


| APPLICABLE STANDARD  |  |                          |  |  |                |
|--|--|--------------------------|--|--|----------------|
| RATING   | OPERATING TEMPERATURE RANGE  | -55 °C TO 85 °C          | STORAGE TEMPERATURE RANGE  | -10 °C TO 50 °C (PACKED CONDITION)     |                |
|  | VOLTAGE  | 30 V AC / DC             | OPERATING OR STORAGE HUMIDITY RANGE  | RELATIVE HUMIDITY 90 % MAX (NOT DEWED) |                |
|  | CURRENT  | 0.2 A                    | APPLICABLE CABLE   | t=0.2±0.03mm, GOLD PLATING             |                |
| 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>                                |  |                          |  |  |                |
| VOLTAGE PROOF  | 90 V AC FOR 1 min.   |                          | NO FLASHOVER OR BREAKDOWN.   | x                                      | x              |
| INSULATION RESISTANCE  | 100 V DC.  |                          | 50 MΩ MIN.   | x                                      | x              |
| CONTACT RESISTANCE   | AC 20 mV MAX ( AC:1 KHz ), 1 mA .  |                          | 100 mΩ MAX.<br>INCLUDING FPC BULK RESISTANCE (L=12)  | x                                      | x              |
| <b>MECHANICAL CHARACTERISTICS</b>                              |  |                          |  |  |                |
| VIBRATION  | FREQUENCY 10 TO 55 Hz, HALF AMPLITUDE 0.75 mm, FOR 10 CYCLES IN 3 DIRECTIONS.              |                          | ① NO ELECTRICAL DISCONTINUITY OF 1 μs.   | x                                      | —              |
| SHOCK  | 981 m/s <sup>2</sup> , DURATION OF PULSE 6 ms AT 3 TIMES IN 3 DIRECTIONS.                  |                          | ② CONTACT RESISTANCE: 100 mΩ MAX.<br>③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS.  | x                                      | —              |
| MECHANICAL OPERATION   | 10 TIMES INSERTIONS AND EXTRACTIONS.   |                          | ① CONTACT RESISTANCE: 100 mΩ MAX.<br>② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.  | x                                      | —              |
| FPC RETENTION FORCE  | MEASURED BY APPLICABLE FPC. (THICKNESS OF FPC SHALL BE t=0.20mm AT INITIAL CONDITION.)     |                          | DIRECTION OF INSERTION : 0.15N × NUMBER OF CONTACTS MIN. (note 1)  | x                                      | —              |
| <b>ENVIRONMENTAL CHARACTERISTICS</b>                           |  |                          |  |  |                |
| CORROSION SALT MIST  | EXPOSED AT 35±2 °C , 5 % SALT WATER SPRAY FOR 96 h.  |                          | ① CONTACT RESISTANCE: 100 mΩ MAX.<br>② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.<br>③ NO EVIDENCE OF CORROSION WHICH AFFECTS TO OPERATION OF CONNECTOR.                                   | x                                      | —              |
| RAPID CHANGE OF TEMPERATURE                                    | TEMPERATURE-55→+15TO+35→+85→+15TO+35°C<br>TIME 30→ 2 TO 3 → 30→ 2 TO 3 min UNDER 5 CYCLES. |                          | ① CONTACT RESISTANCE: 100 mΩ MAX.<br>② INSULATION RESISTANCE: 50 MΩ MIN.<br>③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS.   | x                                      | —              |
| DAMP HEAT (STEADY STATE)                                       | EXPOSED AT 40±2 °C,<br>RELATIVE HUMIDITY 90 TO 95 %, 96 h.                                 |                          |  | x                                      | —              |
