



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



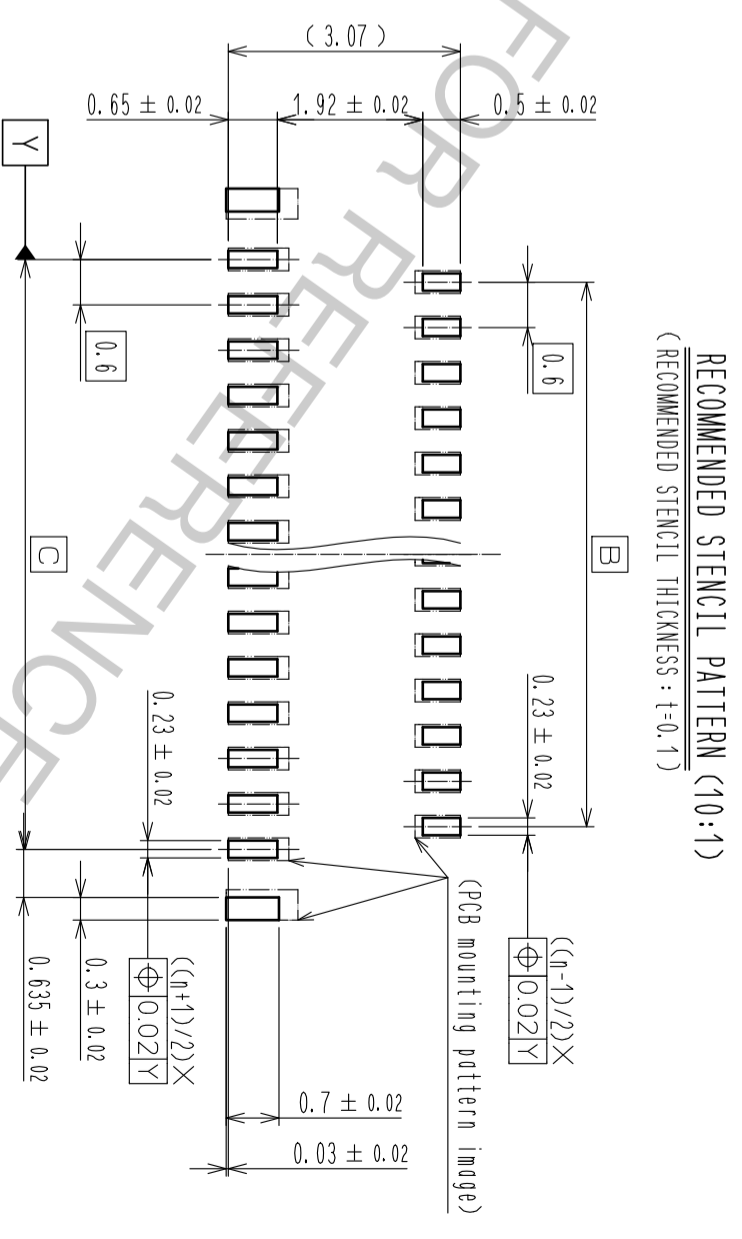
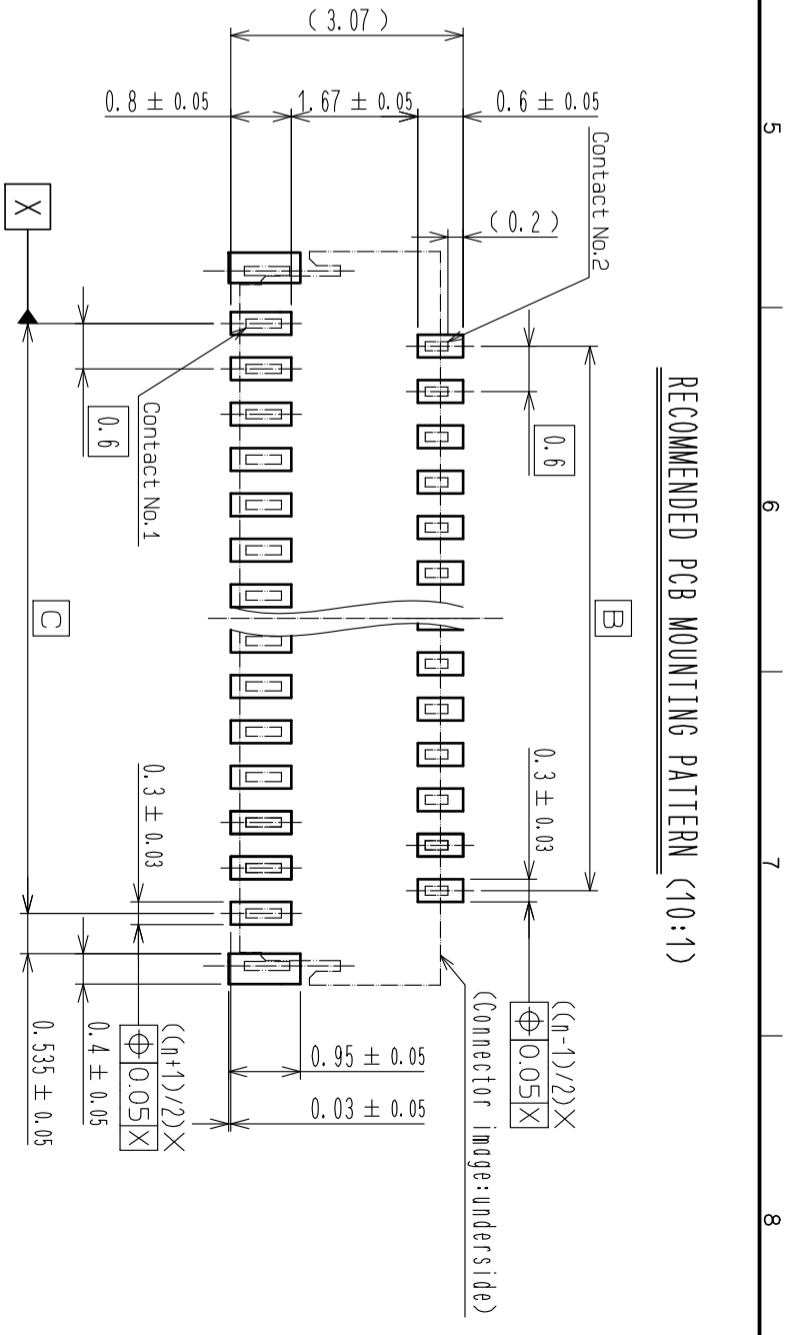
