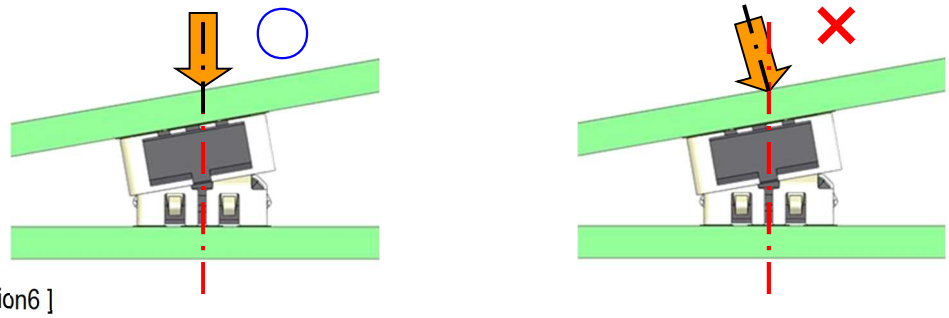
[Caution 4]

At starting the insertion, please keep the offset 0.35mm or less in direction of depth.
By inserting with the offset more than 0.35mm, deformation of the connector will occur.



[Caution5]

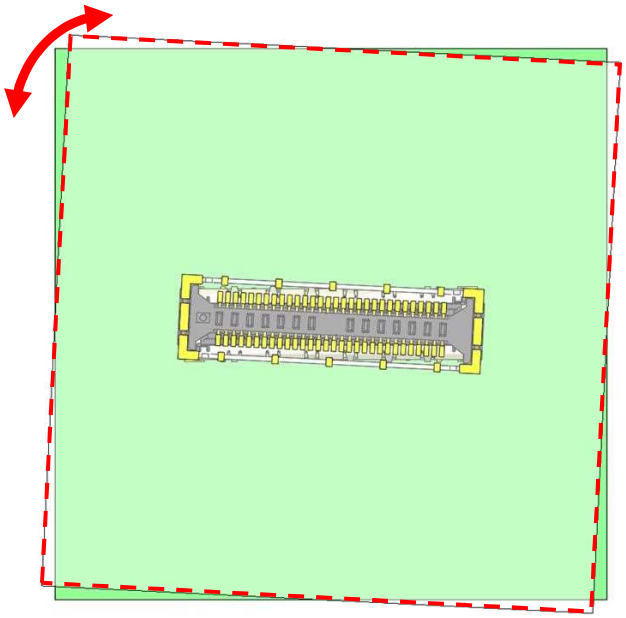
Pressing straight from upper side, the posture becomes stable by guide function of connector.
Do not insert forcedly from oblique direction.



[Caution6]

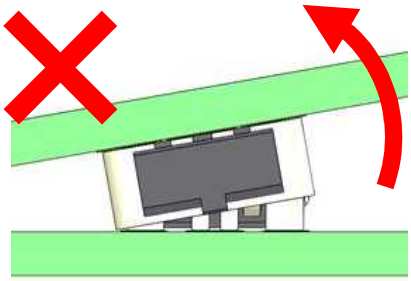
Do not mate or unmate when the connector is turned around.

Rotated connector

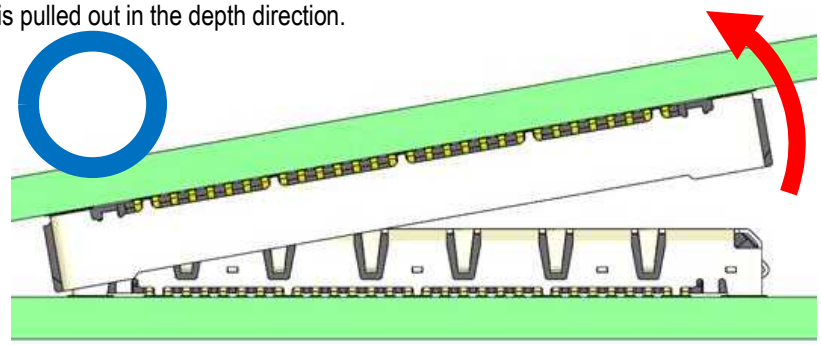


[Caution 7]

When unmate connector with a twist and slant, unmate the connector in the horizontal direction only, as the connector will be structurally damaged if it is pulled out in the depth direction.



Side view



Horizontally