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In case of consideration for using Automotive equipment / device which demand high reliability, kindly contact our sales window correspondents.

| APPLICABLE STANDARD | | | | |
|---|---|---|---|---|
| RATING | OPERATING TEMPERATURE RANGE | -55 °C TO 85 °C (1) | STORAGE TEMPERATURE RANGE | -10 °C TO 60 °C (2) |
| | VOLTAGE | 125 V AC | OPERATING HUMIDITY RANGE | 40 % TO 80 % |
| | CURRENT | 0.5 A | STRAGE HUMIDITY RANGE | 40 % TO 70 % (2) |

## SPECIFICATIONS

| ITEM | TEST METHOD | REQUIREMENTS | QT | AT |
|---|---|---|---|---|
| **CONSTRUCTION** | | | | |
| GENERAL EXAMINATION | VISUALLY AND BY MEASURING INSTRUMENT. | ACCORDING TO DRAWING. | × | × |
| MARKING | CONFIRMED VISUALLY. | | × | × |
| **ELECTRIC CHARACTERISTICS** | | | | |
| CONTACT RESISTANCE | 100 mA (DC OR 1000 Hz). | 45 mΩ MAX . | × | – |
| CONTACT RESISTANCE MILLIVOLT LEVEL METHOD | 20 mV MAX, 1 mA(DC OR 1000Hz) | 55 mΩ MAX . | × | – |
| INSULATION RESISTANCE | 250 V DC | 100 MΩ MIN. | × | – |
| VOLTAGE PROOF | 300 V AC FOR 1 min. | NO FLASHOVER OR BREAKDOWN. | × | – |
| **MECHANICAL CHARACTERISTICS** | | | | |
| INSERTION AND WITHDRAWAL FORCES | MEASURED BY APPLICABLE CONNECTOR. | INSERTION FORCE: 28.2 N MAX.<br>WITHDRAWAL FORCE: 3.1 N MIN. | × | – |
| MECHANICAL OPERATION | 500 TIMES INSERTIONS AND EXTRACTIONS. | ① CONTACT RESISTANCE: 55 mΩ MAX.<br>② NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | × | – |
| VIBRATION | FREQUENCY 10 TO 55 Hz,<br>AMPLITUDE : 1.52 mm,<br>AT 2 h FOR 3 DIRECTIONS. | ① NO ELECTRICAL DISCONTINUITY OF 1 μs.<br>② NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | × | – |
| SHOCK | 490 m/s$^2$ , DURATION OF PULSE 11 ms<br>AT 3 TIMES FOR 3 DIRECTIONS. | | × | – |
| **ENVIRONMENTAL CHARACTERISTICS** | | | | |
| DAMP HEAT (STEADY STATE) | EXPOSED AT 40±2 °C, 90 ～ 95 %, 96 h. | ① CONTACT RESISTANCE: 55 mΩ MAX.<br>② INSULATION RESISTANCE:100 MΩ MIN.<br>③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | × | – |
| RAPID CHANGE OF TEMPERATURE | TEMPERATURE-55→+15～+35→+85→+15～+35°C<br>TIME 30 → 10～15 → 30 → 10～15 min.<br>UNDER 5 CYCLES. | | × | – |
| CORROSION SALT MIST | EXPOSED IN 5 % SALT WATER SPRAY FOR 48 h. | ① CONTACT RESISTANCE: 55 mΩ MAX.<br>② NO HEAVY CORROSION. | × | – |
| HYDROGEN SULPHIDE | EXPOSED IN 3 PPM FOR 96 h.<br>(TEST STANDARD: JEIDA 38) | | × | – |
| RESISTANCE TO SOLDERING HEAT | 1) REFLOW SOLDERING : 250 °C MAX,<br>: 220 °C MIN,<br>FOR 60 s | NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINALS. | × | – |
| | 2) SOLDERING IRONS : 360 °C,<br>FOR 5 s | | × | – |
| SOLDERABILITY | SOLDERED AT SOLDER TEMPERATURE,<br>240±3°C,<br>FOR IMMERSION DURATION, 2s. | A NEW UNIFORM COATING OF SOLDER SHALL COVER A MINIMUM OF 95 % OF THE SURFACE BEING IMMERSED. | × | – |
| | | | | |

| | COUNT | DESCRIPTION OF REVISIONS | DESIGNED | CHECKED | DATE |
|---|---|---|---|---|---|
| 0 | | | | | |

REMARK (1) TEMPERATURE RISE INCLUDED WHEN ENERGIZED.
(2) THIS STORAGE INDICATES A LONG-TERM STORAGE STATE FOR THE UNUSED PRODUCT BEFORE THE BOARD MOUNTED.

Unless otherwise specified, refer to MIL-STD-1344.

| | | |
|---|---|---|
| APPROVED | HS.OKAWA | 06.07.19 |
| CHECKED | HS.OZAWA | 06.07.19 |
| DESIGNED | KY.NAKAMURA | 06.07.18 |
| DRAWN | AK.SUZUKAWA | 06.07.18 |

Note QT:Qualification Test AT:Assurance Test X:Applicable Test

DRAWING NO. ELC4-082527-21

HRS

SPECIFICATION SHEET

HIROSE ELECTRIC CO., LTD.

PART NO. FX2-32S-1.27SV(71)

CODE NO. CL572-2102-6-71 0 1/1

FORM HD0011-2-1