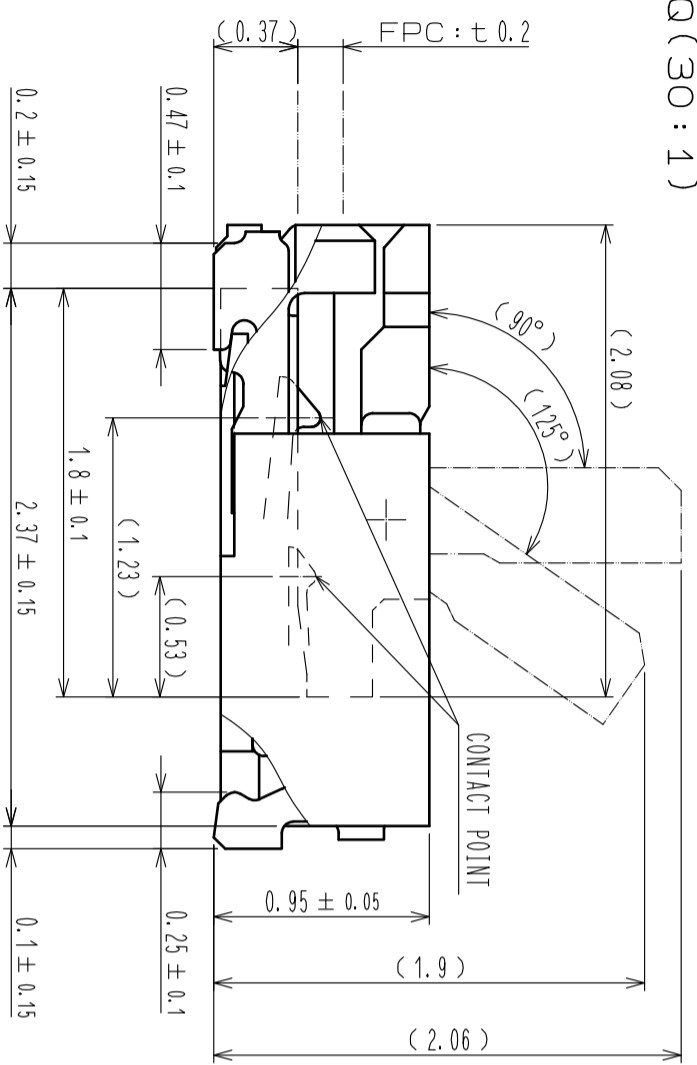
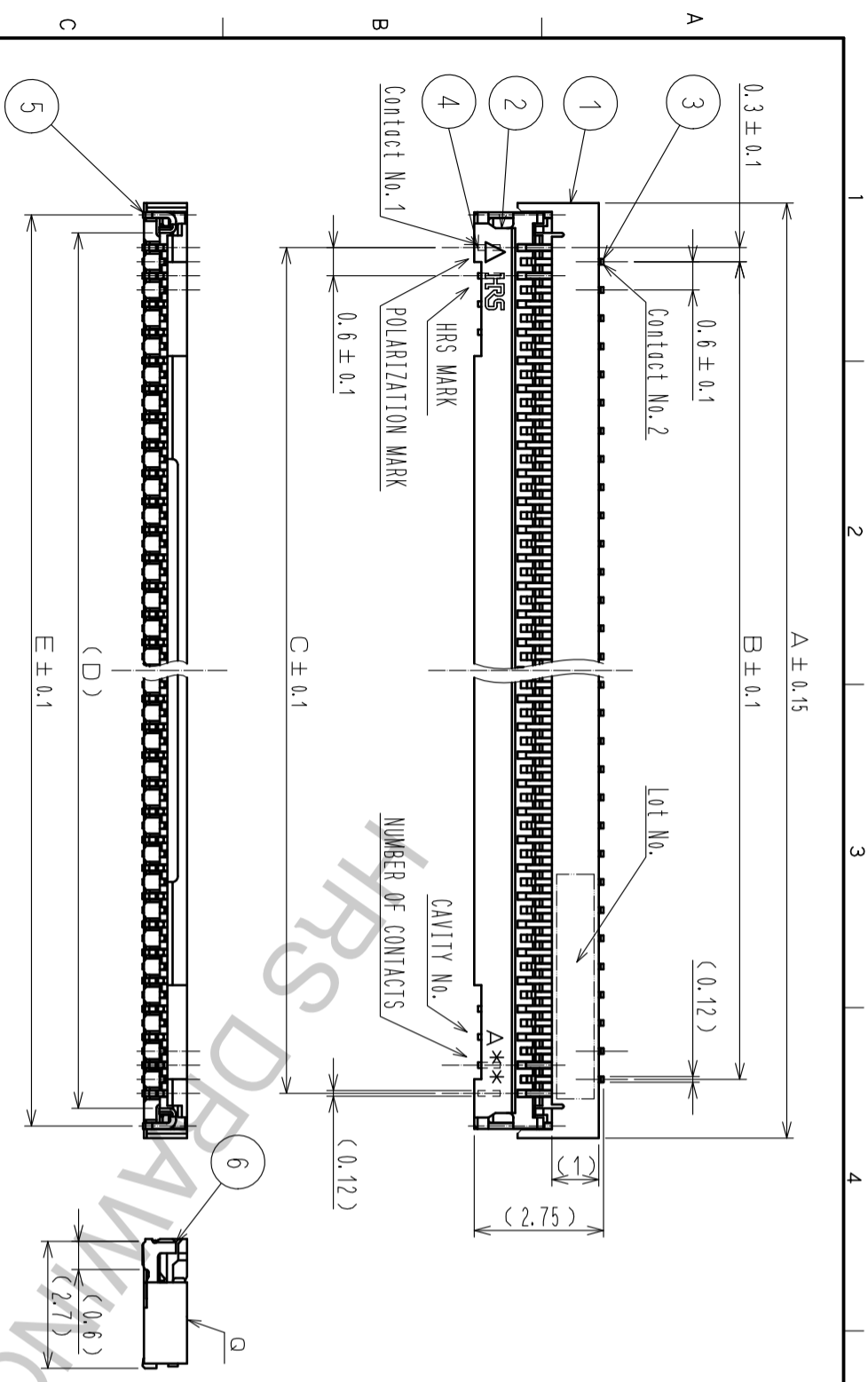
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NOTE

