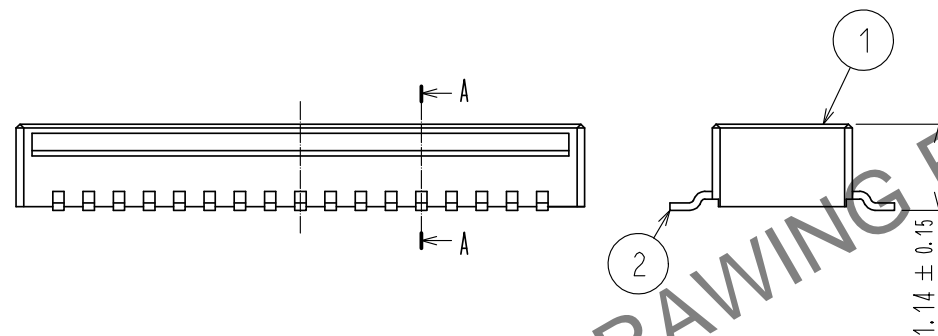
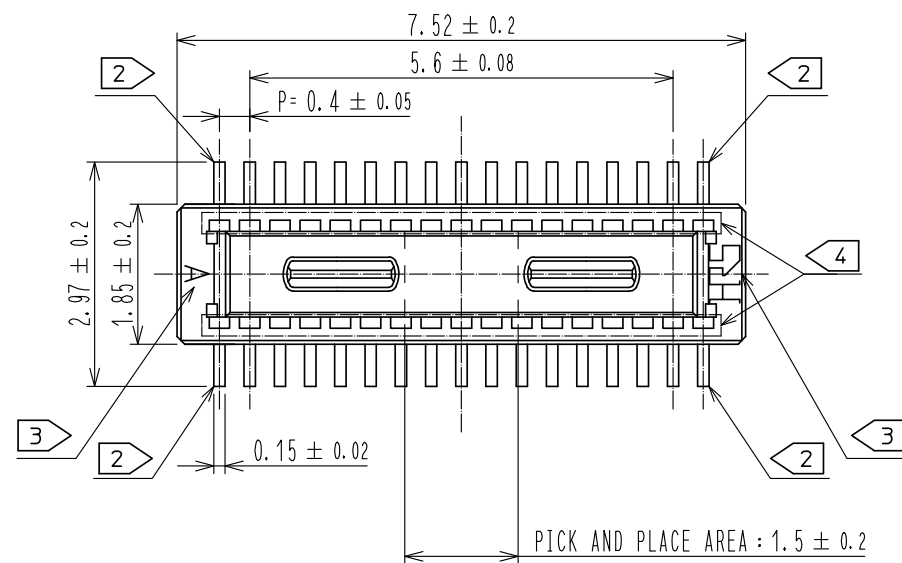
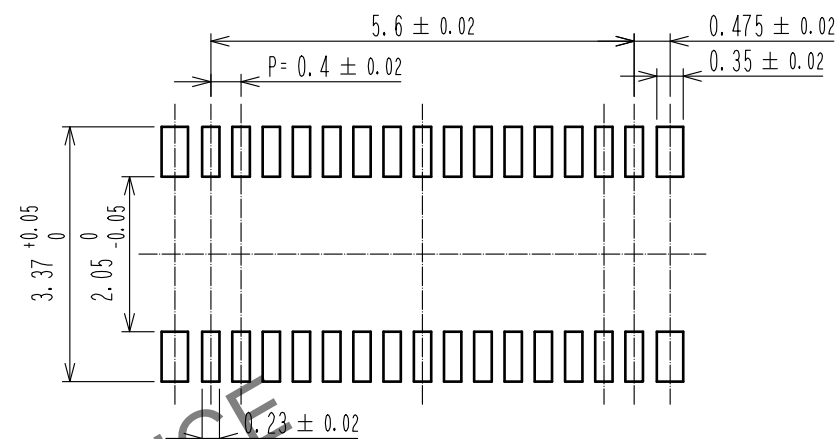


