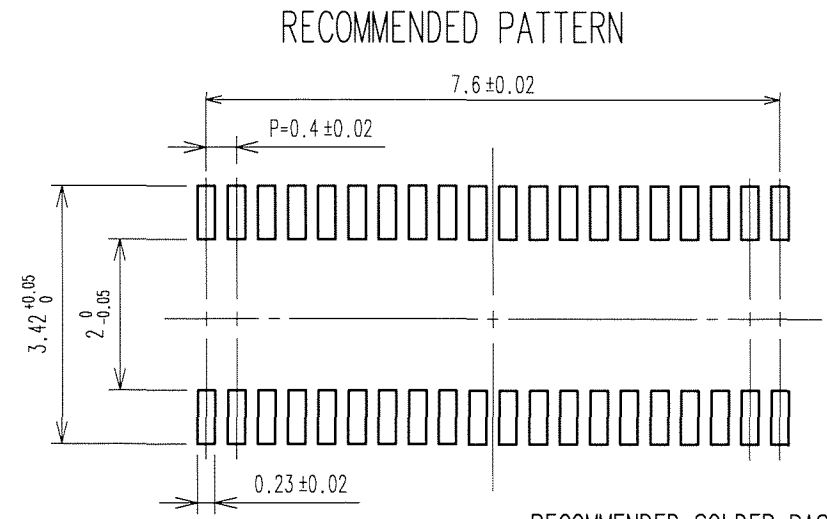
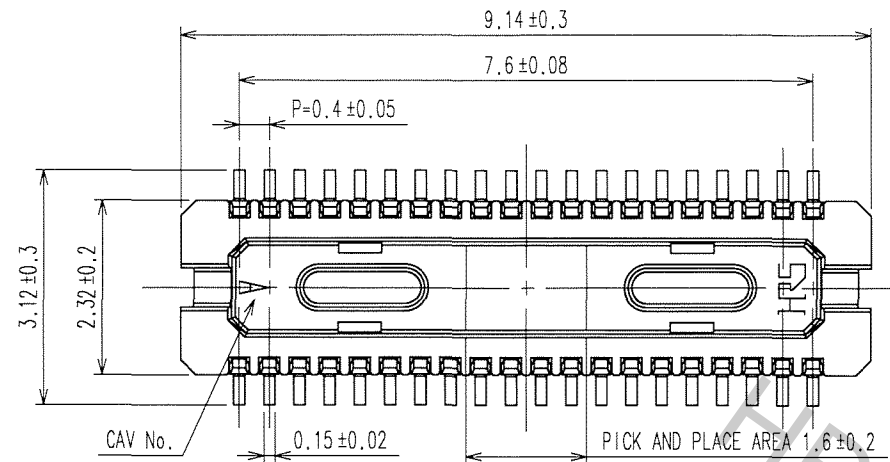


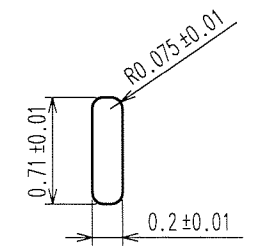
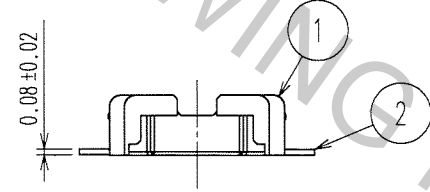
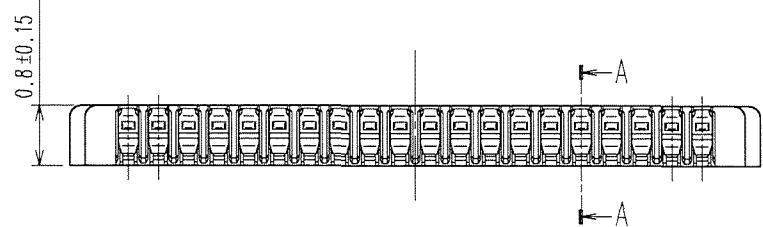
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| COUNT | DESCRIPTION OF REVISIONS | BY | CHKD | DATE | COUNT | DESCRIPTION OF REVISIONS | BY | CHKD | DATE |
|-------|--------------------------|----|------|------|-------|--------------------------|----|------|------|
| △     |                          |    |      | ..   | △     |                          |    |      | ..   |
| △     |                          |    |      | ..   | △     |                          |    |      | ..   |
| △     |                          |    |      | ..   | △     |                          |    |      | ..   |

