

| APPLICABLE STANDARD                                                                                                                                                                                                                                                              |                                                         |                                                                                                                              |                                                                                                                                                                                                       |                                                                    |            |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|------------|
| RATING                                                                                                                                                                                                                                                                           | OPERATING TEMPERATURE RANGE<br>OPERATING HUMIDITY RANGE | -35°C TO +85°C(NOTES 1)<br><br>20% TO 80%(NOTES 2)                                                                           | STORAGE TEMPERATURE RANGE<br>STORAGE HUMIDITY RANGE                                                                                                                                                   | -10°C TO +60°C(NOTES 3)<br><br>40% TO 70%(NOTES 2)(NOTES 3)        |            |
|                                                                                                                                                                                                                                                                                  | VOLTAGE                                                 | 50V AC / DC                                                                                                                  | APPLICABLE CONNECTOR                                                                                                                                                                                  | DF80※-30S-0.5V(##)                                                 |            |
|                                                                                                                                                                                                                                                                                  | CURRENT                                                 | 0.5 A/PIN (NOTE4)                                                                                                            | APPLICABLE CABLE                                                                                                                                                                                      | THIN COAXIAL CABLE (AWG#40~AWG#46)<br>/ DISCRETE CABLE (AWG#32~36) |            |
| SPECIFICATIONS                                                                                                                                                                                                                                                                   |                                                         |                                                                                                                              |                                                                                                                                                                                                       |                                                                    |            |
| ITEM                                                                                                                                                                                                                                                                             |                                                         | TEST METHOD                                                                                                                  | REQUIREMENTS                                                                                                                                                                                          | QT                                                                 | AT         |
| CONSTRUCTION                                                                                                                                                                                                                                                                     |                                                         |                                                                                                                              |                                                                                                                                                                                                       |                                                                    |            |
| GENERAL EXAMINATION                                                                                                                                                                                                                                                              |                                                         | VISUALLY AND BY MEASURING INSTRUMENT.                                                                                        | ACCORDING TO DRAWING.                                                                                                                                                                                 | X                                                                  | X          |
| MARKING                                                                                                                                                                                                                                                                          |                                                         | CONFIRMED VISUALLY.                                                                                                          |                                                                                                                                                                                                       | X                                                                  | X          |
| ELECTRIC CHARACTERISTICS                                                                                                                                                                                                                                                         |                                                         |                                                                                                                              |                                                                                                                                                                                                       |                                                                    |            |
| CONTACT RESISTANCE                                                                                                                                                                                                                                                               |                                                         | 100m A (DC OR 1000 Hz).                                                                                                      | CONTACT:80mΩ MAX.<br>SHIELDING:80mΩ MAX.                                                                                                                                                              | X                                                                  | —          |
| INSULATION RESISTANCE                                                                                                                                                                                                                                                            |                                                         | 100V DC.                                                                                                                     | 50MΩ MIN.                                                                                                                                                                                             | X                                                                  | —          |
| VOLTAGE PROOF                                                                                                                                                                                                                                                                    |                                                         | 150V AC FOR 1 min.                                                                                                           | NO FLASHOVER OR BREAKDOWN.                                                                                                                                                                            | X                                                                  | —          |
| MECHANICAL CHARACTERISTICS                                                                                                                                                                                                                                                       |                                                         |                                                                                                                              |                                                                                                                                                                                                       |                                                                    |            |
| MECHANICAL OPERATION                                                                                                                                                                                                                                                             |                                                         | 30 TIMES INSERTIONS AND EXTRACTIONS.                                                                                         | ① CONTACT RESISTANCE:<br>NO VARIATION OF 50 mΩ OR MORE FROM INITIAL VALUE.<br>SHIELDING RESISTANCE:<br>NO VARIATION OF 50 mΩ OR MORE FROM INITIAL VALUE.<br>② NO DAMAGE, CRACK OR LOOSENESS OF PARTS. | X                                                                  | —          |
| VIBRATION                                                                                                                                                                                                                                                                        |                                                         | FREQUENCY 10 TO 55 Hz, SINGLE AMPLITUDE 0.75 mm, 3 DIRECTIONS × 10 CYCLE.                                                    | ① NO ELECTRICAL DISCONTINUITY OF 1 μs.<br>② NO DAMAGE, CRACK OR LOOSENESS OF PARTS.                                                                                                                   | X                                                                  | —          |
