

MINIFLEX® 5-BFN II

(0.5mm pitch FPC Conn.)

Part No.: 20542-0**E-0#, 20570-0**E-0#, 20586-0**E-0#
20600-0**E-0##, 20606-0**E-01, 20607-0**E-0#
20646-0**E-01, 20666-0**E-0#, 20691-0**E-01

DW-5

(For mating FPC)

Part No.: 20597-0**E-02

Instruction Manual

9	S26323	2026/08/17	T. Minohara	M. Muro	H. Ikari
8	S24189	2024/03/20	E. Tanaka	M. Muro	T. Masunaga
7	S20235	2020/03/01	R. Fukuda	M. Muro	Y. Shimada
6	S19582	2019/09/26	S. Shigekoshi	M. Muro	H. Ikari
Rev.	ECN	Date	Prepared by	Checked by	Approved by

This manual provides cautions to handle our FPC connector MINIFLEX 5-BFN II and DW-5 properly and safely.

【Connector Name, Part number】

◆MINIFLEX 5-BFN II

Product Name		MINIFLEX 5-BFN II (03)	MINIFLEX 5-BFN II (02)
Part No.	STANDARD TYPE	20542-0**E-0#	20607-0**E-0#
	L TYPE	20586-0**E-0#	20666-0**E-0#
	LK TYPE	20600-0**E-0##	20570-0**E-0#
	OTHER TYPES	20606-0**E-01 20646-0**E-01 20691-0**E-01	-

◆DW-5 (For mating FPC)

Product Name : DW-5 Receptacle

Part No. : 20597-0**E-02

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

【Names of each part of the connector】

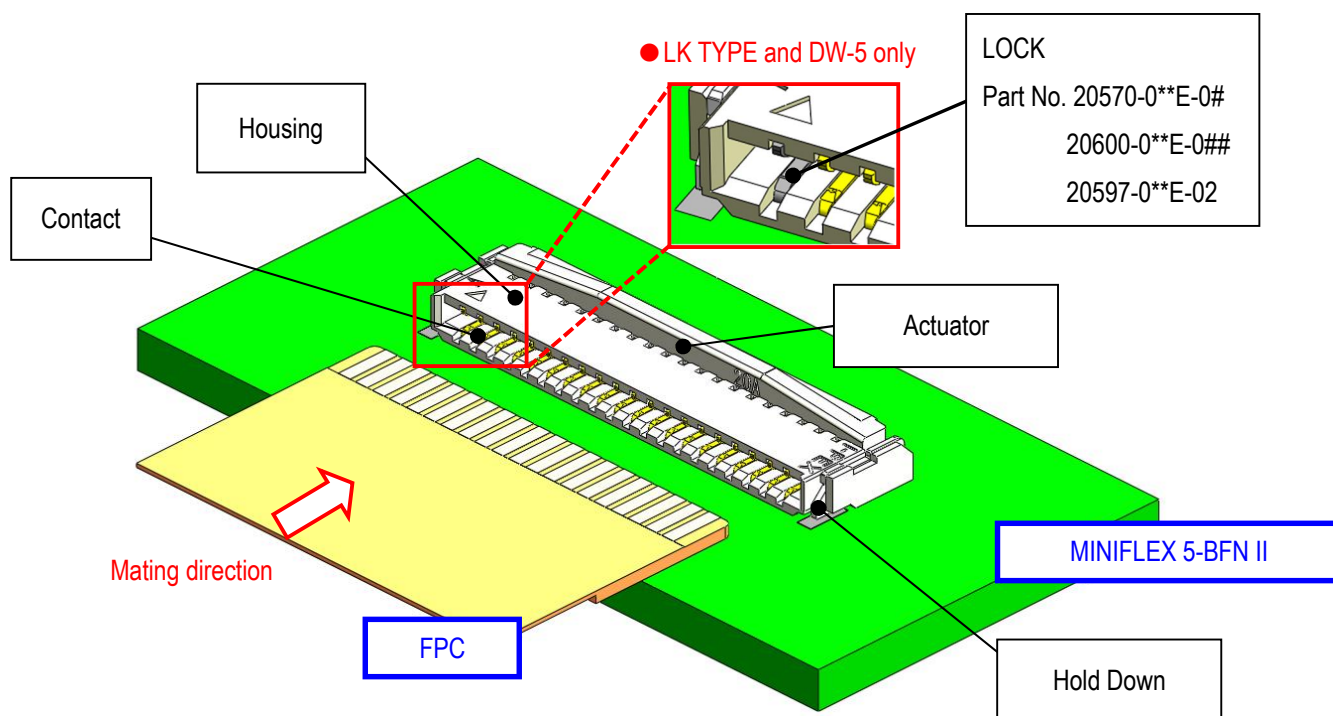


Fig.1 Names of each part of the connector

1. Connector mounting state (Before FPC insertion)

Connectors are delivered with actuator open. There is no need to operate the actuator before FPC insertion.

