

| APPLICABLE STANDARD | | | | | |
|--|--|--|--|--|----------------|
| RATING | OPERATING TEMPERATURE RANGE | -55 °C TO 85 °C ⁽¹⁾ | STORAGE TEMPERATURE RANGE | -10 °C TO 60 °C ⁽²⁾ | |
| | VOLTAGE | 50 V AC | STORAGE HUMIDITY RANGE | RELATIVE HUMIDITY 85% max (NOT DEWED) | |
| | CURRENT | 0.5 A | OPERATING HUMIDITY RANGE | | |
| 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 | | | | | |
| CONTACT RESISTANCE | 100 mA(DC OR 1000Hz) | 70 mΩ MAX . | x | — | |
| INSULATION RESISTANCE | 100 V DC. | 100 MΩ MIN. | x | — | |
| VOLTAGE PROOF | 150 V AC FOR 1 min. | NO FLASHOVER OR BREAKDOWN. | x | x | |
| MECHANICAL CHARACTERISTICS | | | | | |
| INSERTION AND WITHDRAWAL FORCES | MEASURED BY APPLICABLE CONNECTOR. | INSERTION FORCE: 42 N MAX. WITHDRAWAL FORCE: 5.2 N MIN. | x | — | |
| MECHANICAL OPERATION | 50 TIMES INSERTIONS AND EXTRACTIONS. | ① CONTACT RESISTANCE: VARIATION FROM INITIAL VALUE 20 mΩ OR LESS. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | x | — | |
| VIBRATION | FREQUENCY 10 TO 55 TO 10Hz, APPROX 5min SINGLE AMPLITUDE : 0.75 mm, 10 CYCLES FOR 3 AXIAL DIRECTIONS. | ① NO ELECTRICAL DISCONTINUITY OF 1 μs. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | x | — | |
| SHOCK | 490 m/s ² , DURATION OF PULSE 11 ms AT 3 TIMES FOR 3 BOTH AXIAL DIRECTIONS. | | x | — | |
| ENVIRONMENTAL CHARACTERISTICS | | | | | |
| DAMP HEAT (STEADY STATE) | EXPOSED AT 40±2 °C, 90 ~ 95 %, 96 h. | ① CONTACT RESISTANCE: VARIATION FROM INITIAL VALUE 20 mΩ OR LESS. ② INSULATION RESISTANCE :100 MΩ MIN. ③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | x | — | |
| RAPID CHANGE OF TEMPERATURE | TEMPERATURE -55 → +85 °C TIME 30 → 30 min. UNDER 5 CYCLES. (RELOCATION TIME TO CHAMBER:WITHIN 2~3 MIN) | | x | — | |
| COLD | EXPOSED AT -55°C, 96 h | ① CONTACT RESISTANCE: VARIATION FROM INITIAL VALUE 20 mΩ OR LESS. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | x | — | |
| DRY HEAT | EXPOSED AT 85°C, 96 h | | x | — | |
| SULFUR DIOXIDE | EXPOSED AT 25±2°C, 75±5%RH, 25 PPM FOR 96 h. (TEST STANDARD: JIS C 60068) | ① NO DEFECT SUCH AS CORROSION WHICH IMPAIRS THE FUNCTION OF CONNECTOR. ② CONTACT RESISTANCE: VARIATION FROM INITIAL VALUE 20 mΩ OR LESS. | x | — | |
| RESISTANCE TO SOLDERING HEAT | 1)REFLOW SOLDERING : PEAK TMP : 260°C MAX REFLOW TMP: 220°C MIN FOR 60sec 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 | ① INCLUDE TEMPERATURE RISE CAUSED BY CURRENT-CARRYING. ② "STORAGE" MEANS A LONG-TERM STORAGE STATE FOR THE UNUSED PRODUCT BEFORE ASSEMBLY TO PCB. | | APPROVED | HS. OKAWA | 12. 03. 06 |
| | | | CHECKED | KI. HIROKAWA | 12. 03. 06 |
| | | | DESIGNED | KT. DOI | 12. 03. 02 |
| | | | DRAWN | KT. DOI | 12. 03. 02 |
| Unless otherwise specified, refer to JIS-C-5402. | | | Note QT:Qualification Test AT:Assurance Test X:Applicable Test | | |
| | | | DRAWING NO. | | ELC4-336345-00 |
| HRS | SPECIFICATION SHEET | | PART NO. | FX20-60S-0.5SV10 | |
| | HIROSE ELECTRIC CO., LTD. | | CODE NO. | CL570-1108-4-00 | △ 1/1 |