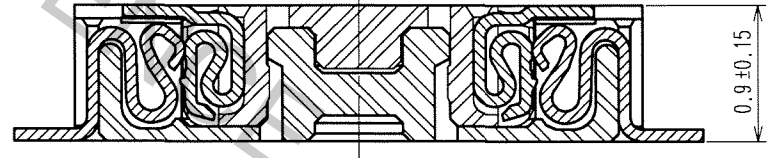
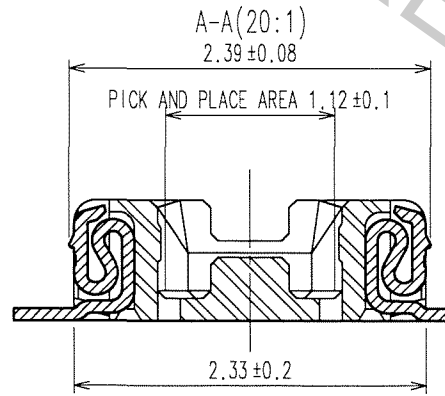


RECOMMENDED SOLDER PASTE: THICKNESS 120μm

RECOMMENDED METAL MASK OPENING DIMENSIONS FOR LEAD PAD (20:1)



ENGAGEMENT FIGURE (20:1)



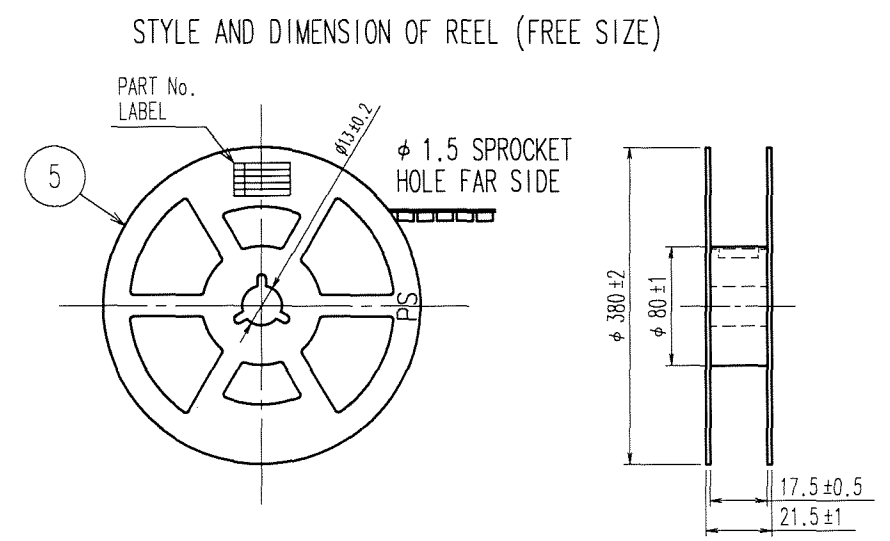
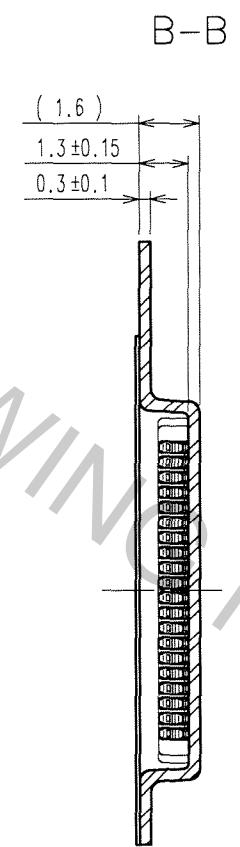
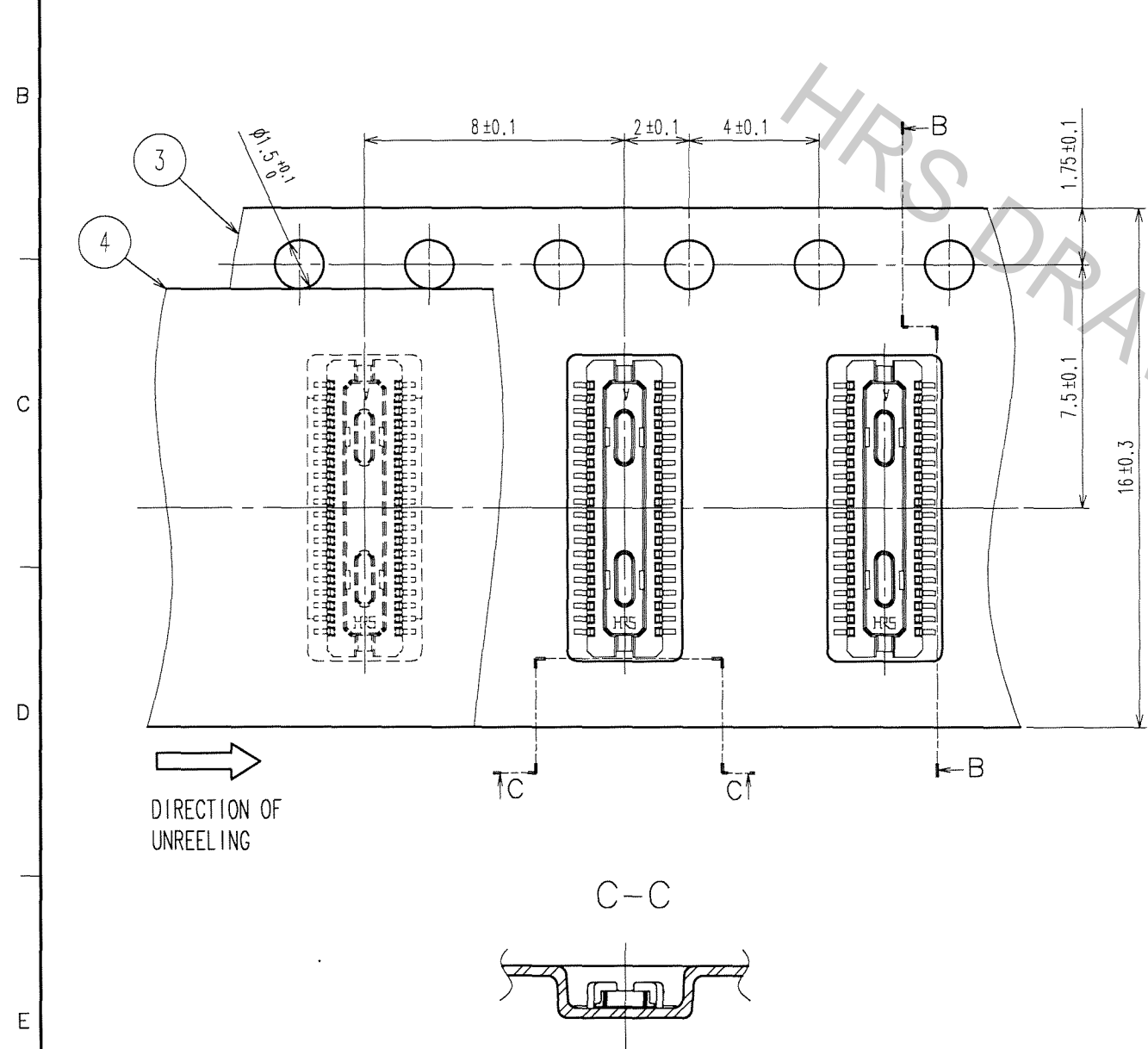
- NOTES
- ALL LEADS CO-PLANARITY SHALL BE 0.1 mm MAX.
  - PER REEL : 1000 CONNECTORS.
  - AT THE BEGINNING OF THE REEL, 100 mm AT MIN SHALL BE EMPTY POCKETS.  
AT THE END OF THE REEL, 160 mm AT MIN SHALL BE EMPTY POCKETS.
  - CONTACT PLATING SPECIFICATIONS.  
CONTACT AREA : GOLD 0.05μm MIN.  
SMT LEAD : GOLD 0.02μm MIN.  
UNDERPLATING : NICKEL 1μm MIN.  
(SURFACE : SEALING)

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| 2              | PHOSPHOR BRONZE | 4               | PS                       | PLASTIC REEL (BLACK) |                               |              |          |
|----------------|-----------------|-----------------|--------------------------|----------------------|-------------------------------|--------------|----------|
| 1              | LCP             | UL94V-0, BLACK  | 4                        | POLYESTER            | CLEAR (COVER TAPE)            |              |          |
|                |                 |                 | 3                        | PS                   | CLEAR (EMBOSSED CARRIER TAPE) |              |          |
| NO.            | MATERIAL        | FINISH, REMARKS | NO.                      | MATERIAL             | FINISH, REMARKS               |              |          |
| CODE NO. (OLD) |                 |                 | DRAWN                    | DESIGNED             | CHECKED                       | APPROVED     | RELEASED |
|                |                 |                 | N.Sato                   | A. Takahashi         | T. Miyajaki                   | M. Kobayashi |          |
|                |                 |                 | '06. 12. 04              | '06. 12. 04          | '06. 12. 05                   | '06. 12. 05  |          |
| DRAWING NO.    |                 |                 | PART NO.                 |                      |                               |              |          |
| EDC3-312159-02 |                 |                 | DF30RC-40DP-0.4V(82)     |                      |                               |              |          |
| SCALE          |                 |                 | CODE NO.                 |                      |                               |              |          |
| 10 : 1         |                 |                 | CL684-1273-1-82          |                      |                               | 1/2          |          |
| UNITS          |                 |                 | HIROSE ELECTRIC CO., LTD |                      |                               |              |          |
| mm             |                 |                 |                          |                      |                               |              |          |