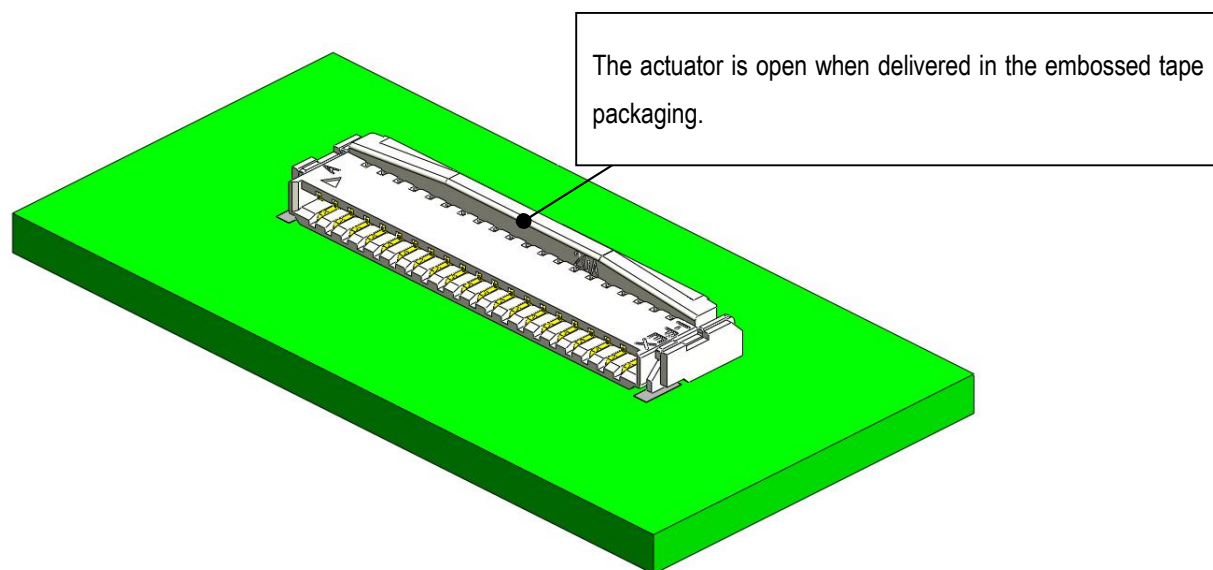


Fig.2 Connector mounting state

«Caution»

- Even if the actuator is locked without FPC (FPC is not inserted), there is no remarkable affect to the contact pressure and the reliability will not be damaged.

However, there is the possibility that the insertion force rises in inserting FPC, because the gap of contacts became narrowed. Therefore, please avoid locking the actuator without FPC as much as possible.

- In case of the manual mounting do not to touch contact tail.

Please do not use excessive amount of solder and flux compounds.

2. FPC Insertion Method

Please insert FPC straight in the connector.

Please confirm FPC is inserted into the end of mating part fully.

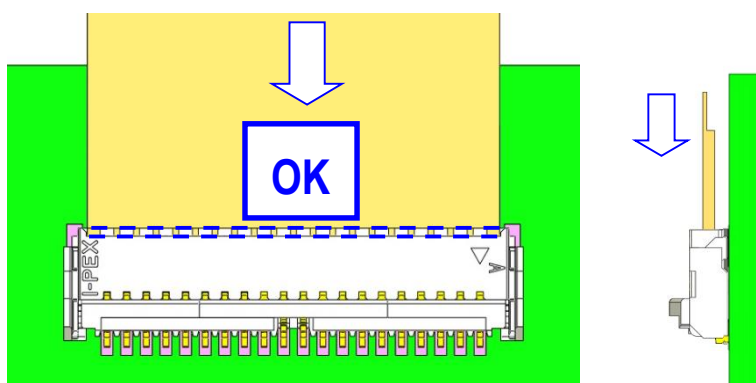


Fig.3 FPC insertion (OK)

«Caution»

<Caution.1>

If it become the oblique insertion of FPC as shown in Fig. 4, electrical connection NG and a short circuit will be caused.

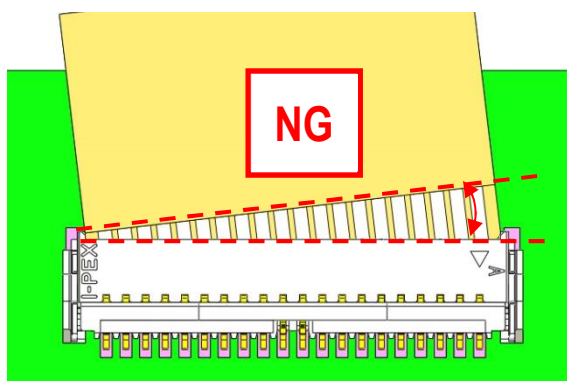


Fig.4 FPC insertion (NG example 1)

<Caution.2>

Please insert FPC horizontally.

