




| 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: 28 N MAX. WITHDRAWAL FORCE: 3.5 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. | | | 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. 06. 22 |
| | | | CHECKED | KI. HIROKAWA | 12. 06. 22 |
| | | | DESIGNED | KT. DOI | 12. 06. 21 |
| Unless otherwise specified, refer to JIS-C-5402. | | | DRAWN | KT. DOI | 12. 06. 21 |
| Note QT:Qualification Test AT:Assurance Test X:Applicable Test | | | DRAWING NO. | | ELC4-336325-00 |
|  | SPECIFICATION SHEET | | PART NO. | FX20-40P-0. 5SV20 | |
| | HIROSE ELECTRIC CO., LTD. | | CODE NO. | CL570-1007-7-00 |  1/1 |