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| COUNT | DESCRIPTION OF REVISIONS | BY | CHKD | DATE | COUNT | DESCRIPTION OF REVISIONS | BY | CHKD | DATE |
|-------|--------------------------|----|------|------|-------|--------------------------|----|------|------|
|       |                          |    |      |      |       |                          |    |      |      |
|       |                          |    |      |      |       |                          |    |      |      |
|       |                          |    |      |      |       |                          |    |      |      |



DETAIL OF PART NO. LABEL

SUPPLIER  
QUANTITY  
PART NO.  
CODE NO.  
DATE OF MANUFACTURED

|      |                      |
|------|----------------------|
| 生産月日 | 年 月 日                |
| 図番   | CL684-1273-1-82      |
| 品名   | DF30RC-40DP-0.4V(82) |
| 納入数量 | 1000個                |
| 納入者  | ヒロセ電機(株)             |

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|                               |                               |                                       |                                     |                                       |          |
|-------------------------------|-------------------------------|---------------------------------------|-------------------------------------|---------------------------------------|----------|
| CODE NO. (OLD)                | DRAWN<br>N.Sato<br>'06.12.04  | DESIGNED<br>T. Takahashi<br>'06.12.04 | CHECKED<br>T. Miyajaki<br>'06.12.05 | APPROVED<br>M. Kobayashi<br>'06.12.05 | RELEASED |
| SCALE<br>5 : 1<br>UNITS<br>mm | DRAWING NO.<br>EDC3-312159-02 |                                       | PART NO.<br>DF30RC-40DP-0.4V(82)    |                                       |          |
| HRS HIROSE ELECTRIC CO., LTD  |                               | CODE NO.<br>CL684-1273-1-82           |                                     | 2                                     |          |

| 1     | 2                        |            | 3    |      | 4        |                          |    |      |      |
|-------|--------------------------|------------|------|------|----------|--------------------------|----|------|------|
| COUNT | DESCRIPTION OF REVISIONS | BY         | CHKD | DATE | COUNT    | DESCRIPTION OF REVISIONS | BY | CHKD | DATE |
| △     | 4                        | RE-H-06664 | YM   | TS   | 04.12.17 | △                        |    |      | . .  |
| △     |                          |            |      |      |          | △                        |    |      | . .  |
| △     |                          |            |      |      |          | △                        |    |      | . .  |

■ NOTES WHEN MATING DF30 SERIES CONNECTORS.

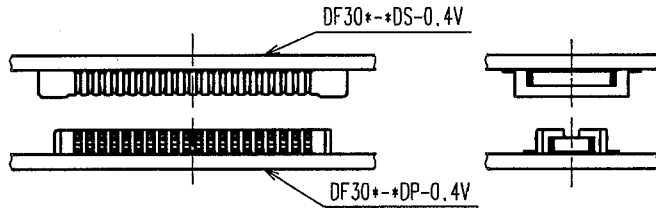


FIGURE-1

PLEASE LOCATE EACH CONNECTOR IN PARALLEL WHEN YOU PUT THEM IN MATING POSITION.

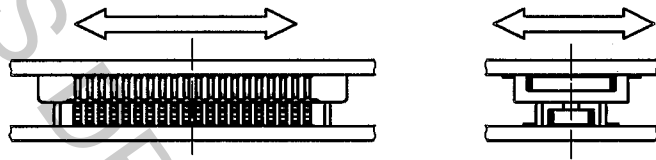


FIGURE-2

THE INSULATOR WILL BE DAMAGED AND THE CONTACTS WILL BE DEFORMED IF THE CONNECTORS ARE LOCATED INCLINED AND MATED BY EXCESSIVE FORCE.