If FPC is slanted as fig.5, there is possibility of breakage of the connector or FPC.

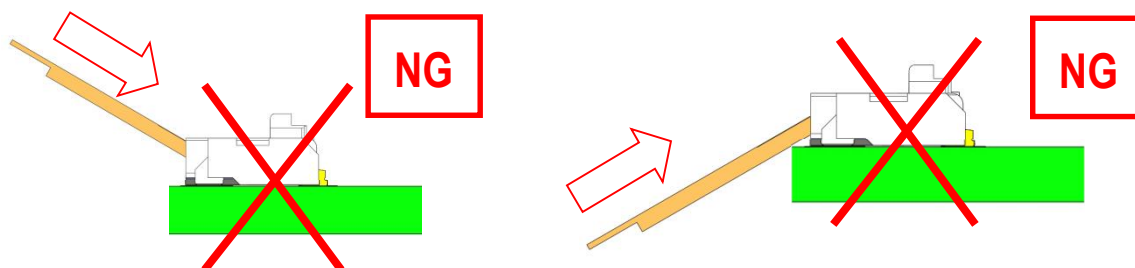


Fig.5 FPC insertion (NG example 2)

- ★The check of FPC insertion becomes easy by preparing the wing in FPC and preparing the silk print in board.

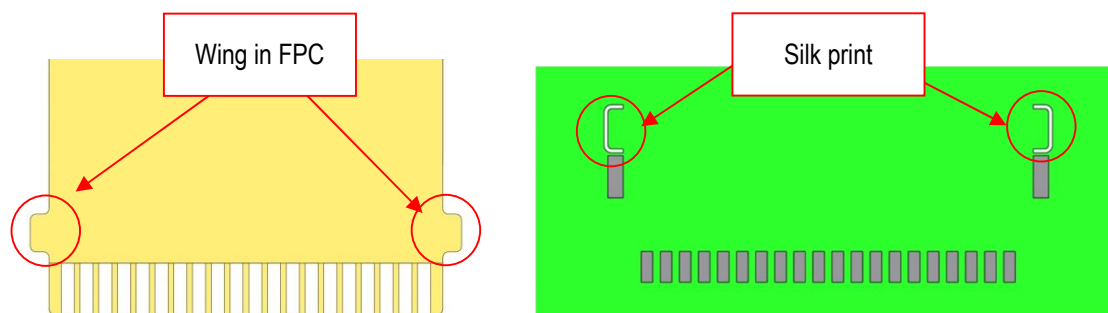


Fig.6 The check of FPC insertion (Reference)

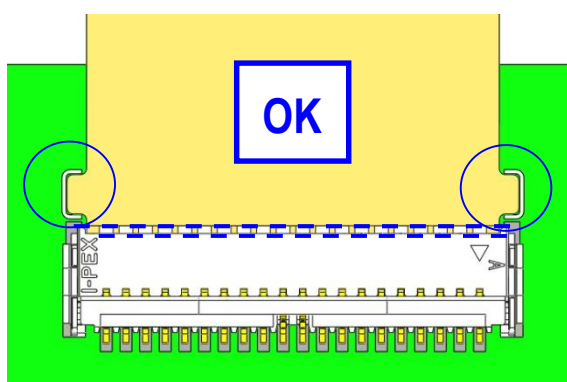
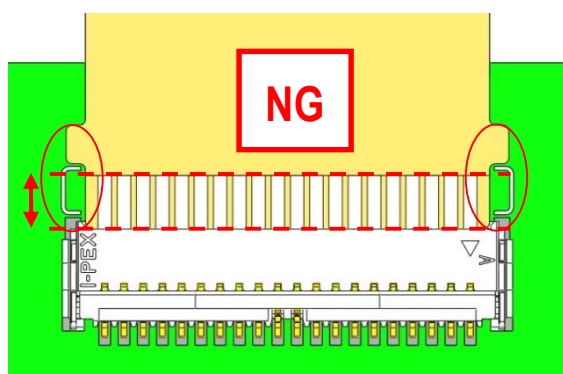
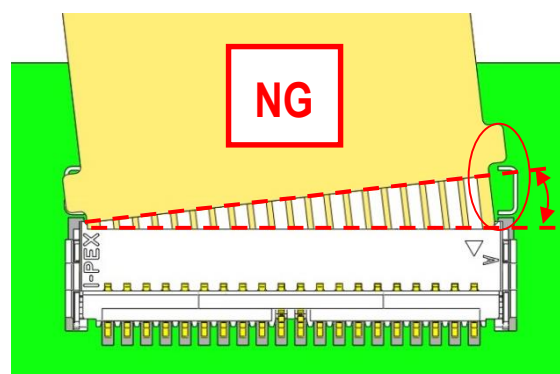


Fig.7 FPC insertion (OK)



NG-① : Short insertion



NG-② : Oblique insertion

Fig.8 FPC insertion (NG)

- Please do not suppress FPC near a connector.