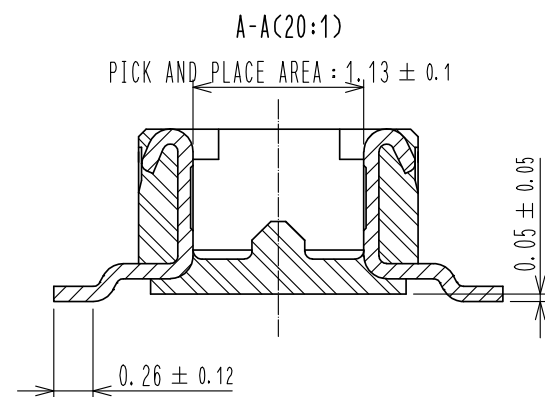
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# RECOMMENDED PATTERN

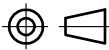




RECOMMENDED METAL MASK THICKNESS :  $120 \mu\text{m}$   
RECOMMENDED METAL MASK OPENING RATIO : 80% FOR LEAD PAD





- NOTES
- ALL LEADS CO-PLANARITY SHALL BE 0.1mm MAX.
  - EACH ONE CONTACT AT 4 CORNERS SHALL BE USED AS METAL HOLD DOWN.
  - HRS MARK AND CAV NO. IS INDICATED IN APPROXIMAL POSITION SHOWN. THE INDICATION COULD BE ON THE UPPER SURFACE OF DESIGN ON THE CONNECTOR.
  - THERE IS A POSSIBILITY THAT THE RESIN WILL BE EXPOSED AT THIS AREA, BUT THIS WILL NOT AFFECT THE CONTACT RELIABILITY.

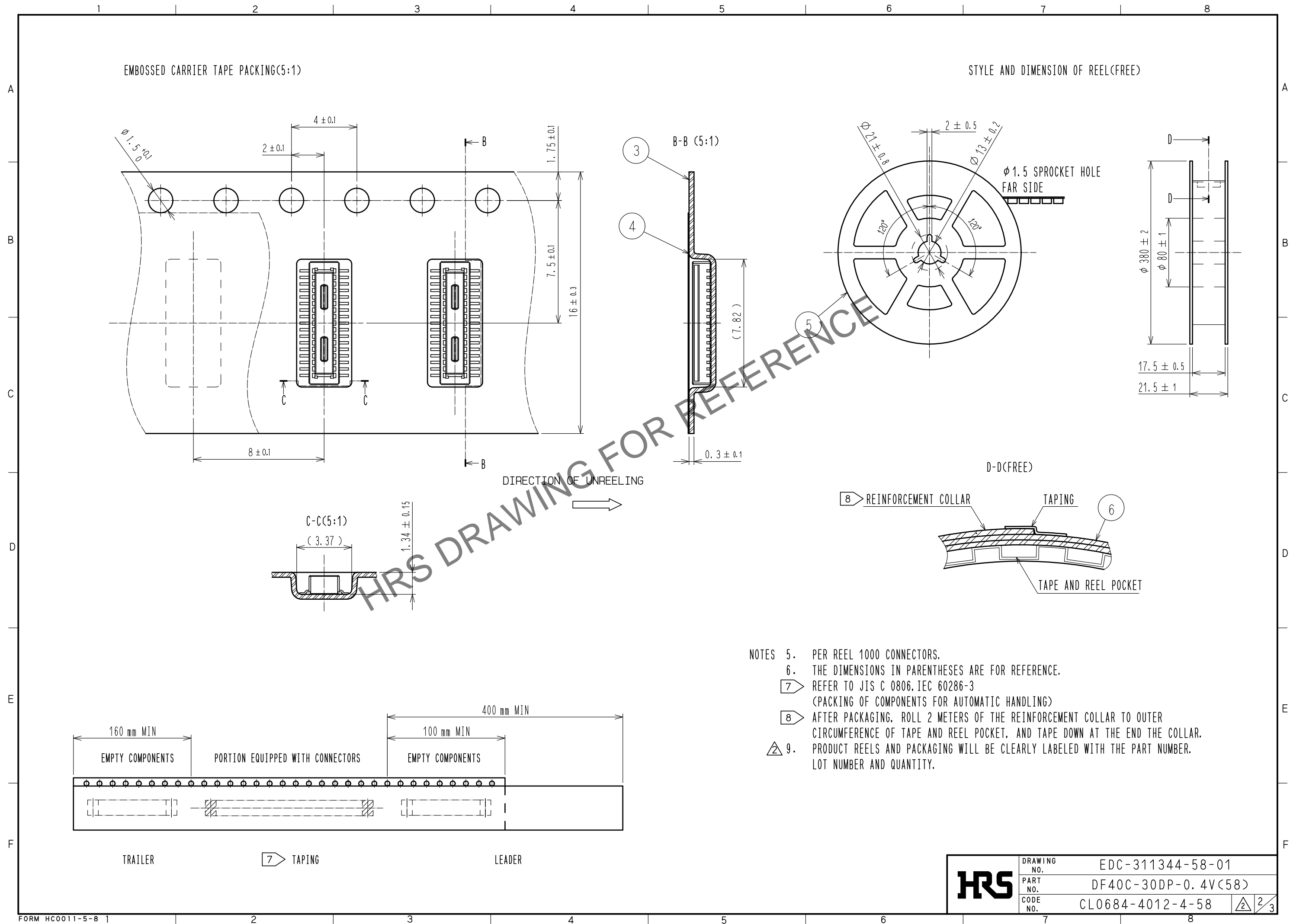
|     |                 |                              |     |           |                              |
|-----|-----------------|------------------------------|-----|-----------|------------------------------|
| 2   | PHOSPHOR BRONZE | CONTACT AREA: Au 0.05μm MIN  | 6   | PS        | CLEAR, REINFORCEMENT COLLAR  |
|     |                 | SMT LEAD: Au 0.05μm MIN      | 5   | PS        | BLACK, PLASTIC REEL          |
|     |                 | UNDERPLATING: NICKEL 1μm MIN | 4   | POLYESTER | CLEAR, COVER TAPE            |
| 1   | LCP             | BLACK, UL94V-0               | 3   | PS        | CLEAR, EMBOSSED CARRIER TAPE |
| NO. | MATERIAL        | FINISH . REMARKS             | NO. | MATERIAL  | FINISH . REMARKS             |