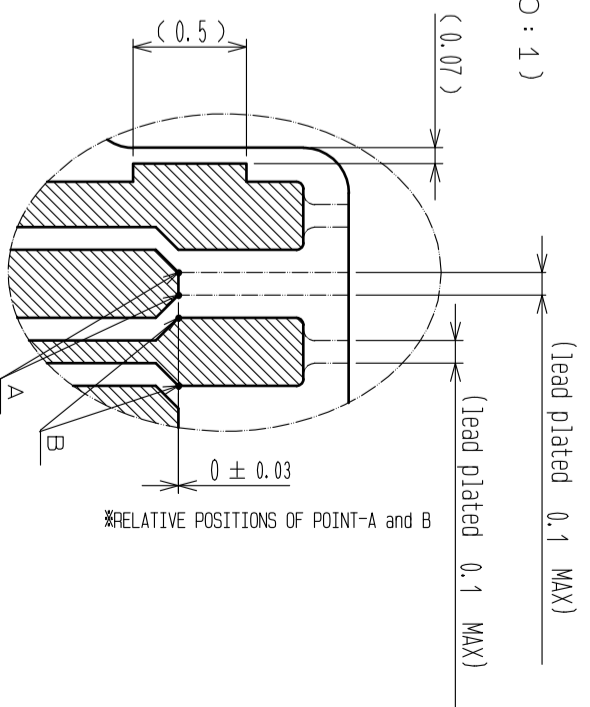
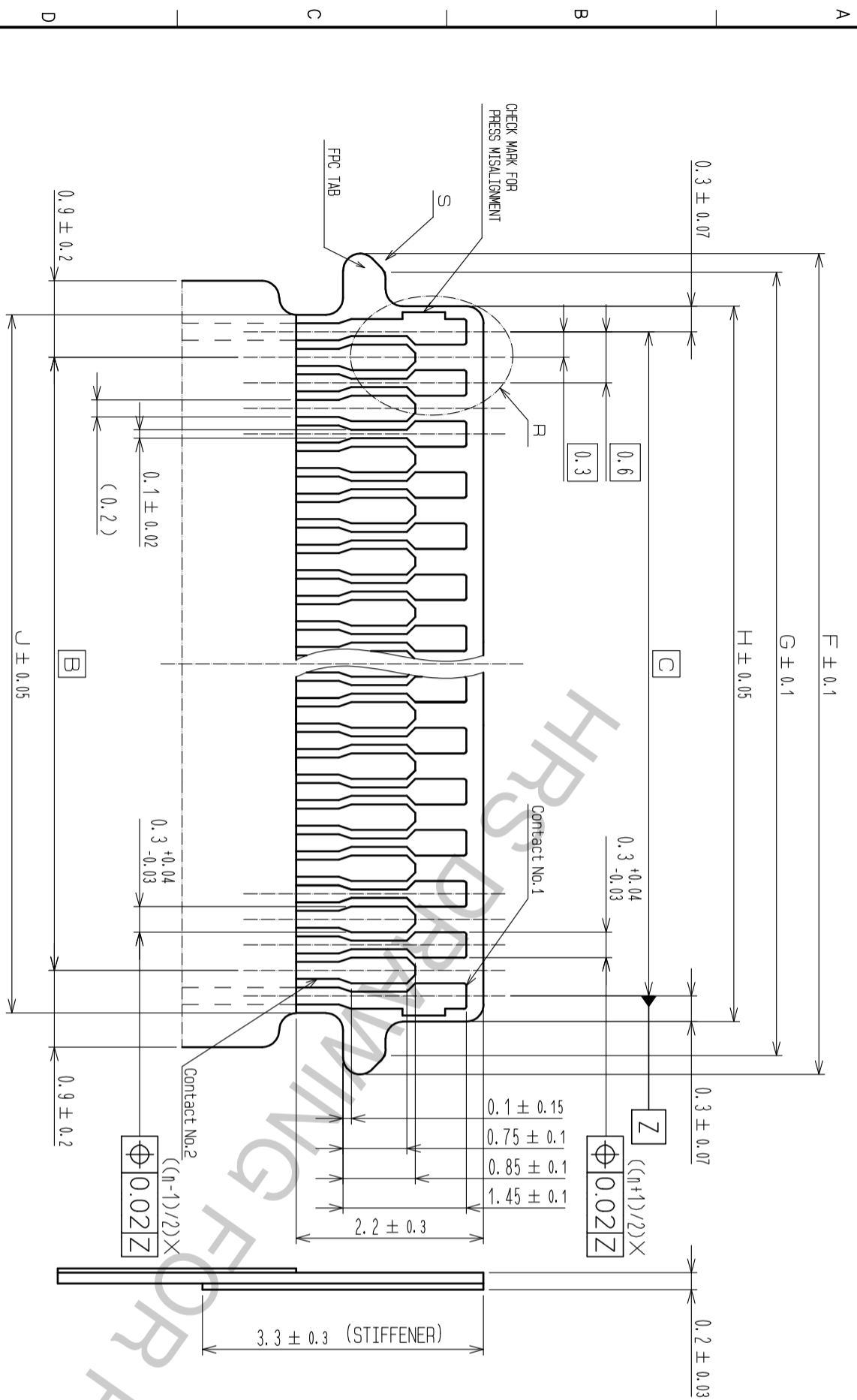
1. THE DIMENSIONS IN PARENTHESES ARE FOR REFERENCE.
2. LEAD CO-PLANARITY INCLUDING REINFORCED METAL FITTINGS SHALL BE 0.1 MAX.
3. TO BE DELIVERED WITH TAPE AND REEL PACKAGES. SEE ATTACHED PACKAGING SPECIFICATIONS FOR DETAILS.
4. NOTE THAT PREVENTIVE HOLE FOR SINK MARK COULD BE ADDED FOR IMPROVEMENT. THE QUALITY REMAINS GOOD, EVEN WITH THE DARK SPOTS, WHICH COULD OCCASIONALLY OCCUR ON MOLDED PLASTIC.
5. THIS PRODUCT SATISFIES HALOGEN FREE REQUIREMENTS DEFINED AS 900ppm MAXIMUM CHLORINE, 900ppm MAXIMUM BROMINE, AND 1500ppm MAXIMUM TOTAL OF CHLORINE AND BROMINE.
6. 'n' REPRESENTS THE NUMBER OF CONTACTS.