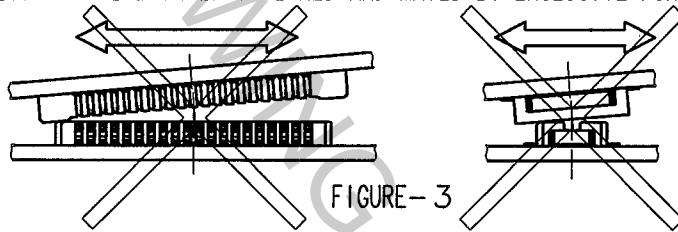


FIGURE-3

WHEN YOU LOCATE TWO CONNECTORS IN A PROPER POSITION, THEY WILL GO DOWN SLIGHTLY AT A LOWER LEVEL AND YOU WILL FIND THAT THEY GET LOCATED CORRECTLY. PLEASE MATE EACH CONNECTOR IN PARALLEL AFTER YOU CONFIRMED THAT THEY GO DOWN LOWER TO SOME EXTENT.

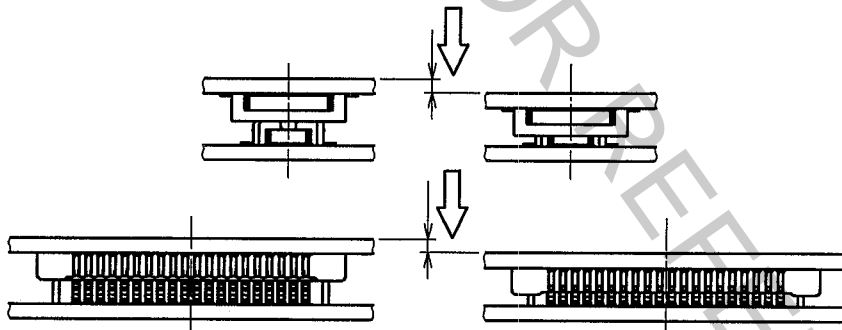


FIGURE-4

THE MATED CONDITIONS CAN BE RELEASED BY A DROP IMPACT OR THE APPLIED FORCE CAUSED BY FPC-HANDLING. FIX THE CONNECTORS BY APPLYING PRESSURE IN THE MATING DIRECTION WITH THE DEVICE OR A BUFFER MATERIAL.

|                                  |                             |                                |                                     |                                 |                               |                          |
|----------------------------------|-----------------------------|--------------------------------|-------------------------------------|---------------------------------|-------------------------------|--------------------------|
| CODE NO. (OLD)                   |                             | DRAWN<br>Y.MICHIDA<br>04.12.16 | DESIGNED<br>A.TAKAHASHI<br>04.12.16 | CHECKED<br>T.SAKATA<br>04.12.16 | APPROVED<br>T.OMA<br>04.12.16 | RELEASED                 |
| NOTES WHEN MATING                |                             |                                |                                     |                                 |                               |                          |
| SCALE<br>FREE : 1<br>UNITS<br>mm | DRAWING NO.<br>EDSC4-830174 | PART NO.<br>DF30 Series        |                                     |                                 |                               | CODE NO.<br>CL684<br>1/3 |
|                                  | HIROSE ELECTRIC CO., LTD.   |                                |                                     |                                 |                               |                          |

| 1     |                          |    | 2    |      |       | 3                        |    |      | 4    |       |                          |    |      |      |
|-------|--------------------------|----|------|------|-------|--------------------------|----|------|------|-------|--------------------------|----|------|------|
| COUNT | DESCRIPTION OF REVISIONS | BY | CHKD | DATE | COUNT | DESCRIPTION OF REVISIONS | BY | CHKD | DATE | COUNT | DESCRIPTION OF REVISIONS | BY | CHKD | DATE |
| △     |                          |    |      |      | △     |                          |    |      |      |       |                          |    |      | .    |
| △     |                          |    |      |      | △     |                          |    |      |      |       |                          |    |      | .    |
| △     |                          |    |      |      | △     |                          |    |      |      |       |                          |    |      | .    |

■ NOTES WHEN EXTRACTING

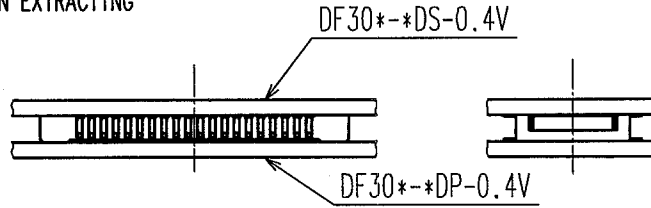


FIGURE-5

WHEN YOU EXTRACT CONNECTORS, PLEASE EXTRACT IN PARALLEL.

