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| APPLICABLE STANDARD   |  |                                |   |                                |            |
|---|--|--------------------------------|---|--------------------------------|------------|
| RATING  | OPERATING TEMPERATURE RANGE  | -55 °C TO 85 °C <sup>(1)</sup> | STORAGE TEMPERATURE RANGE   | -10 °C TO 60 °C <sup>(2)</sup> |            |
|   | VOLTAGE  | 125 V AC                       | OPERATING HUMIDITY RANGE  | 40 % TO 80 %                   |            |
|   | CURRENT  | 0.5 A                          | STORAGE HUMIDITY RANGE  | 40 % TO 70 % <sup>(2)</sup>    |            |
| 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  | 100 mA (DC OR 1000 Hz).  |                                | 45 mΩ MAX .   | x                              | -          |
| CONTACT RESISTANCE MILLIVOLT LEVEL METHOD   | 20 mV MAX, 1 mA(DC OR 1000Hz)  |                                | 55 mΩ MAX .   | x                              | -          |
| INSULATION RESISTANCE   | 250 V DC   |                                | 100 MΩ MIN.   | x                              | -          |
| VOLTAGE PROOF   | 300 V AC FOR 1 min.  |                                | NO FLASHOVER OR BREAKDOWN.  | x                              | -          |
| MECHANICAL CHARACTERISTICS  |  |                                |   |                                |            |
| INSERTION AND WITHDRAWAL FORCES   | MEASURED BY APPLICABLE CONNECTOR.  |                                | INSERTION FORCE: 17.6 N MAX.<br>WITHDRAWAL FORCE: 2.0 N MIN.                                  | x                              | -          |
| MECHANICAL OPERATION  | 500 TIMES INSERTIONS AND EXTRACTIONS.  |                                | ① CONTACT RESISTANCE: 55 mΩ MAX.<br>② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.                | x                              | -          |
| VIBRATION   | FREQUENCY 10 TO 55 Hz,<br>AMPLITUDE : 1.52 mm,<br>AT 2 h FOR 3 DIRECTIONS.   |                                | ① NO ELECTRICAL DISCONTINUITY OF 1 μs.<br>② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.          | x                              | -          |
| SHOCK   | 490 m/s <sup>2</sup> , DURATION OF PULSE 11 ms<br>AT 3 TIMES FOR 3 DIRECTIONS.                                     |                                |   | x                              | -          |
| ENVIRONMENTAL CHARACTERISTICS   |  |                                |   |                                |            |
| DAMP HEAT (STEADY STATE)  | EXPOSED AT 40±2 °C, 90 ~ 95 %, 96 h.   |                                | ① CONTACT RESISTANCE: 55 mΩ MAX.<br>② INSULATION RESISTANCE: 100 MΩ MIN.                      | x                              | -          |
| RAPID CHANGE OF TEMPERATURE   | TEMPERATURE-55→+15~+35→+85→+15~+35°C<br>TIME 30 → 10~15 → 30 → 10~15 min.<br>UNDER 5 CYCLES.                       |                                | ③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS.  | x                              | -          |
| CORROSION SALT MIST   | EXPOSED IN 5 % SALT WATER SPRAY FOR 48 h.  |                                | ① CONTACT RESISTANCE: 55 mΩ MAX.<br>② NO HEAVY CORROSION.                                     | x                              | -          |
| HYDROGEN SULPHIDE   | EXPOSED IN 3 PPM FOR 96 h.<br>(TEST STANDARD: JEIDA 38)  |                                |   | x                              | -          |
| RESISTANCE TO SOLDERING HEAT  | 1) SOLDER BATH:SOLDER TEMPERATURE,<br>260±5°C FOR IMMERSION,DURATION,10±1s.<br>2) SOLDERING IRONS : 360°C FOR 5 s. |                                | NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINALS.                               | x                              | -          |
| SOLDERABILITY   | SOLDERED AT SOLDER TEMPERATURE,<br>240±3°C,<br>FOR IMMERSION DURATION, 2 s.  |                                | A NEW UNIFORM COATING OF SOLDER SHALL COVER A MINIMUM OF 95 % OF THE SURFACE BEING IMMERSSED. | x                              | -          |
|   |  |                                |   |                                |            |
|   | COUNT  | DESCRIPTION OF REVISIONS       | DESIGNED  | CHECKED                        | DATE       |
|   |  |                                |   |                                |            |
| REMARK <sup>(1)</sup> TEMPERATURE RISE INCLUDED WHEN ENERGIZED.<br><sup>(2)</sup> THIS STORAGE INDICATES A LONG-TERM STORAGE STATE FOR THE UNUSED PRODUCT BEFORE THE BOARD MOUNTED. |  |                                | APPROVED  | HS. OKAWA                      | 07. 08. 08 |
|   |  |                                | CHECKED   | HS. OZAWA                      | 07. 08. 07 |
|   |  |                                | DESIGNED  | KY. NAKAMURA                   | 07. 08. 07 |
| Unless otherwise specified, refer to MIL-STD-1344.  |  |                                | DRAWN   | TP. MATSUMOTO                  | 07. 08. 07 |
| Note  | QT:Qualification Test AT:Assurance Test X:Applicable Test  |                                | DRAWING NO.   | ELC4-083179-21                 |            |
|   | SPECIFICATION SHEET  |                                | PART NO.  | FX2C-20S-1. 27DSA (71)         |            |
|   | HIROSE ELECTRIC CO., LTD.  |                                | CODE NO.  | CL572-2401-7-71                | 1/1        |