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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   | 100 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                             |                |
| <b>CONSTRUCTION</b>  |   |   |                           |                                |                |
| GENERAL EXAMINATION  | VISUALLY AND BY MEASURING INSTRUMENT.   | ACCORDING TO DRAWING.   | x                         | x                              |                |
| MARKING  | CONFIRMED VISUALLY.   |   | x                         | x                              |                |
| <b>ELECTRIC CHARACTERISTICS</b>  |   |   |                           |                                |                |
| CONTACT RESISTANCE   | 20 mV MAX, 1 mA(DC OR 1000Hz)   | 60 mΩ MAX. <sup>(3)</sup>   | x                         |                                |                |
| INSULATION RESISTANCE  | 100 V DC.   | 500 MΩ MIN.   | x                         |                                |                |
| VOLTAGE PROOF  | 300 V AC FOR 1 min.   | NO FLASHOVER OR BREAKDOWN.  | x                         |                                |                |
| <b>MECHANICAL CHARACTERISTICS</b>  |   |   |                           |                                |                |
| INSERTION AND WITHDRAWAL FORCES  | MEASURED BY APPLICABLE CONNECTOR.   | INSERTION FORCE: 24.6 N MAX.<br>WITHDRAWAL FORCE: 2.05 N MIN.   | x                         |                                |                |
| MECHANICAL OPERATION   | 50 TIMES INSERTIONS AND EXTRACTIONS.  | ① CONTACT RESISTANCE: 80 mΩ MAX. <sup>(3)</sup><br>② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.   | x                         |                                |                |
| VIBRATION  | FREQUENCY 10 TO 55 Hz,<br>SINGL AMPLITUDE : 0.76 mm,<br>AT 2 h FOR 3 DIRECTION.   | 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                         |                                |                |
| <b>ENVIRONMENTAL CHARACTERISTICS</b>   |   |   |                           |                                |                |
| DAMP HEAT (STEADY STATE)   | EXPOSED AT 40±2 °C, 90 ~ 95 %, 96 h.  | ① CONTACT RESISTANCE: 80 mΩ MAX. <sup>(3)</sup><br>② INSULATION RESISTANCE: 500 MΩ MIN.<br>③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | x                         |                                |                |
| DRY HEAT   | EXPOSED AT 85±2 °C, 96 h  |   |                           |                                |                |
| RAPID CHANGE OF TEMPERATURE  | TEMPERATURE -55→+5~+35→+85→+5~+35°C<br>TIME 30→ 5 MAX→ 30→ 5 MAX min.<br>UNDER 5 CYCLES.  |   | x                         |                                |                |
| CORROSION SALT MIST  | EXPOSED IN 5 % SALT WATER SPRAY FOR 48 h.   | ① CONTACT RESISTANCE: 80 mΩ MAX. <sup>(3)</sup><br>② NO HEAVY CORROSION.  | x                         |                                |                |
| SULFUR DIOXIDE   | EXPOSED IN 10 PPM FOR 96 h.<br>(TEST STANDARD: JIS-C-0090)  |   | x                         |                                |                |
| RESISTANCE TO SOLDERING HEAT   | 1)REFLOW SOLDERING :<br>REFLOW 2 TIMES UNDER THE TEMPERATURE PROFILE SHOWN BELOW.<br><br>2) SOLDERING IRONS : 360°C MAX. FOR 5 sec. | NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINAL.  | x                         |                                |                |
| SOLDERABILITY  | SOLDERED AT SOLDER TEMPERATURE 240±3°C FOR IMMERSION DURATION, 3 sec.   | A NEW UNIFORM COATING OF SOLDER SHALL COVER A MINIMUM OF 95 % OF THE SURFACE BEING IMMERSED.  | x                         |                                |                |
|  | COUNT   | DESCRIPTION OF REVISIONS  | DESIGNED                  | CHECKED                        | DATE           |
|  | △   |   |                           |                                |                |
| REMARKS <sup>(1)</sup> INCLUDE TEMPRERATURE RISE CAUSED BY CURRENT-CARRYING.<br><sup>(2)</sup> "STORAGE" MEANS A LONG-TERM STORAGE STATE FOR THE UNUSED PRODUCT BEFORE ASSEMBLY TO PCB.<br><sup>(3)</sup> INCLUDE CONDUCTOR RESISTANCE OF CABLE IN CASE THE MATED CONNECTOR IS CABLE TYPE.(L=12mm) |   |   | APPROVED                  | HS. OKAWA                      | 05. 08. 05     |
|  |   |   | CHECKED                   | HT. YAMAGUCHI                  | 05. 08. 05     |
|  |   |   | DESIGNED                  | KN. SHIBUYA                    | 05. 08. 05     |
| Unless otherwise specified, refer to JIS-C-5402.   |   |   | DRAWN                     | KN. SHIBUYA                    | 05. 08. 05     |
| Note QT:Qualification Test AT:Assurance Test X:Applicable Test   |   |   | DRAWING NO.               |                                | ELC4-155937-00 |
| <b>HRS</b>   | SPECIFICATION SHEET   |   | PART NO.                  | FX15S-41S-0. 5SH               |                |
|  | HIROSE ELECTRIC CO., LTD.   |   | CODE NO.                  | CL575-2307-8-00                | △ 1/1          |