| SHOCK                                                                                                                                                                                                                                                                            |                                                         | 490 m/s <sup>2</sup> DURATION OF PULSE 11 ms AT 3 TIMES FOR 3 DIRECTIONS.                                                    |                                                                                                                                                                                                       | X                                                                  | —          |
| ENVIRONMENTAL CHARACTERISTICS                                                                                                                                                                                                                                                    |                                                         |                                                                                                                              |                                                                                                                                                                                                       |                                                                    |            |
| RAPID CHANGE OF TEMPERATURE                                                                                                                                                                                                                                                      |                                                         | TEMPERATURE -55 →+85 °C<br>TIME 30 → 30 min<br>UNDER 5 CYCLES. (THE TRANSFERRING TIME OF THE CHAMBER IS 2-3 MINUTE.)         | ① CONTACT RESISTANCE:<br>NO VARIATION OF 50 mΩ OR MORE FROM INITIAL VALUE.<br>SHIELDING RESISTANCE:<br>NO VARIATION OF 50 mΩ OR MORE FROM INITIAL VALUE.                                              | X                                                                  | —          |
| DAMP HEAT (STEADY STATE)                                                                                                                                                                                                                                                         |                                                         | EXPOSED AT 40 ± 2 °C, 90 TO 95 %, 96 h.                                                                                      | ② INSULATION RESISTANCE: 25 MΩ MIN.<br>③ NO DAMAGE, CRACK OR LOOSENESS OF PARTS.                                                                                                                      | X                                                                  | —          |
| SULFUR DIOXDE GAS                                                                                                                                                                                                                                                                |                                                         | EXPOSED IN 25PPM , 25°C , 75%RH , 96h.                                                                                       | NO DEFECT SUCH AS CORROSION WHICH IMPAIRS THE FUNCTION OF CONNECTOR.                                                                                                                                  | X                                                                  | —          |
| RESISTANCE TO SOLDERING HEAT                                                                                                                                                                                                                                                     |                                                         | ①BONDING TEMPERATURE:<br>270°C MAX :5 sec MAX<br>200°C MIN :30 sec MAX<br>②MANUAL SOLDERING TEMPERATURE:<br>350°C, 3sec MAX. | NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINALS.                                                                                                                                       | X                                                                  | —          |
| SOLDERABILITY                                                                                                                                                                                                                                                                    |                                                         | SOLDERED AT SOLDER TEMPERATURE, 245°C FOR INSERTION DURATION, 5 sec. (Sn-3.0Ag-0.5Cu)                                        | SOLDER SHALL COVER A MINIMUM OF 95 % OF THE SURFACE BEING IMMERSSED.                                                                                                                                  | X                                                                  | —          |
|                                                                                                                                                                                                                                                                                  | COUNT                                                   | DESCRIPTION OF REVISIONS                                                                                                     | DESIGNED                                                                                                                                                                                              | CHECKED                                                            | DATE       |
| △                                                                                                                                                                                                                                                                                |                                                         |                                                                                                                              |                                                                                                                                                                                                       |                                                                    |            |
| REMARKS                                                                                                                                                                                                                                                                          |                                                         |                                                                                                                              | APPROVED                                                                                                                                                                                              | TS. SAKATA                                                         | 13. 06. 26 |
| NOTE1: INCLUDE THE TEMPERATURE RISING BY CURRENT                                                                                                                                                                                                                                 |                                                         |                                                                                                                              | CHECKED                                                                                                                                                                                               | TS. SAKATA                                                         | 13. 06. 26 |
| NOTE2: NON CONDENSING                                                                                                                                                                                                                                                            |                                                         |                                                                                                                              | DESIGNED                                                                                                                                                                                              | IO. DENPOUYA                                                       | 13. 06. 25 |
| NOTE3: THE TERM "STORAGE" REFERS TO PRODUCTS STORED FOR A LONG PERIOD PRIOR TO MOUNTING AND USE. THE OPERATING TEMPERATURE AND HUMIDITY RANGE COVERS THE NON-CONDUCTING CONDITION OF CONNECTORS AFTER BOARD MOUNTING AND THE TEMPORARY STORAGE CONDITIONS OF TRANSPORTATION, etc |                                                         |                                                                                                                              | DRAWN                                                                                                                                                                                                 | IO. DENPOUYA                                                       | 13. 06. 25 |
| NOTE4: TEMPERATURE RISE OF CONNECTOR BODY ONLY, AND THAT OF CASE IS NOT INCLUDED.<br>RATED CURRENT VARIES DEPENDING ON CABLES ASSEMBLED.<br>Unless otherwise specified, refer to JIS C 5402,IEC60512.                                                                            |                                                         |                                                                                                                              |                                                                                                                                                                                                       |                                                                    |            |
| Note QT:Qualification Test AT:Assurance Test X:Applicable Test                                                                                                                                                                                                                   |                                                         |                                                                                                                              | DRAWING NO.                                                                                                                                                                                           | ELC4-351371-01                                                     |            |
| HRS                                                                                                                                                                                                                                                                              | SPECIFICATION SHEET                                     |                                                                                                                              | PART NO.                                                                                                                                                                                              | DF80D-30P-0. 5SD (51)                                              |            |
|                                                                                                                                                                                                                                                                                  | HIROSE ELECTRIC CO., LTD.                               |                                                                                                                              | CODE NO.                                                                                                                                                                                              | CL662-8018-5-51                                                    | △ 1/1      |