Contact gives damage to FPC and contact is damaged. It becomes the electrical connection NG.

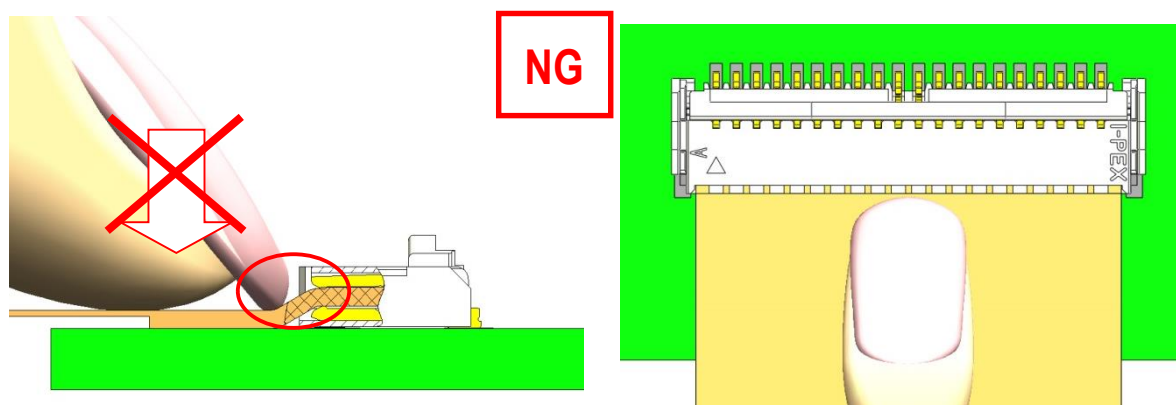


Fig.9 FPC insertion (NG)

3. To lock actuator

Push the center of actuator to the arrowed direction horizontally with finger cushion from the FPC inserting direction.

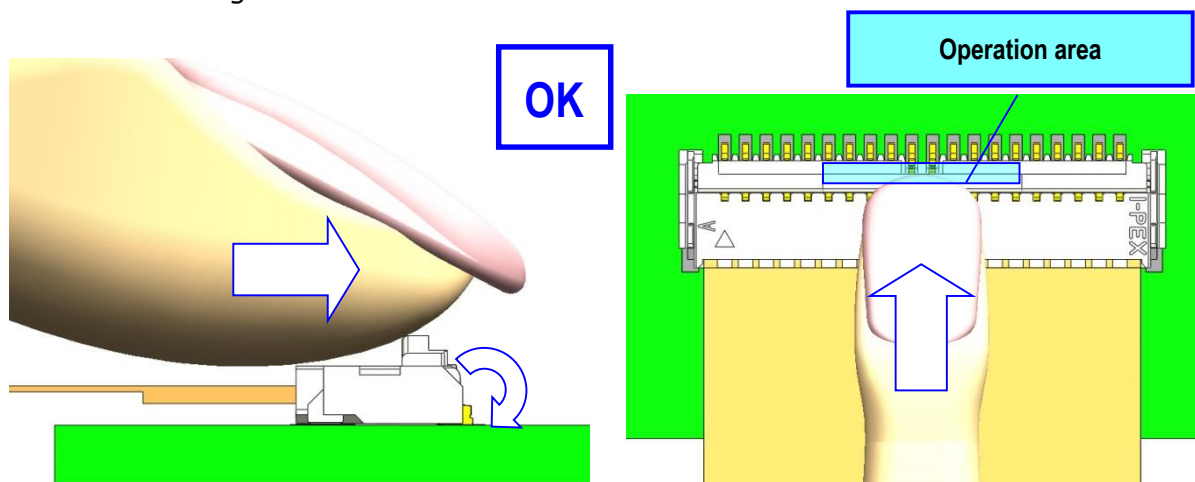


Fig.10 To lock actuator (OK)

«Caution»

- Please do not press an actuator from a top.
Actuator is damaged and a function is not satisfied.

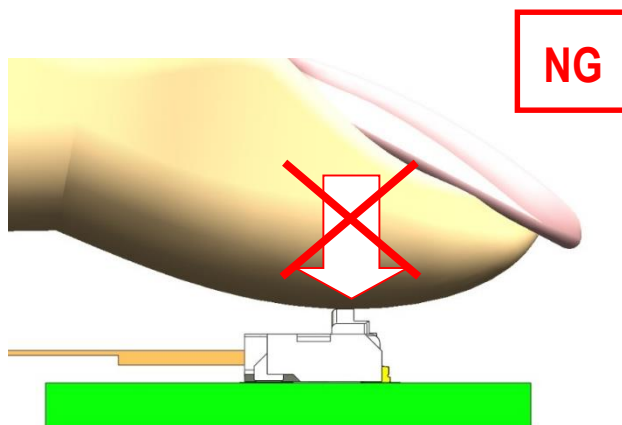


Fig.11 To lock actuator (NG)

- Please do not push an actuator toward the connector opening.
Actuator is damaged and a function is not satisfied.