|             |   |                 |   |            |  |                           |                        |                  |
|-------------|---|-----------------|---|------------|--|---------------------------|------------------------|------------------|
| UNITS<br>mm |  | SCALE<br>10 : 1 |  | COUNT<br>2 | DESCRIPTION OF REVISIONS<br>DIS-H-00014841 | DESIGNED<br>TY. MORISHITA | CHECKED<br>RT. SHIMIZU | DATE<br>20220824 |
|-------------|---|-----------------|---|------------|--|---------------------------|------------------------|------------------|

|   |                       |          |             |                     |  |
|---|-----------------------|----------|-------------|---------------------|--|
|  HIROSE ELECTRIC CO., LTD. | APPROVED : MO. ISHIDA | 20150715 | DRAWING NO. | EDC-311344-58-01    |  |
|   | CHECED : TS. MIYAZAKI | 20150715 | PART NO.    | DF40C-30DP-0.4V(58) |  |
|   | DESIGNED : SH. HOSODA | 20150715 | CODE NO.    | CL0684-4012-4-58    |  |
|   | DRAWN : KR. AJITO     | 20150715 |             |                     |  |

|   |   |
|---|---|
|  |  |
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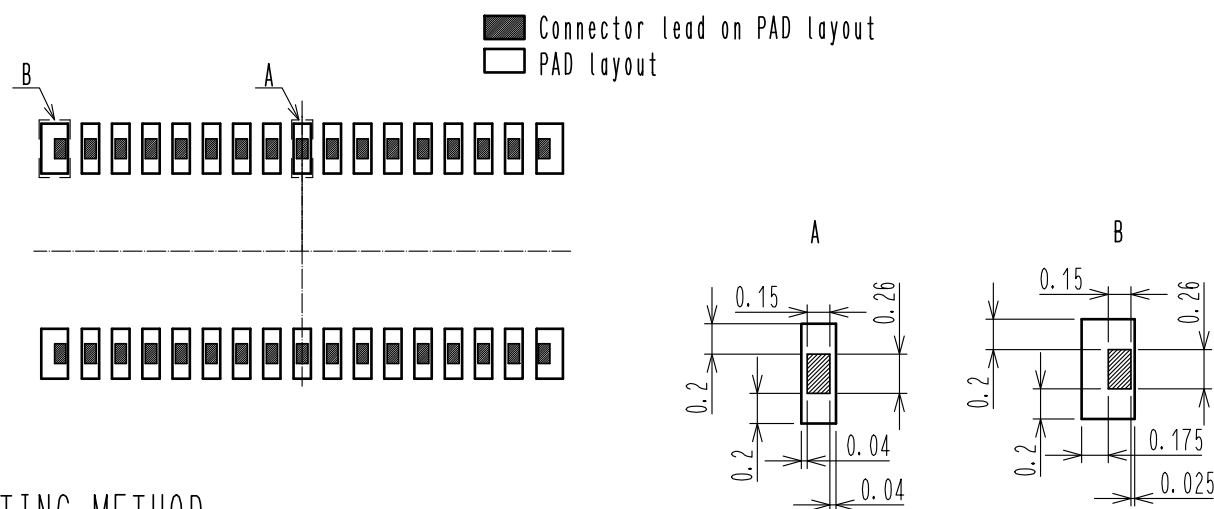
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△10. PLEASE REFER TO THE PRODUCT GUIDELINE ETAD-H1015 FOR DETAIL OF CONNECTOR HANDLING.