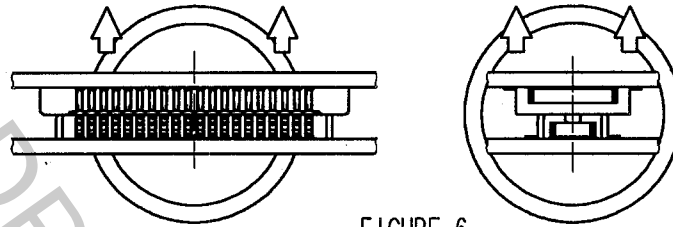


FIGURE-6

⚠ IF YOU'RE UNABLE TO EXTRACT IN PARALLEL DUE TO SET STRUCTURE OR SPACE, PLEASE EXTRACT AS FIGURE-7 (IN LONGER DIMENSION). PLEASE BE CAREFUL NOT TO DAMAGE CONTACTS AT SIDES, WHERE STRESS IS LIKELY TO GATHER WHEN CONNECTORS ARE MOUNTED ON SOFT FPC.

⚠ ESPECIALLY, PLEASE DO NOT EXTRACT FROM THE CORNER AS FIGURE-8. IT GIVES CRITICAL STRESS TO THE CONTACTS ON THE CROSS CORNER.

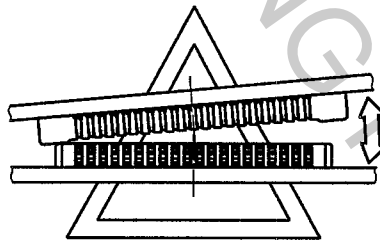


FIGURE-7

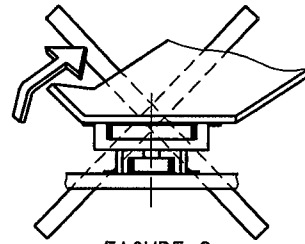


FIGURE-8

⚠ PLEASE DO NOT EXTRACT AS FIGURE-9. THE STRESS CONCENTRATES ON ONE ROW, AND MIGHT DAMAGE CONNECTORS TO MALFUNCTION.

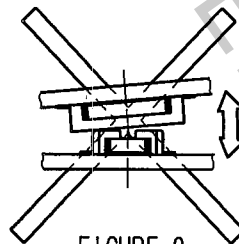


FIGURE-9

|                       |              |             |             |          |          |          |
|-----------------------|--------------|-------------|-------------|----------|----------|----------|
| CODE NO. (OLD)        |              | DRAWN       | DESIGNED    | CHECKED  | APPROVED | RELEASED |
|                       |              | Y.MICHIDA   | A.TAKAHASHI | T.SAKATA | T.OMA    |          |
| NOTES WHEN EXTRACTING |              | 04.12.16    | 04.12.16    | 04.12.16 | 04.12.16 |          |
|                       | DRAWING NO.  | PART NO.    |             |          |          |          |
|                       | EDSC4-830174 | DF30 Series |             |          |          |          |
| SCALE<br>FREE : 1     |              | CODE NO.    |             |          | 2/3      |          |
| UNITS<br>mm           |              | CL684       |             |          |          |          |

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| 1     | 2                        |    |      |      | 3     |                          |    |      | 4    |  |
|-------|--------------------------|----|------|------|-------|--------------------------|----|------|------|--|
| COUNT | DESCRIPTION OF REVISIONS | BY | CHKD | DATE | COUNT | DESCRIPTION OF REVISIONS | BY | CHKD | DATE |  |
| △     |                          |    |      |      | △     |                          |    |      | . .  |  |
| △     |                          |    |      |      | △     |                          |    |      | . .  |  |
| △     |                          |    |      |      | △     |                          |    |      | . .  |  |

⚠ WHEN FPC IS SOFT, STRESS IS CONCENTRATED ON THE CONTACTS AT CORNERS. PLEASE PAY ATTENTION TO THIS POINT AND DO NOT UNMATE CONNECTORS FROM CORNERS AS FIGURE-10. THIS GIVES SERIOUS DAMAGE ON CONTACTS, AND OCCURS SOLDER PEEL-OFF OR CONTACT COME-OFF.

