



| APPLICABLE STANDARD | | | | | |
|--|---|--|-------------------------------------|-------------------------------------|-----------------|
| RATING | OPERATING TEMPERATURE RANGE | -55°C TO +105°C \triangle | STORAGE TEMPERATURE RANGE | -10°C TO +50°C(PACKED CONDITION) | |
| | VOLTAGE | 30V AC/DC | OPERATING OR STORAGE HUMIDITY RANGE | RELATIVE HUMIDITY 90%MAX(NOT DEWED) | |
| | CURRENT | 0.2A | APPLICABLE CABLE | t=0.2±0.03mm, GOLD PLATED | |
| SPECIFICATIONS | | | | | |
| ITEM | TEST METHOD | REQUIREMENTS | QT | AT | |
| CONSTRUCTION | | | | | |
| GENERAL EXAMINATION | VISUALLY AND BY MEASURING INSTRUMENT. | ACCORDING TO DRAWING. | × | × | |
| MARKING | CONFIRMED VISUALLY. | | × | × | |
| ELECTRICAL CHARACTERISTICS | | | | | |
| VOLTAGE PROOF | 90V AC FOR 1 min. | NO FLASHOVER OR BREAKDOWN. | × | × | |
| INSULATION RESISTANCE | 100V DC. | 50M Ω MIN. | × | × | |
| CONTACT RESISTANCE | AC 20mV MAX (1KHz), 1mA. | 100m Ω MAX. INCLUDING FPC BULK RESISTANCE (L=12mm) | × | × | |
| MECHANICAL CHARACTERISTICS | | | | | |
| VIBRATION | FREQUENCY 10 TO 55 Hz, HALF AMPLITUDE 0.75 mm FOR 10 CYCLES IN 3 AXIAL DIRECTIONS. | ① NO ELECTRICAL DISCONTINUITY OF 1 μ s. ② CONTACT RESISTANCE: 100m Ω MAX. | × | — | |
| SHOCK | 981 m/s ² , DURATION OF PULSE 6ms AT 3 TIMES IN 3BOTH AXIAL DIRECTIONS. | ③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | × | — | |
| MECHANICAL OPERATION | 10 TIMES INSERTIONS AND EXTRACTIONS. | ① CONTACT RESISTANCE: 100m Ω MAX. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | × | — | |
| FPC RETENTION FORCE | MEASURED BY APPLICABLE FPC. (THICKNESS OF FPC SHALL BE t=0.20mm AT INITIAL CONDITION.) | DIRECTION OF INSERTION: 0.2N × NUMBER OF CONTACTS MIN. <i>(note 1)</i> | × | — | |
| ENVIRONMENTAL CHARACTERISTICS | | | | | |
| CORROSION SALT MIST | EXPOSED AT 35±2°C, 5% SALT WATER SPRAY FOR 96h. | ① CONTACT RESISTANCE: 100m Ω MAX. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS. ③ NO EVIDENCE OF CORROSION WHICH AFFECTS TO OPERATION OF CONNECTOR. | × | — | |
| RAPID CHANGE OF TEMPERATURE | TEMPERATURE -55→+15 TO +35→+85→+15TO+35 °C TIME 30 → 2~3 → 30 → 2~3 min UNDER 5 CYCLES. | ① CONTACT RESISTANCE: 100m Ω MAX. ② INSULATION RESISTANCE: 50M Ω MIN. ③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | × | — | |
| DAMP HEAT (STEADY STATE) | EXPOSED AT 40±2°C, RELATIVE HUMIDITY 90 TO 95%, 96h. | | × | — | |
| DAMP HEAT,CYCLIC | EXPOSED AT -10 TO +65 °C RELATIVE HUMIDITY 90 TO 96 % 10 CYCLES, TOTAL 240h. | ① CONTACT RESISTANCE: 100m Ω MAX. ② INSULATION RESISTANCE: 1M Ω MIN. (AT HIGH HUMIDITY) ③ INSULATION RESISTANCE: 50M Ω MIN. (AT DRY) ④ NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | × | — | |
