

| 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. | x | x |
| MARKING             | CONFIRMED VISUALLY.                   |                       | x | x |

#### ELECTRIC CHARACTERISTICS

|                       |                                   |   |   |   |
|-----------------------|-----------------------------------|---|---|---|
| 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 |

#### 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.  | 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 | — |

#### 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.                                   | 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 |
|        | DRAWN    | HK. OSHIKIRI | 09.12.19 |

Unless otherwise specified, refer to JIS C 5402.

|  |             |                |
|--|-------------|----------------|
| 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            |