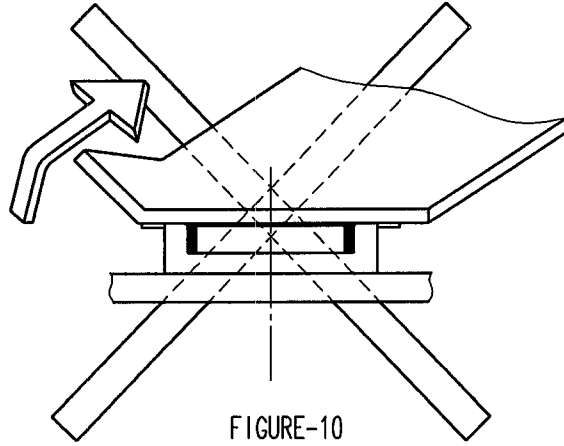


FIGURE-10

IF YOU MOUNT PLUG CONNECTOR ON FPC, CONTACTS MIGHT COME OFF FROM HOUSING MOLD.

CONTACT MIGHT COME OFF FROM HOUSING MOLD.

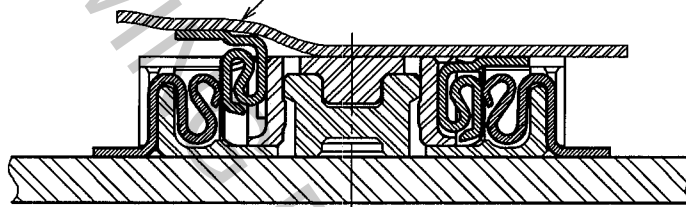


FIGURE-11

IN CASE YOU MOUNT RECEPTACLE CONNECTOR ON FPC, THERE IS NO RISK OF CONTACT COME-OFF. HIROSE RECOMMEND THAT RECEPTACLE IS MOUNTED ON FPC.

IN ORDER TO AVOID THIS RISK, IT IS RECOMMENDED THAT YOU MOUNT RECEPTACLE CONNECTOR ON FPC.

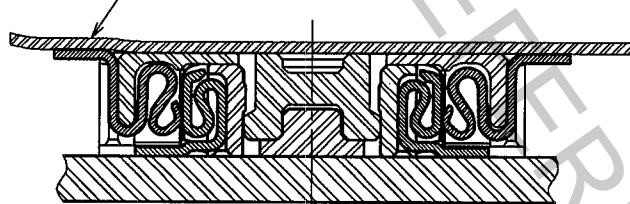
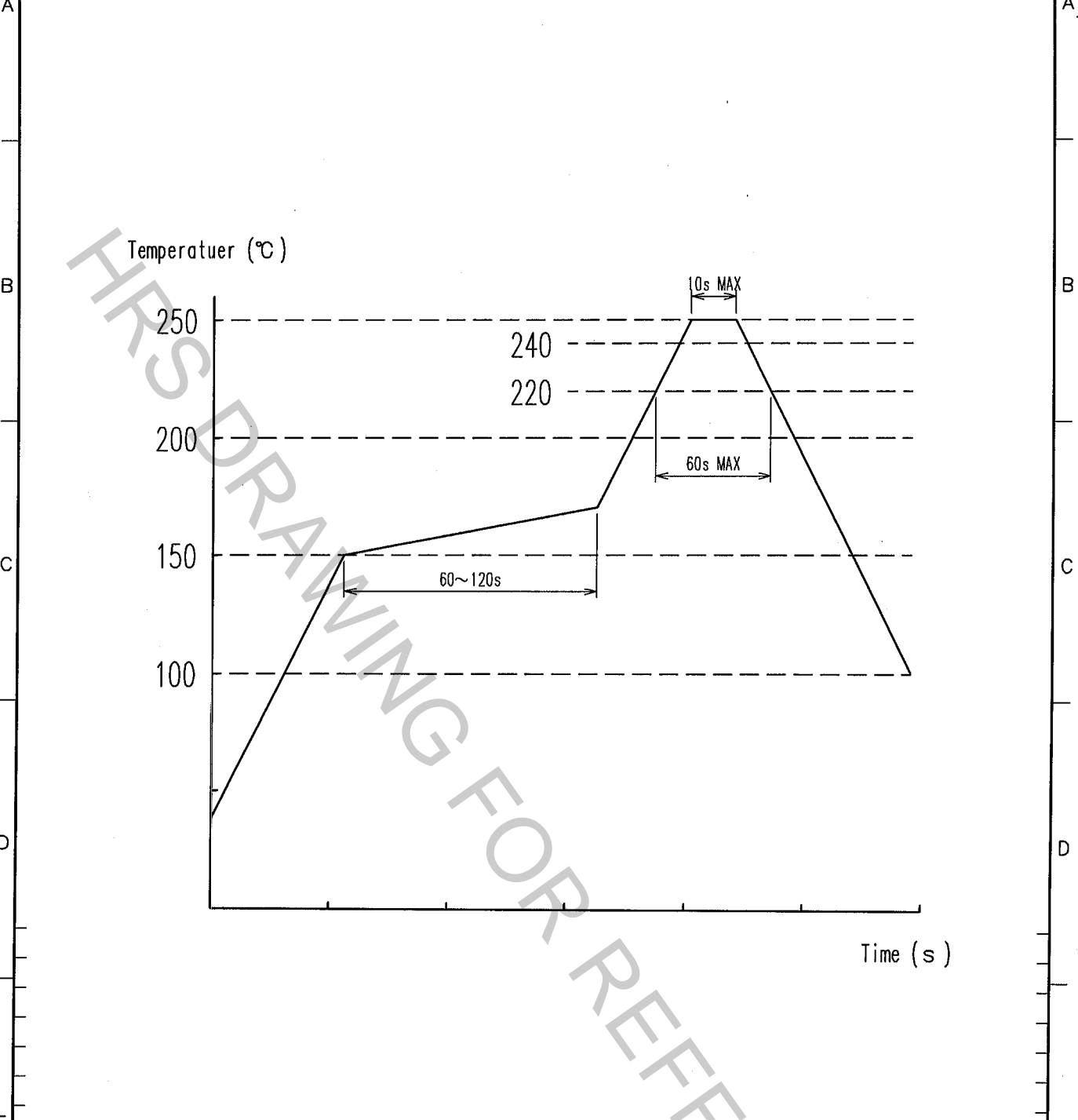