THE POSITION BETWEEN THE CONNECTOR AND PAD

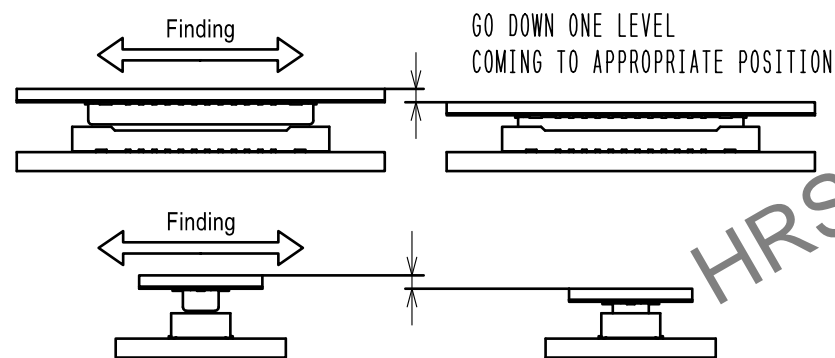


## MATING METHOD

PLEASE MATE THE CONNECTOR BY HAND.

### MATING PROCEDURE

- (1) FIND THE ALIGNMENT AREA TO THE CONNECTOR IN THE APPROPRIATE MATING POSITION.  
THIS CONNECTOR HAS AN ALIGNMENT CHAMBER(GUIDANCE RIBS) ON RECEPTACLE SIDE AND 'R' ON PLUG SIDE,  
SO THAT THE CONNECTOR WILL BE SELF-ALIGNED.  
WHEN THE CONNECTOR COMES TO THE APPROPRIATE POSITION, THE CONNECTOR GOES INTO THE ALIGNED POSITION.  
WHEN ALIGNED, IT CAN BE FELT BY HAND.



- (2) WHEN GUIDING, THE CONNECTORS ARE ALIGNED PARALLEL TO EACH OTHER, WITH LONGITUDINAL AND LATERAL MOVEMENTS RESTRICTED. MATE THEM PROPERLY BY APPLYING FORCE IN THIS CONDITION.

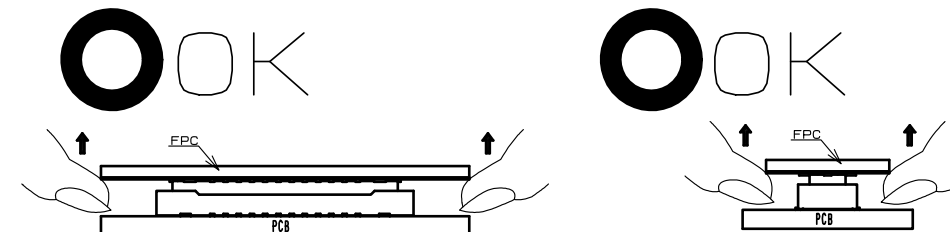


- (3) MAKE SURE THE CONNECTORS ARE MATED CORRECTLY. IF ONE SIDE IS FLOATING OR THE CONNECTORS ARE MATED IN ONE DIRECTION, UN-MATE THEM ONCE, AND THEN MATE THEM AGAIN, FOLLOWING THE PROCEDURES ABOVE FROM THE BEGINNING.