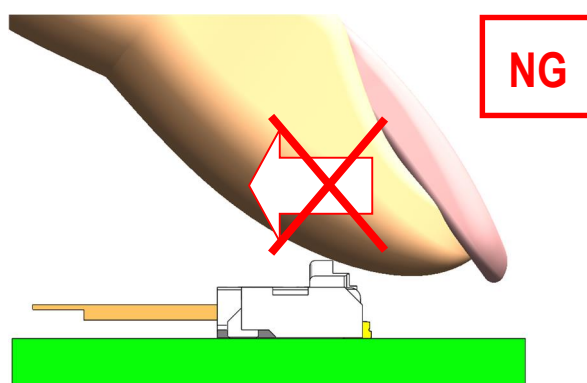


Fig.12 To lock actuator (NG)

- Please do not operate side of an actuator.
Actuator is damaged, or it becomes imperfect lock.

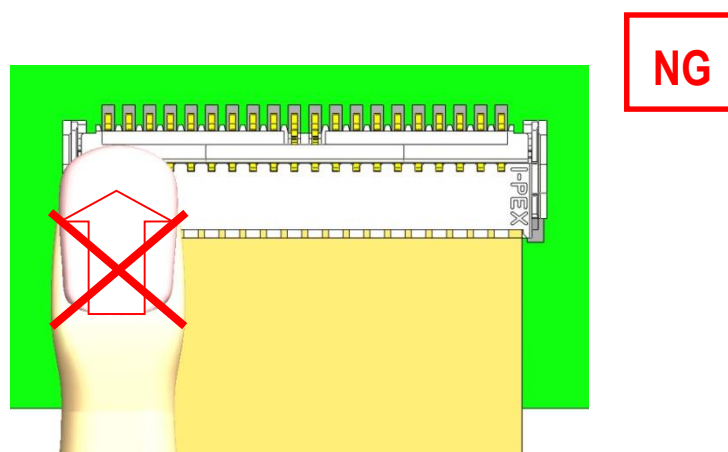


Fig.13 To lock actuator (NG)

- Please do not press contact on top by a nail etc. after a lock actuator. Contacts are damaged.

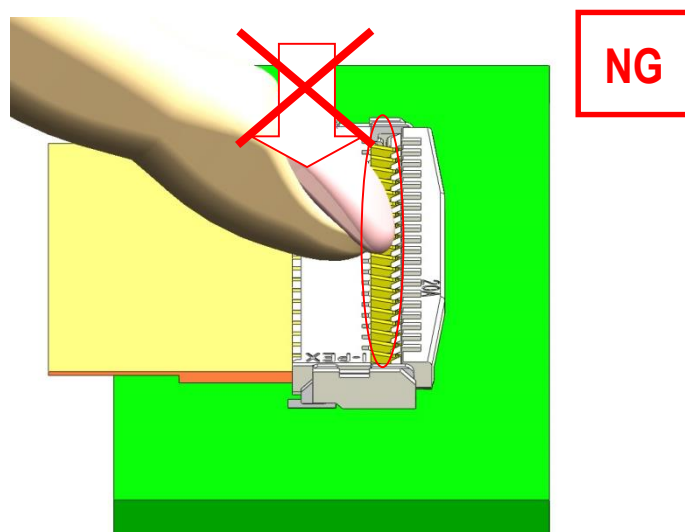


Fig.14 To lock actuator (NG)

- Please do not press housing on top and actuator after a lock actuator. Connector and FPC are damaged. It becomes the electrical connection NG.

