

| 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                 |
| CONSTRUCTION   |                             |  |                                     |  |                       |
| GENERAL EXAMINATION  |                             | VISUALLY AND BY MEASURING INSTRUMENT.  |                                     | ACCORDING TO DRAWING.  | ×                     |
| MARKING  |                             | CONFIRMED VISUALLY.  |                                     |  | ×                     |
| ELECTRIC CHARACTERISTICS                                       |                             |  |                                     |  |                       |
| VOLTAGE PROOF  |                             | 90 V AC FOR 1 min.   |                                     | NO FLASHOVER OR BREAKDOWN.   | ×                     |
| INSULATION RESISTANCE  |                             | 100 V DC.  |                                     | 50 MΩ MIN.   | ×                     |
| CONTACT RESISTANCE   |                             | AC 20 mV MAX ( AC:1 KHz ) , 1 mA .   |                                     | 100 mΩ MAX.<br>INCLUDING FPC BULK RESISTANCE (L=12)  | ×                     |
| MECHANICAL CHARACTERISTICS                                     |                             |  |                                     |  |                       |
| VIBRATION  |                             | FREQUENCY 10 TO 55 Hz, HALF AMPLITUDE 0.75 mm, FOR 10 CYCLES IN 3 DIRECTIONS.              |                                     | ① NO ELECTRICAL DISCONTINUITY OF 1 μs.   | ×                     |
| 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.  | ×                     |
| MECHANICAL OPERATION   |                             | 10 TIMES INSERTIONS AND EXTRACTIONS.   |                                     | ① CONTACT RESISTANCE: 100 mΩ MAX.<br>② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.  | ×                     |
| FPC RETENTION FORCE  |                             | MEASURED BY APPLICABLE FPC.<br>(THICKNESS OF FPC SHALL BE t=0.20mm AT INITIAL CONDITION.)  |                                     | DIRECTION OF INSERTION :<br>0.15N × NUMBER OF CONTACTS MIN.<br>(note 1)  | ×                     |
| ENVIRONMENTAL CHARACTERISTICS                                  |                             |  |                                     |  |                       |
| 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.                                   | ×                     |
| 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.   | ×                     |
| DAMP HEAT (STEADY STATE)                                       |                             | EXPOSED AT 40±2 °C,<br>RELATIVE HUMIDITY 90 TO 95 %, 96 h.                                 |                                     |  | ×                     |
| 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. | ×                     |
| COUNT  | DESCRIPTION OF REVISIONS    |  | DESIGNED                            | CHECKED  | DATE                  |
| 0  |                             |  |                                     |  |                       |
| REMARK   |                             |  |                                     | APPROVED   | RI. TAKAYASU 09.12.22 |
|  |                             |  |                                     | CHECKED  | FN. TAMURA 09.12.22   |
|  |                             |  |                                     | DESIGNED   | HH. MURAKAMI 09.12.22 |
|  |                             |  |                                     | DRAWN  | HK. OSHIKIRI 09.12.21 |
| Unless otherwise specified, refer to JIS C 5402.               |                             |  |                                     |  |                       |
| Note QT:Qualification Test AT:Assurance Test X:Applicable Test |                             |  | DRAWING NO.                         |  | ELC4-156643-06        |
| HRS  | SPECIFICATION SHEET         |  | PART NO.                            | FH36-**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<br>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  | —  |  |

(note 1)

THIS PRODUCT HAS FLIP-LOCK CONSTRUCTION. FASTEN FPC ON PCB OR SOMETHING FIXED IF FORCE IN VERTICAL DIRECTION SHALL BE PREDICTED.

(note 2)

BLISTERS WHICH MAY OCCUR IN HOUSING DO NOT AFFECT PRODUCT PERFORMANCE.

|  |                           |             |                       |                |     |
|--|---------------------------|-------------|-----------------------|----------------|-----|
| Note QT:Qualification Test AT:Assurance Test X:Applicable Test |                           | DRAWING NO. |                       | ELC4-156643-06 |     |
| <b>HRS</b>   | SPECIFICATION SHEET       | PART NO.    | FH36-**S-0. 3SHW (50) |                |     |
|  | HIROSE ELECTRIC CO., LTD. | CODE NO     |                       |                | 2/2 |