NO.	MATERIAL	FINISH	REMARKS	NO.	MATERIAL	FINISH	REMARKS
1	LCP	BEIGE	UL94V-0	5	(PLATED MATERIAL)	TIN PLATING (REFLOW FINISHED)	1.4μm MIN COPPER 0.5μm MIN
2	PA	LIGHT BROWN	UL94HB	6	PHOSPHOR BRONZE	TIN PLATING (REFLOW FINISHED)	1.4μm MIN COPPER 0.5μm MIN
3	PHOSPHOR BRONZE	(CONTACT AREA, LEAD)	GOLD PLATING 0.05μm MIN OVER NICKEL 1.4μm MIN	7	POLYSTYRENE		
4	PHOSPHOR BRONZE	(CONTACT AREA, LEAD)	GOLD PLATING 0.05μm MIN OVER NICKEL 1.4μm MIN	8	POLYESTER		
		(OTHER)	NICKEL PLATING 1.4μm MIN	9	POLYSTYRENE		
		(OTHER)	NICKEL PLATING 1.4μm MIN	10	(CONNECTOR)		

UNITS	SCALE	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
mm	7 : 1					

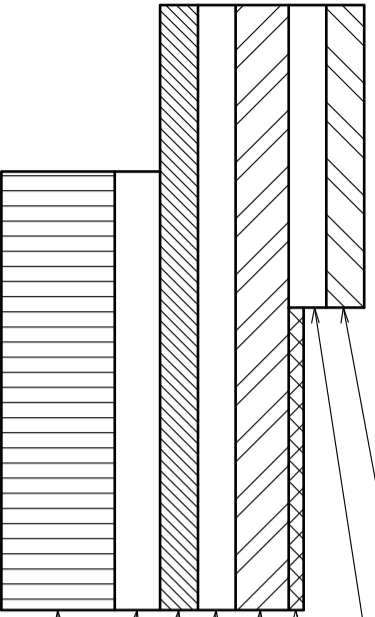
HRS	HIROSE ELECTRIC CO., LTD.	APPROVED: NF. MIYAZAKI	16.03.08	DRAWING NO.	EDC-158578-99-00
		CHECKED: YH. MICHIDA	16.03.08	PART NO.	FH36W-*S-0.3SHW(99)
		DESIGNED: KN. KOBAYASHI	16.03.08	CODE	CL580
		DRAWN: RN. IIDA	16.03.08		

RECOMMENDED FPC (SCALE:FREE)

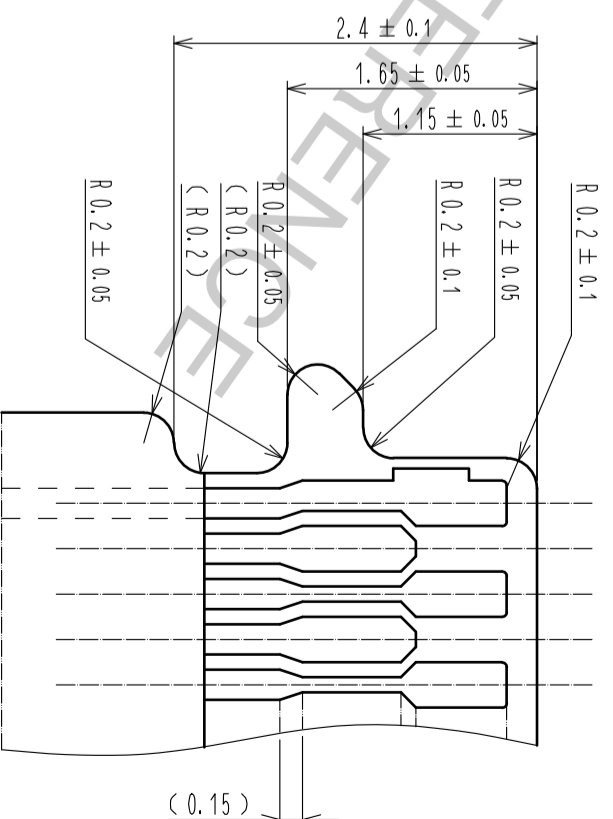


FPC CONFIGURATION (REFERENCE EXAMPLE)

(SCALE:FREE)