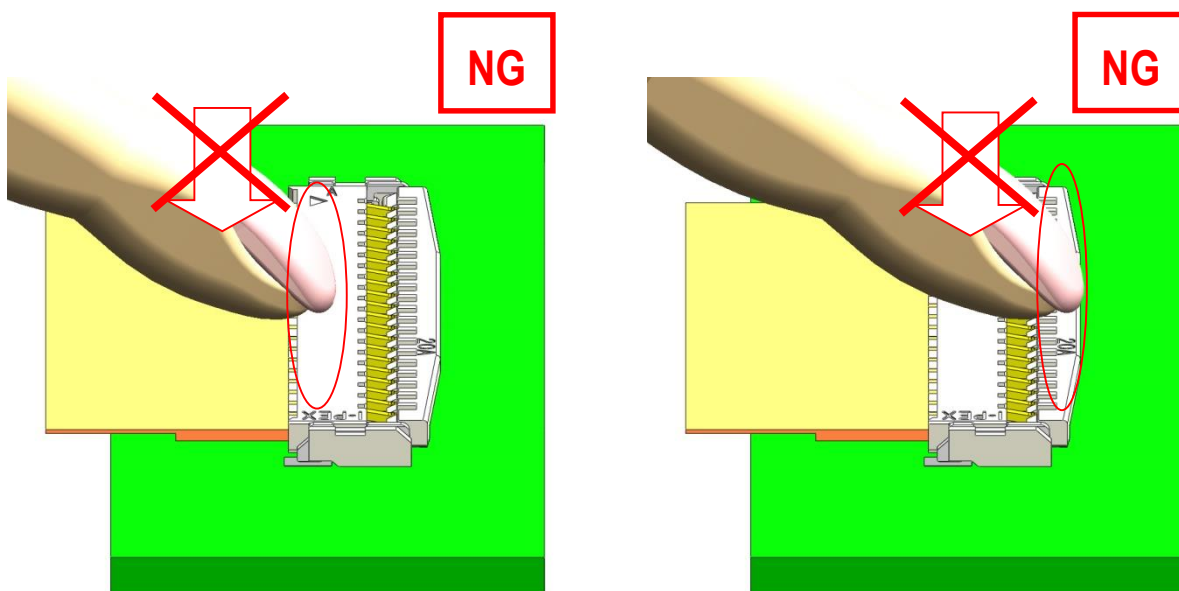


Fig.15 To lock actuator (NG)

- Please do not operate it using a sharp tool. (For example, tweezers) Connector is damaged.

4. To release actuator

Raise the center of actuator upwards lightly.

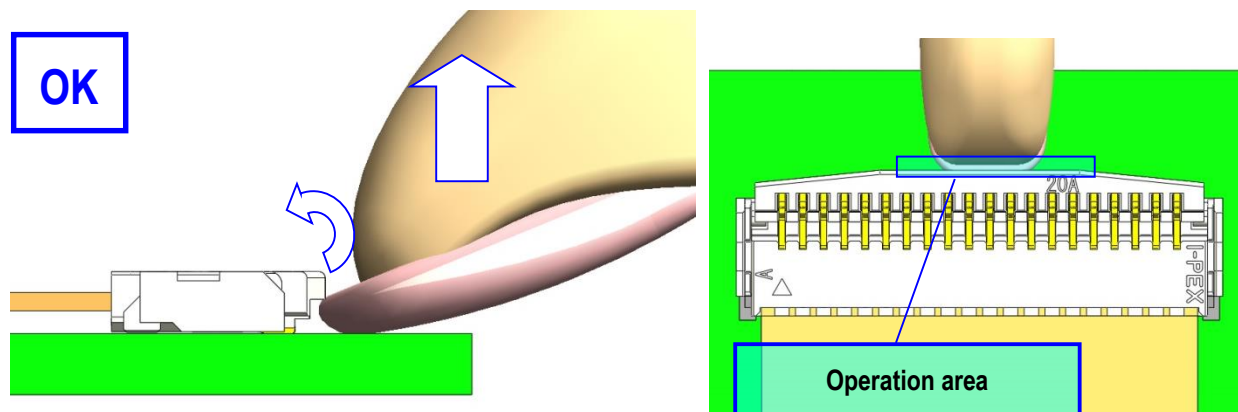


Fig.16 To release actuator (OK)

When release actuator is difficult, raise the center of actuator upwards lightly using the following JIG.

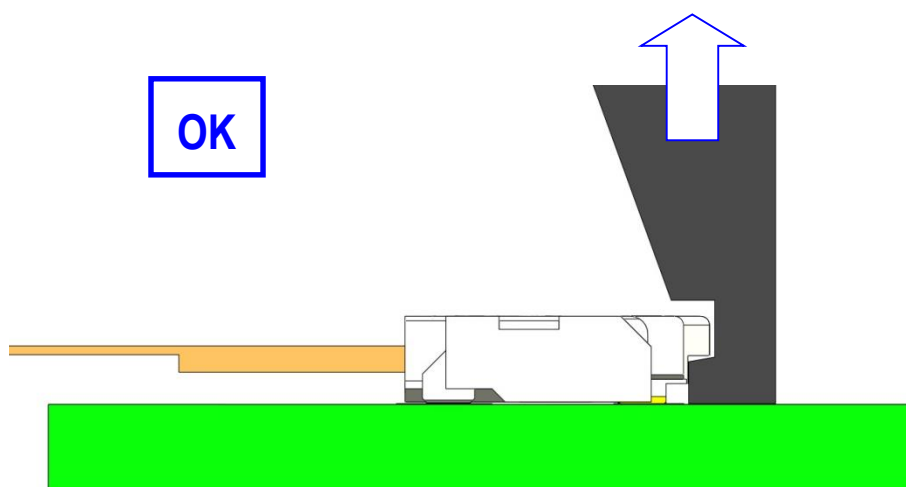


Fig.17 To release actuator (OK)

«Caution»

- Please do not press to the direction of FPC mating side.
Actuator and contacts are damaged.