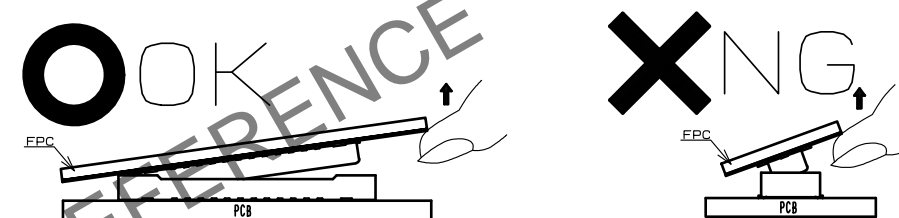
## UN-MATING METHOD

PLEASE UN-MATE THE CONNECTOR BY HAND

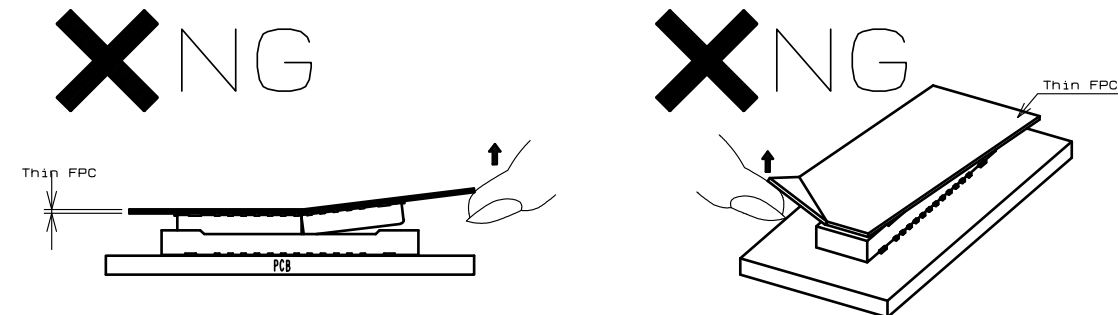
- (1) UN-MATE THE CONNECTORS PARALLEL TO EACH OTHER. HOWEVER, IF THE CONNECTORS HAVE HIGH PIN COUNTS OR THINNER FPC AND STIFFENER, IT BECOMES MORE DIFFICULT TO DO SO.



- (2) IF THE CONNECTOR CANNOT BE UN-MATED PARALLEL IT CAN BE REMOVED DIAGONALLY FROM THE PITCH DIRECTION. BE CAREFUL TO DO SO SINCE THIS ACTION APPLIES STRESS ON THE CONTACT.

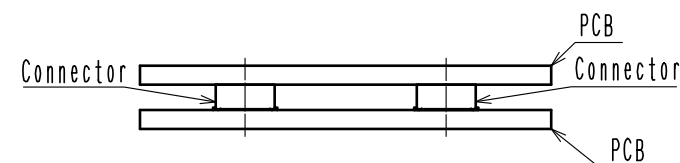


- (3) IF THE FPC IS NOT RIGID, THE CONNECTOR CAN BE BROKEN. PLEASE CHECK THE ACTION OF THE FPC TO BE USED REPEATEDLY AT THE TIME OF TRIAL PRODUCTION. BE CAREFUL TO UN-MATE THEM FROM THE PITCH DIRECTION. PULLING IT FROM THE CORNER CAN ALSO RISK TO PUTTING STRESS ON CONTACTS.

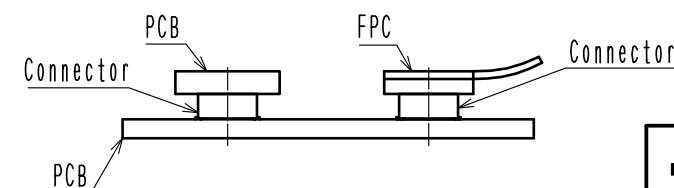


- (4) Caution for using multiple connectors.

Please avoid using more than a single mated pair of connectors between two sandwiched PCBs.  
like the picture on the below.  
Due to possible misalignment, connector breakage while and after mating may occur.



If using more than a single mated pair, please use divided boards for each connection.



HRS

|             |                     |
|-------------|---------------------|
| DRAWING NO. | EDC-311344-58-01    |
| PART NO.    | DF40C-30DP-0.4V(58) |
| CODE NO.    | CL0684-4012-4-58    |

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