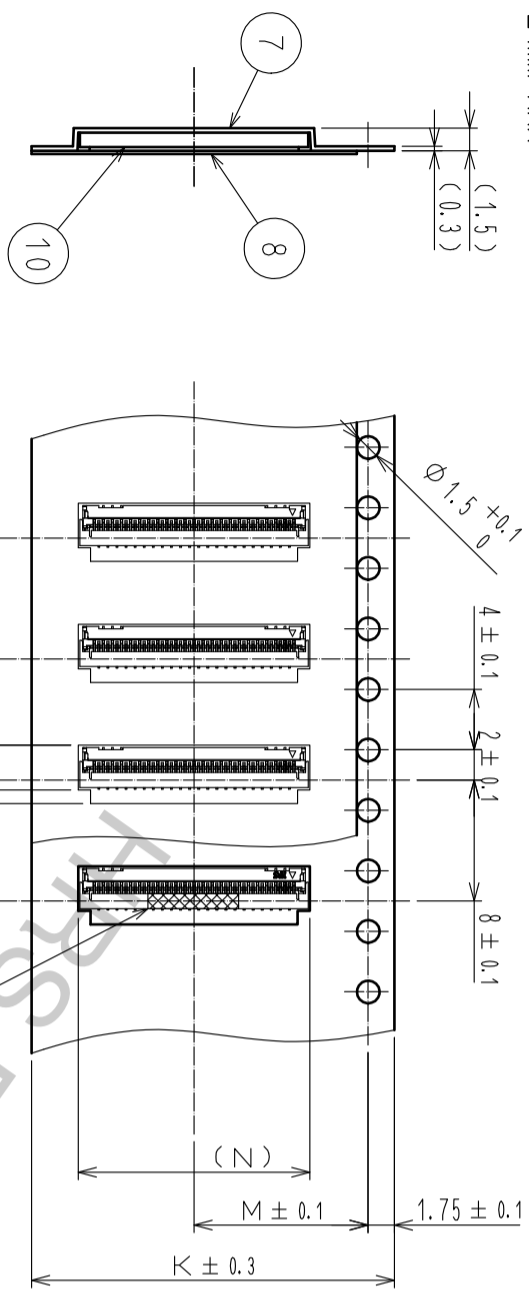


MATERIAL NAME	MATERIAL	THICKNESS(mm)
COVERING FILM LAYER.	POLYIMIDE 1m1 thick.	25
COVER ADHESIVE		25
SURFACE TREATMENT	1 μ m to 5 μ m NICKEL UNDERPLATED 0.2 μ m GOLD PLATED	(3)
COPPER FOIL	CU 1 OZ	35
BASE ADHESIVE	HEAT-HARDENED ADHESIVE	25
BASE FILM	POLYIMIDE 1m1 thick	25
REINFORCEMENT MATERIAL ADHESIVE	HEAT-HARDENED ADHESIVE	40
STIFFENER	POLYIMIDE 3m1 thick	75

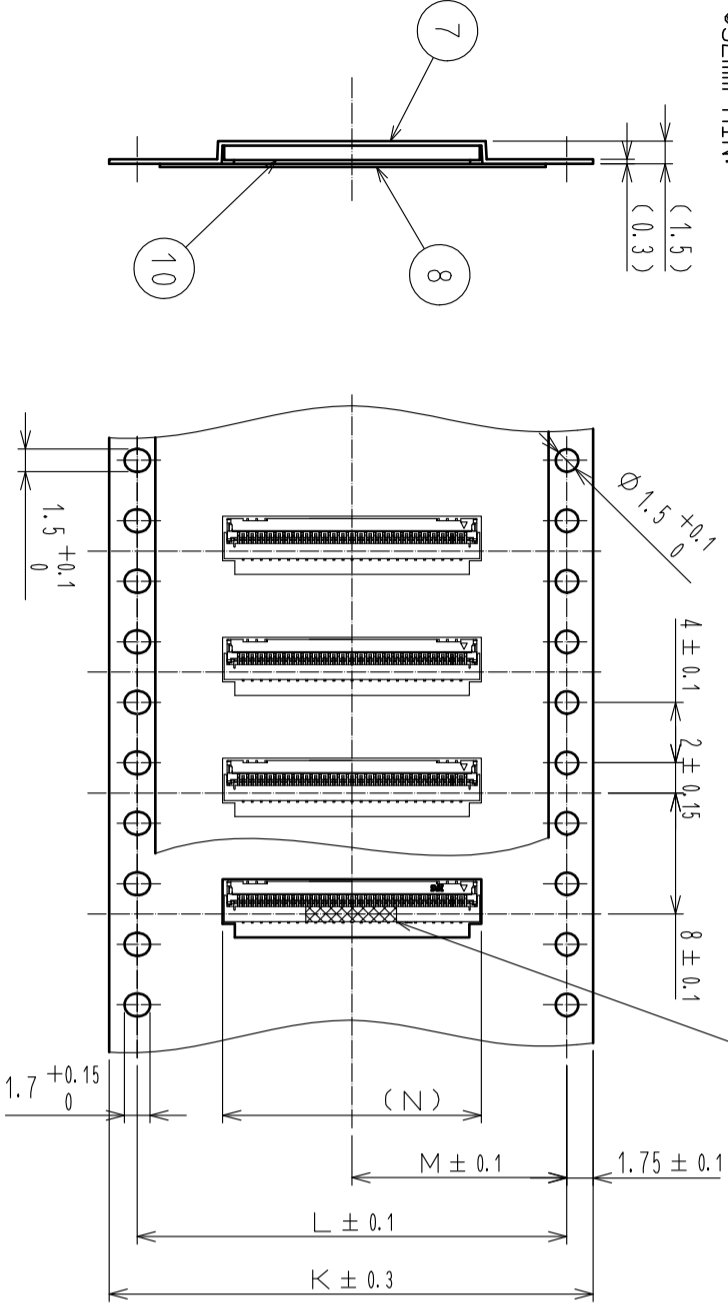


●24mm MAX.

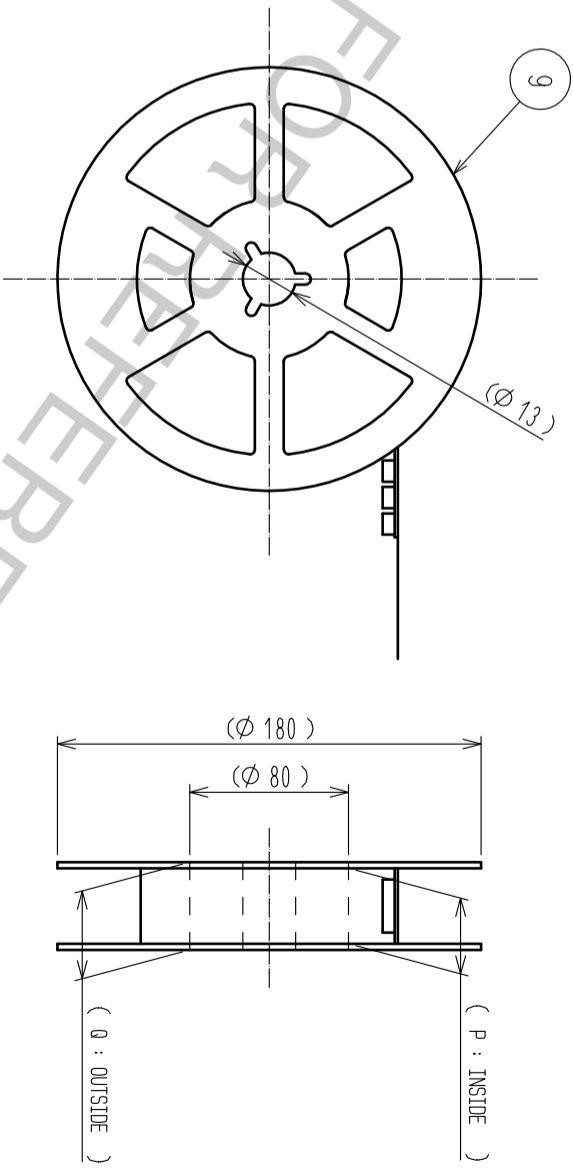
EMBOSSED CARRIER TAPE DIMENSION(2:1)



●32mm MIN.