FIGURE-12

|  |                       |                              |             |                         |          |          |
|--|-----------------------|------------------------------|-------------|-------------------------|----------|----------|
| CODE NO. (OLD)                             |                       | DRAWN                        | DESIGNED    | CHECKED                 | APPROVED | RELEASED |
|  |                       | Y.MICHIDA                    | A.TAKAHASHI | T.SAKATA                | T.OMA    |          |
| NOTES WHEN EXTRACTING (SUPPLEMENTARY DATA) |                       | 04.12.16                     | 04.12.16    | 04.12.16                | 04.12.16 |          |
| F  | <br>SCALE<br>FREE : 1 | DRAWING NO.<br>EDSC4-830174  |             | PART NO.<br>DF30 Series |          |          |
|  | UNITS<br>mm           | <br>HIROSE ELECTRIC CO.,LTD. |             | CODE NO.<br>CL684       |          | 3<br>3   |
|  |                       |                              |             |                         |          |          |

| 1     |                          |    | 2    |      |       | 3                        |    |      | 4    |       |                          |    |      |      |
|-------|--------------------------|----|------|------|-------|--------------------------|----|------|------|-------|--------------------------|----|------|------|
| COUNT | DESCRIPTION OF REVISIONS | BY | CHKD | DATE | COUNT | DESCRIPTION OF REVISIONS | BY | CHKD | DATE | COUNT | DESCRIPTION OF REVISIONS | BY | CHKD | DATE |
| △     |                          |    |      |      | △     |                          |    |      |      | △     |                          |    |      |      |
| △     |                          |    |      |      | △     |                          |    |      |      | △     |                          |    |      |      |
| △     |                          |    |      |      | △     |                          |    |      |      | △     |                          |    |      |      |



NOTE 1. REFLOW SYSTEM : IR REFLOW (AIR OR N<sub>2</sub> GAS)  
 2. PERFORMING REFLOW : TWICE MAX

| NO.            | MATERIAL | FINISH, REMARKS | NO.              | MATERIAL   | FINISH, REMARKS |
|----------------|----------|-----------------|------------------|------------|-----------------|
| CODE NO. (OLD) |          |                 | DRAWN            | DESIGNED   | CHECKED         |
|                |          |                 | T. NISHI         | W. Fukuchi | J. Yamada       |
|                |          |                 | 03.08.19         | 03.08.19   | 03.08.20        |
|                |          |                 |                  |            | APPROVED        |
|                |          |                 |                  |            | J. Ono          |
|                |          |                 |                  |            | 03.08.20        |
|                |          |                 |                  |            | RELEASED        |
|                |          |                 |                  |            |                 |
| DRAWING NO.    |          |                 | PART NO.         |            |                 |
| EDC4-830116    |          |                 | DF30-*DS/DP-0.4V |            |                 |
| CODE NO.       |          |                 | CL684            |            |                 |
|                |          |                 |                  |            |                 |
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SCALE  
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**HRS** HIROSE ELECTRIC CO.,LTD.

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