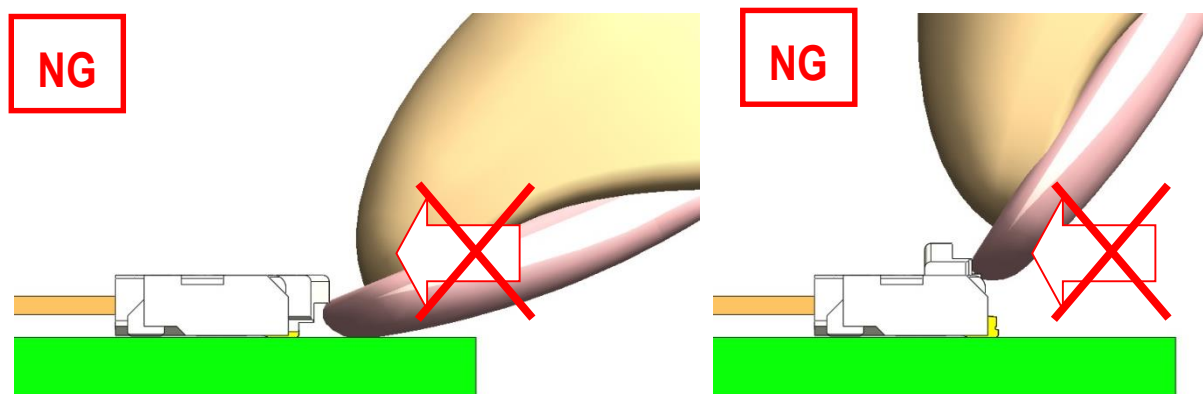


Fig.18 To release actuator (NG)

- Please do not operate side of an actuator. Actuator is damaged.

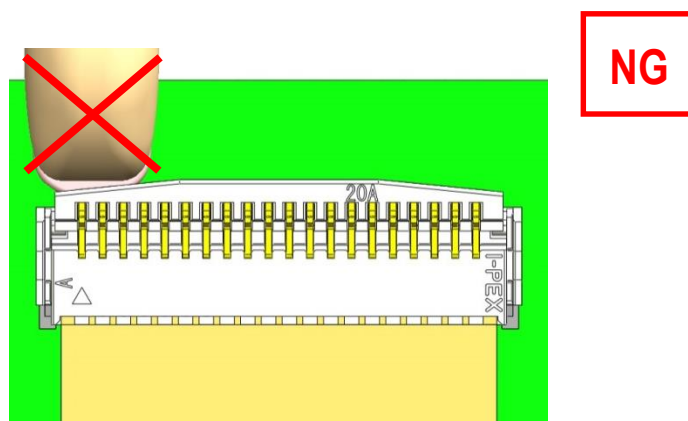


Fig.19 To lock actuator (NG)

- Please do not operate it using a sharp tool. (For example, tweezers) Connector is damaged.

5. Flexion of FPC

Please bend from the end of FPC stiffener.

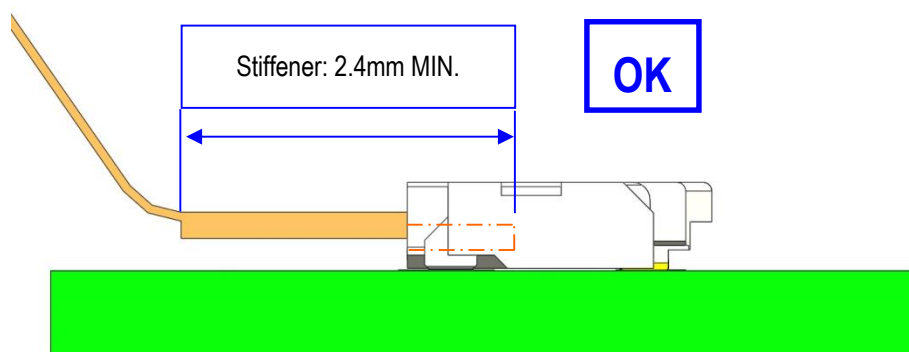


Fig.20 Flexion of FPC (OK)

«Caution»

- Please avoid applying excessive stress to the FPC connector exit part (FPC stiffener) with FPC inserted. Housing and contacts are damaged. It becomes the electrical connection NG.