REEL DIMENSION (FREE)



NOTE 7. PER REEL : 500 CONNECTORS.
8. REFER TO JIS C 0806 and IEC 60286-3
(PACKAGING OF COMPONENTS FOR AUTOMATIC HANDLING.)

< DRAWING FOR PACKING >

HRS	DRAWING NO.	EDC-158578-99-00
	PART NO.	FH36W-**-S-0.3SHW(99)
	CODE	CL580
	NO.	3/7

PART NUMBER	CODE NUMBER	NUMBER OF CONTACT	DIMENSION OF CONNECTOR, FPC, PCB MOUNTING PATTERN AND STENCIL PATTERN										DIMENSION OF DRAWING FOR PACKING						
			A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q		
FH36W-11S-0.3SHW(99)	CL580-1625-3-99	11	4.9	2.4	3	3.63	4.39	4.84	4.4	3.6	3.4	16	-	7.5	5.1	17.4	21.4		
FH36W-15S-0.3SHW(99)	CL580-1623-8-99	15	6.1	3.6	4.2	4.83	5.59	6.04	5.6	4.8	4.6	16	-	7.5	6.3	17.4	21.4		
FH36W-17S-0.3SHW(99)	CL580-1616-2-99	17	6.7	4.2	4.8	5.43	6.19	6.64	6.2	5.4	5.2	16	-	7.5	6.9	17.4	21.4		
FH36W-19S-0.3SHW(99)	CL580-1612-1-99	19	7.3	4.8	5.4	6.03	6.79	7.24	6.8	6	5.8	16	-	7.5	7.5	17.4	21.4		
FH36W-23S-0.3SHW(99)	CL580-1614-7-99	23	8.5	6	6.6	7.23	7.99	8.44	8	7.2	7	24	-	11.5	8.7	25.4	29.4		
FH36W-25S-0.3SHW(99)	CL580-1610-6-99	25	9.1	6.6	7.2	7.83	8.59	9.04	8.6	7.8	7.6	24	-	11.5	9.3	25.4	29.4		
FH36W-27S-0.3SHW(99)	CL580-1608-4-99	27	9.7	7.2	7.8	8.43	9.19	9.64	9.2	8.4	8.2	24	-	11.5	9.9	25.4	29.4		
FH36W-31S-0.3SHW(99)	CL580-1609-7-99	31	10.9	8.4	9	9.63	10.39	10.84	10.4	9.6	9.4	24	-	11.5	11.1	25.4	29.4		
FH36W-33S-0.3SHW(99)	CL580-1622-5-99	33	11.5	9	9.6	10.23	10.99	11.44	11	10.2	10	24	-	11.5	11.7	25.4	29.4		
FH36W-39S-0.3SHW(99)	CL580-1620-0-99	39	13.3	10.8	11.4	12.03	12.79	13.24	12.8	12	11.8	24	-	11.5	13.5	25.4	29.4		
FH36W-51S-0.3SHW(99)	CL580-1605-6-99	51	16.9	14.4	15	15.63	16.39	16.84	16.4	15.6	15.4	32	28.4	14.2	17.1	33.4	37.4		
FH36W-61S-0.3SHW(99)	CL580-1611-9-99	61	19.9	17.4	18	18.63	19.39	19.84	19.4	18.6	18.4	32	28.4	14.2	20.1	33.4	37.4		

HRS DRAWING REFERENCE

HRS	DRAWING NO. EDC-158578-99-00
PART NO. FH36W-**-S-0.3SHW(99)	CODE CL580
4/7	

This connector is small and thin and requires delicate and careful handling. Read through the instructions shown below and handle the connector properly. Each value indicating here are for reference and may differ from standard value.

INSTRUCTIONS FOR MOUNTING ON THE BOARD

◆Warp of Board

Minimize warp of the board as much as possible.
Lead co-planarity including reinforced metal fittings is 0.1 mm or less.
Too much warp of the board may result in a soldering failure.

◆Flexible board design

Please make sure to put a stiffener on the backside of the flexible board.
We recommend a glass epoxy material with the thickness of 0.3mm MIN.

◆Load to Connector

Do not add 0.5N or greater external force when unroll or pick and place the connector etc. or it may get broken.
In addition, do not insert the FPC or operate the connector before mounting it.

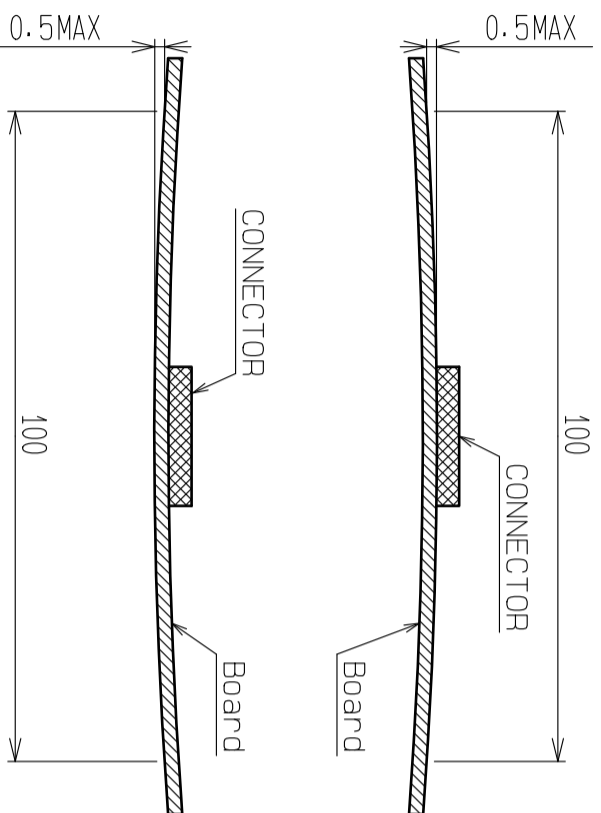
INSTRUCTIONS FOR PCB HANDLING AFTER MOUNTING THE CONNECTOR

◆Load to Board

- Splitting a large board into several pieces
 - Screwing the board
- Avoid the handling described above so that no force is exerted on the board during the assembly process. Otherwise, the connector may become defective.