| DAMP HEAT,CYCLIC   | EXPOSED AT -10 TO +65 °C,<br>RELATIVE HUMIDITY 90 TO 96 %, 10 CYCLES,TOTAL 240 h.          |                          | ① CONTACT RESISTANCE: 100 mΩ MAX.<br>② INSULATION RESISTANCE: 1 MΩ MIN. (AT HIGH HUMIDITY)<br>③ INSULATION RESISTANCE: 50 MΩ MIN. (AT DRY)<br>④ NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | x                                      | —              |
|  | COUNT  | DESCRIPTION OF REVISIONS | DESIGNED   | CHECKED                                | DATE           |
|  | 0  |                          |  |  |                |
| REMARK   |  |                          | APPROVED   | RI. TAKAYASU                           | 09.12.24       |
|  |  |                          | CHECKED  | FN. TAMURA                             | 09.12.24       |
|  |  |                          | DESIGNED   | HH. MURAKAMI                           | 09.12.22       |
| Unless otherwise specified, refer to JIS C 5402.               |  |                          | DRAWN  | HK. OSHIKIRI                           | 09.12.19       |
| Note QT:Qualification Test AT:Assurance Test X:Applicable Test |  |                          | DRAWING NO.  |  | ELC4-158578-06 |
| <b>HRS</b>   | SPECIFICATION SHEET  |                          | PART NO.   | FH36W-**S-0.3SHW (50)                  |                |
|  | HIROSE ELECTRIC CO., LTD.  |                          | CODE NO.   |  | △ 1/2          |

| SPECIFICATIONS  |   |  |             |   |                |
|---|---|--|-------------|---|----------------|
| ITEM  | TEST METHOD   | REQUIREMENTS   | QT          | AT  |                |
| DRY HEAT  | EXPOSED AT 85±2 °C, 96 h.   | ① CONTACT RESISTANCE: 100 mΩ MAX.  | x           | —   |                |
| COLD  | EXPOSED AT -55±3°C, 96 h.   | ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.   | x           | —   |                |
| SURPHUR DIOXIDE<br>[JIS C 0090]   | EXPOSED AT 40±2 °C , RELATIVE HUMIDITY 80 ±5%<br>25±5 ppm FOR 96 h.   | ① CONTACT RESISTANCE: 100 mΩ MAX.<br>② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.              | x           | —   |                |
| HYDROGEN SULPHIDE<br>[JIS C 0092]   | EXPOSED AT 40±2 °C , RELATIVE HUMIDITY 80±5% ,<br>10 TO 15 ppm FOR 96 h.  | ③ NO EVIDENCE OF CORROSION WHICH AFFECTS TO OPERATION OF CONNECTOR.                          | x           | —   |                |
| SOLDERABILITY   | SOLDERED AT SOLDER TEMPERATURE,<br>235 ±5°C FOR IMMERSION DURATION,<br>2±0.5 sec.   | A NEW UNIFORM COATING OF SOLDER SHALL COVER A MINIMUM OF 95 % OF THE SURFACE BEING IMMersed. | x           | —   |                |
| RESISTANCE TO SOLDERING HEAT  | 1) REFLOW SOLDERING :<br>PEAK TMP. 250 °C MAX .<br>REFLOW TMP. OVER 230 °C WITHIN 60 sec.<br>2) SOLDERING IRONS :<br>TMP. 350 ± 10 °C FOR 5±1 sec . | NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINALS.<br>(note 2)                  | x           | —   |                |
| <p>(note 1)</p> <p>THIS PRODUCT HAS FLIP-LOCK CONSTRUCTION. FASTEN FPC ON PCB OR SOMETHING FIXED IF FORCE IN VERTICAL DIRECTION SHALL BE PREDICTED.</p> <p>(note 2)</p> <p>BLISTERS WHICH MAY OCCUR IN HOUSING DO NOT AFFECT PRODUCT PERFORMANCE.</p> |   |  |             |   |                |
| Note QT:Qualification Test AT:Assurance Test X:Applicable Test  |   |  | DRAWING NO. |   | ELC4-158578-06 |
| <b>HRS</b>  | SPECIFICATION SHEET   |  | PART NO.    | FH36W-**S-0. 3SHW (50)  |                |
|   | HIROSE ELECTRIC CO., LTD.   |  | CODE NO     |  2/2 |                |