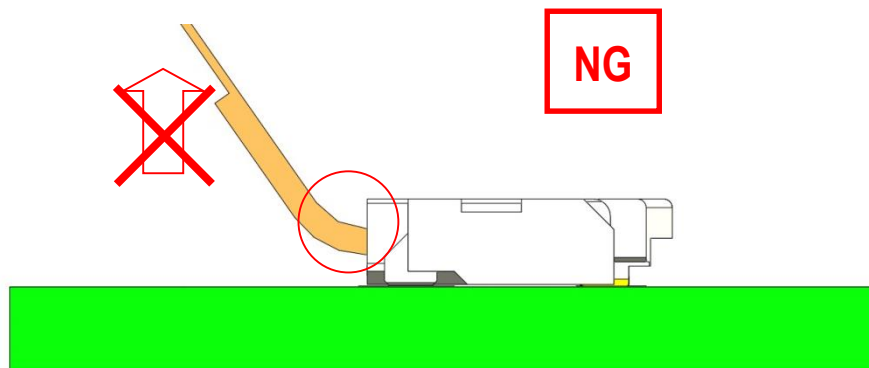


Fig.21 Flexion of FPC (NG)

6. To withdraw FPC

(For : 20570-0**E-0* LK02 , 20600-0**E-0** LK03, 20597-0**E-02 DW-5)

Please withdraw FPC straight in the connector with actuator release condition.

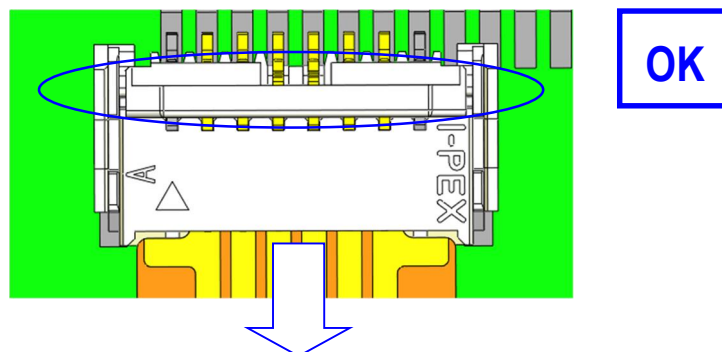


Fig.22 To withdraw FPC (OK)

«Caution»

(1) Please refrain from withdrawing FPC with actuator close condition. It may cause deformation of FPC.

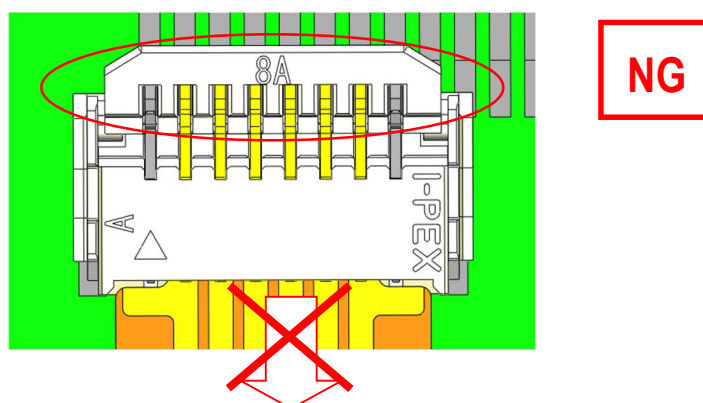


Fig.23 To withdraw FPC (NG)



Fig.24 In case withdrawing FPC with (a) actuator close condition or (b) actuator release condition

※If FPC receives damage like Fig.24, FPC retention force will be down, please exchange to new FPC.

7. 実装後の基板の反りに関して/ Regarding board warp after mounting.

Be careful that warp of 90mm width PCB is 0.5mm or less. If excessive warp is applied, Connector is damaged.
(Reference standard: JEITA ED-4702C)

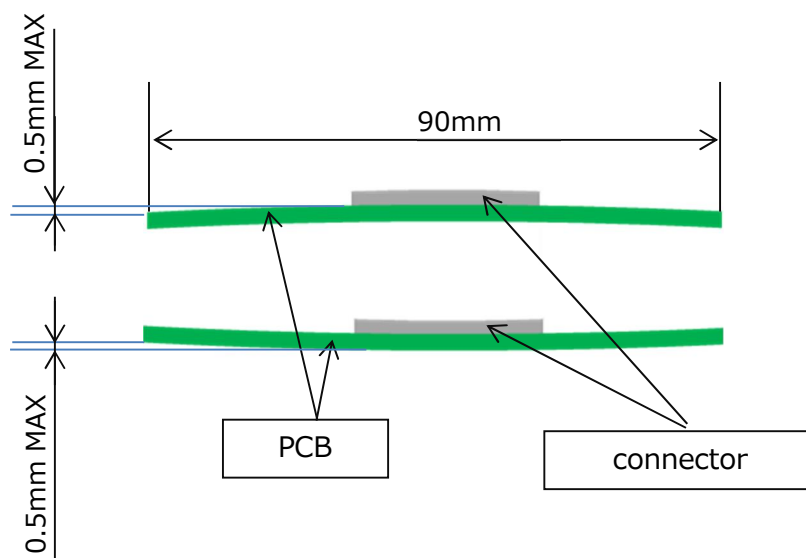


Fig.25 Amount of PCB warp