| | COUNT | DESCRIPTION OF REVISIONS | DESIGNED | CHECKED | DATE |
| \triangle | 1 | DIS-F-00000511 | YH.MICHIDA | YN.TAKASHITA | 15.07.29 |
| REMARK | | | APPROVED | NM.NISHIMATSU | 11.06.13 |
| | | | CHECKED | FN.TAMURA | 11.06.10 |
| | | | DESIGNED | HH.MURAKAMI | 11.06.10 |
| | | | DRAWN | HH.MURAKAMI | 11.06.10 |
| Unless otherwise specified, refer to IEC 60512. | | | | | |
| Note QT:Qualification Test AT:Assurance Test X:Applicable Test | | | DRAWING NO. | | ELC4-338903-01 |
| HRS | SPECIFICATION SHEET | | PART NO. | FH35C-**S-0.3SHW(50) | |
| | HIROSE ELECTRIC CO., LTD. | | CODE NO. | CL580 | \triangle 1/2 |

| SPECIFICATIONS | | | | | |
|--|---|---|-------------|---------------------|---|
| ITEM | TEST METHOD | REQUIREMENTS | QT | AT | |
| DRY HEAT | EXPOSED AT $85 \pm 2^{\circ}\text{C}$, 96h. | ① CONTACT RESISTANCE: $100\text{m}\Omega$ MAX. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | × | — | |
| COLD | EXPOSED AT $-55 \pm 3^{\circ}\text{C}$, 96h. | | | | |
| SULPHUR DIOXIDE [JIS C 0090] | EXPOSED AT $40 \pm 2^{\circ}\text{C}$, RELATIVE HUMIDITY $80 \pm 5\%$, 25 ± 5 ppm FOR 96h. | ① CONTACT RESISTANCE: $100\text{m}\Omega$ MAX. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS. ③ NO EVIDENCE OF CORROSION WHICH AFFECTS TO OPERATION OF CONNECTOR. | × | — | |
| HYDROGEN SULPHIDE [JIS C 0092] | EXPOSED AT $40 \pm 2^{\circ}\text{C}$, RELATIVE HUMIDITY $80 \pm 5\%$, 10 TO 15 ppm FOR 96h. | | | | |
| SOLDERABILITY | SOLDERED AT SOLDER TEMPERATURE, $235 \pm 5^{\circ}\text{C}$ FOR IMMERSION DURATION, 2 ± 0.5 sec. | A NEW UNIFORM COATING OF SOLDER SHALL COVER A MINIMUM OF 95 % OF THE SURFACE BEING IMMersed. | × | — | |
| RESISTANCE TO SOLDERING HEAT | 1) REFLOW SOLDERING: PEAK TMP. 250°C MAX. REFLOW TMP. 230°C MIN WITHIN 60 sec. 2) SOLDERING IRONS: TMP. $350 \pm 10^{\circ}\text{C}$ FOR 5 ± 1 sec. | NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINALS. | × | — | |
| <p>(note1)</p> <p>FASTEN FPC ON PCB OR SOMETHING FIXED IF FORCE IN VERTICAL DIRECTION SHALL BE PREDICTED. DO NOT CLOSE THE ACTUATOR BEFORE INSERTING FPC EVEN AFTER THE CONNECTOR IS MOUNTED ONTO A PCB. CLOSING THE ACTUATOR WITHOUT FPC COULD MAKE THE CONTACT GAP SMALLER, WHICH INCREASES THE FPC INSERTION FORCE.</p> <p>THIS CONNECTOR HAS CONTACT POINTS ON BOTH TOP AND BOTTOM.</p> | | | | | |
| Note QT:Qualification Test AT:Assurance Test X:Applicable Test | | | DRAWING NO. | | ELC4-338903-01 |
|  | SPECIFICATION SHEET | | PART NO. | FH35C-**-0.3SHW(50) | |
| | HIROSE ELECTRIC CO., LTD. | | CODE NO. | CL580 |  2/2 |