◆Amount of Warp

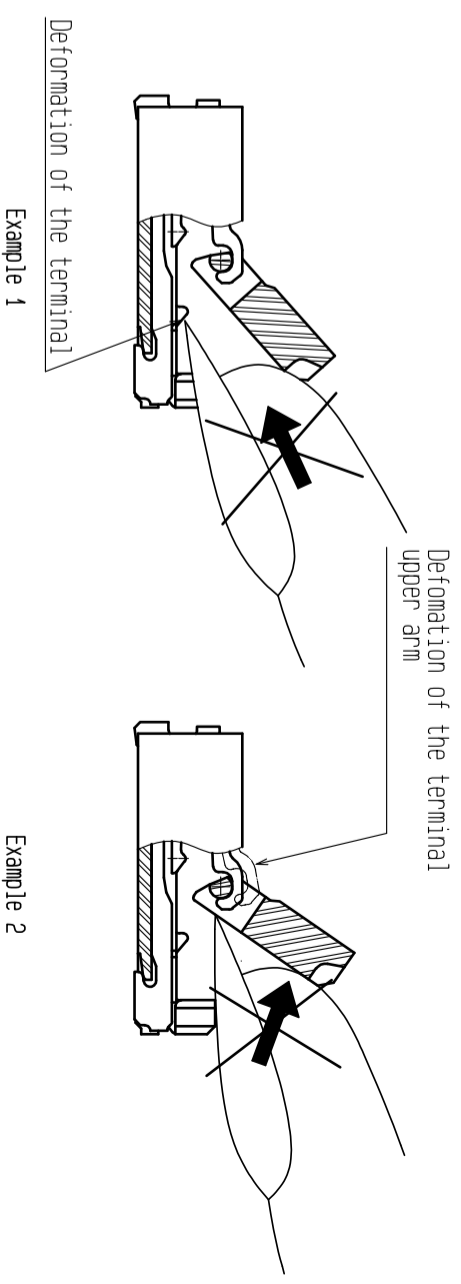
The warp of a 100 mm wide board should be 0.5 mm or less.
The warp of board suffers stress on connector and the connector may become defective.



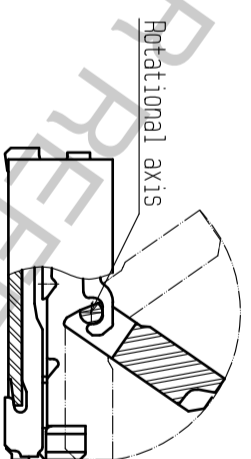
INSTRUCTIONS ON INSERTING FPC AND CONNECTION

◆ Use of the actuator

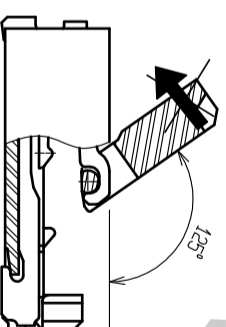
1. Be very careful not to apply excessive force when releasing the actuator in the initial position (with no FPC inserted).
If you use your nail or finger as shown below, the terminals may be deformed.



2. The actuator rotates around the rotational axis as shown below.
Rotate the actuator.



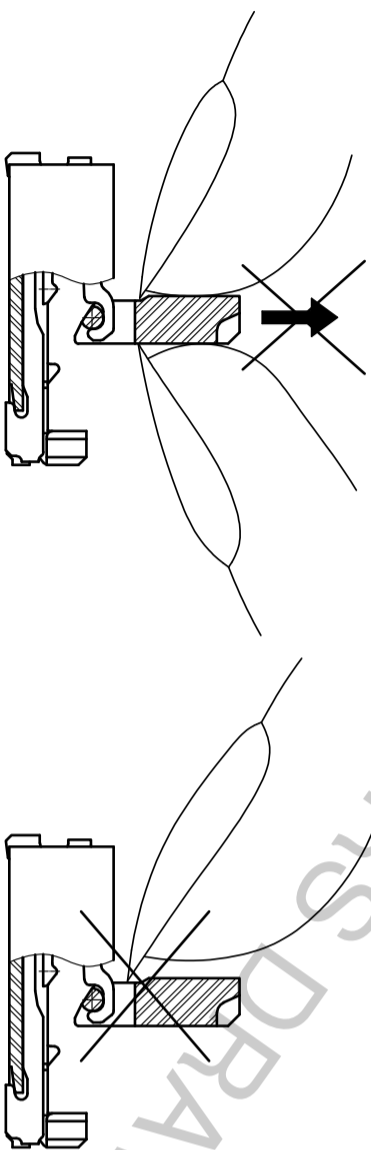
3. The actuator will not open more than 125°. Do not apply any force backward beyond this point. Otherwise, the actuator may come off or break.



< INSTRUCTION MANUAL 1 >

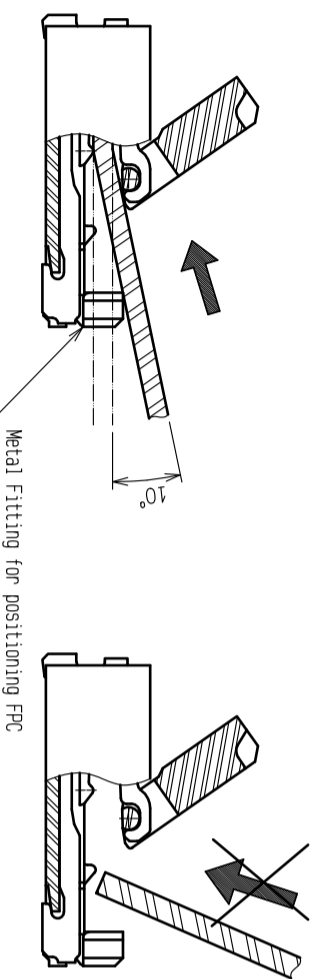
HR5	DRAWING NO.	EDC-158578-99-00
	PART NO.	FH36W-**-S-0.3SHW(99)
	CODE	CL580
	NO.	5/7

4. Move the actuator at approximately the center.
 5. Do not pinch or pick the actuator to lift it as shown below. Otherwise, it may break.
 (Do not carry out any operation other than rotating the actuator as shown in 2 above.)

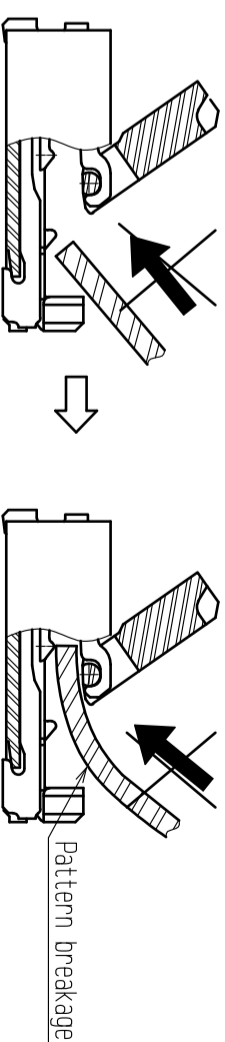


◆Direction of Contacts
 This connector has contacts on the bottom. Thus, insert it with the exposed conductors face down.

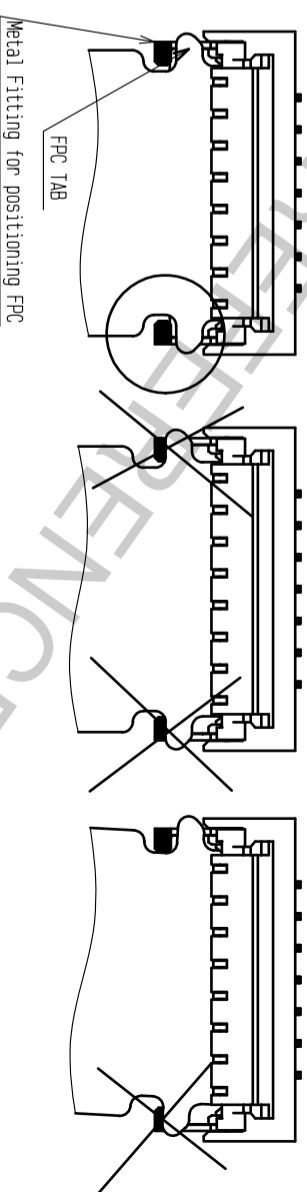
- ◆Inserting the FPC
 1. Insert the FPC by about 10 degrees along the surface and at a right angle to the connector.
 Insert it properly to the very end.
 If the FPC is inserted at a slant (incorrectly), the conductors may short-circuit due to pitch shift on the edge of the FPC may catch in the terminals, resulting in deformation of the terminals.



2. Do not insert the FPC diagonally from above.
 If the FPC is inserted at a slant (incorrectly) as shown below in the FPC insertion process, the FPC may bend and patterns may break or the FPC may not insert completely, resulting in improper conduction.
 *Keep a sufficient FPC insertion space in the stage of the layout in order to avoid incorrect FPC insertion.
 Besides, it is not difficult to insert FPC correctly all the way to the end.
 Design the proper layout of parts.
 *Make adjustments with the FPC manufacturer for FPC bending performance and wire breakage.



3. Do not rotate the actuator when FPC TAB is on Metal Fittings.
 Make sure the position of FPC TAB and Metal Fittings before rotate the actuator.



◆Checking the Locking Condition
 In the locked condition, make sure that the actuator is horizontal on the board surface.
 Do not apply excessive force to it near the 0° position of the actuator.
 Otherwise, the terminals may be deformed. (Allowable force: 1 N or less)

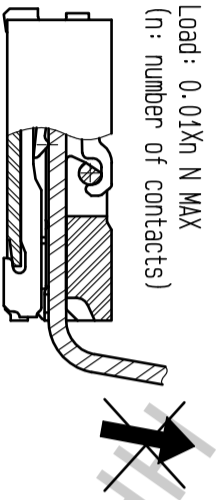
< INSTRUCTION MANUAL 2 >

HRS	DRAWING NO.	EDC-158578-99-00
	PART NO.	FH36W-**-S-0.3SHW(99)
	CODE	CL580
	NO.	6/7

[INSTRUCTIONS ON FPC LAYOUT AFTER CONNECTION]

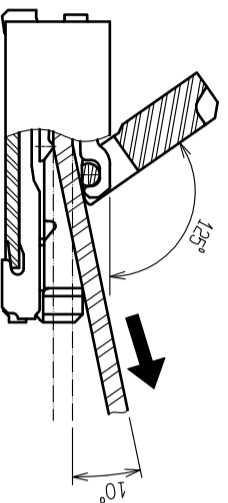
- ◆Load to FPC
Be very careful not to apply any force to the FPC after inserting it. Otherwise, the connector may become unlocked or the FPC may break. Fix the FPC, in particular, when loads are applied to it continuously. Design the FPC layout with care not to bend it sharply near the insertion opening.

Load: $0.01Xn$ N MAX
(n: number of contacts)



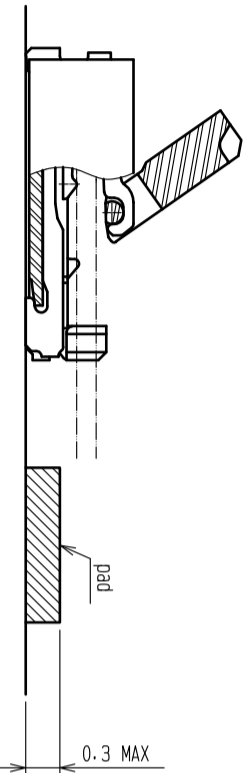
[INSTRUCTIONS ON REMOVING FPC]

- ◆Release the actuator to remove the FPC.



[OTHER INSTRUCTIONS]

In case a pad to support FPC is set in front of connector, that pad needs to be 0.30 MAX.



◆Instructions on Manual Soldering

- Follow the instructions shown below when soldering the connector manually during repair work, etc.
1. Do not perform reflow soldering or manual soldering with the FPC inserted into the connector.
 2. Do not heat the connector excessively. Be very careful not to let the soldering iron contact any parts other than connector leads. Otherwise, the connector may be deformed or melt.
 3. Do not use excessive solder (or flux).
- If excessive solder (or flux) is used on the terminals, solder or flux may adhere to the contacts or rotating parts of the actuator, resulting in poor contact or a rotation failure of the actuator.
Supplying excessive solder to the reinforcing bracket may hinder actuator rotation, resulting in breakage of the connector.

< INSTRUCTION MANUAL 3 >

HRS	DRAWING NO.	EDC-158578-99-00
	PART NO.	FH36W-**-S-0.3SHW(99)
	CODE	CL580