

Aug.1.2025 Copyright 2025 HIROSE ELECTRIC CO., LTD. All Rights Reserved.
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. | x | x |
| MARKING | CONFIRMED VISUALLY. | | | x | x |
| ELECTRIC CHARACTERISTICS | | | | | |
| CONTACT RESISTANCE | 100 mA (DC OR 1000 Hz). | | 45 mΩ MAX . | x | - |
| CONTACT RESISTANCE MILLIVOLT LEVEL METHOD | 20 mV MAX, 1 mA(DC OR 1000Hz) | | 55 mΩ MAX . | x | - |
| INSULATION RESISTANCE | 250 V DC | | 100 MΩ MIN. | x | - |
| VOLTAGE PROOF | 300 V AC FOR 1 min. | | NO FLASHOVER OR BREAKDOWN. | x | - |
| MECHANICAL CHARACTERISTICS | | | | | |
| INSERTION AND WITHDRAWAL FORCES | MEASURED BY APPLICABLE CONNECTOR. | | INSERTION FORCE: 53.0 N MAX. WITHDRAWAL FORCE: 5.9 N MIN. | x | - |
| MECHANICAL OPERATION | 500 TIMES INSERTIONS AND EXTRACTIONS. | | ① CONTACT RESISTANCE: 55 mΩ MAX. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | x | - |
| VIBRATION | FREQUENCY 10 TO 55 Hz, AMPLITUDE : 1.52 mm, AT 2 h FOR 3 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 DIRECTIONS. | | ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | x | - |
| ENVIRONMENTAL CHARACTERISTICS | | | | | |
| DAMP HEAT (STEADY STATE) | EXPOSED AT 40±2 °C, 90 ~ 95 %, 96 h. | | ① CONTACT RESISTANCE: 55 mΩ MAX. ② INSULATION RESISTANCE:100 MΩ MIN. | x | - |
| RAPID CHANGE OF TEMPERATURE | TEMPERATURE-55→+15~+35→+85→+15~+35°C TIME 30 → 10~15 → 30 → 10~15 min. UNDER 5 CYCLES. | | ③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | x | - |
| CORROSION SALT MIST | EXPOSED IN 5 % SALT WATER SPRAY FOR 48 h. | | ① CONTACT RESISTANCE: 55 mΩ MAX. ② NO HEAVY CORROSION. | x | - |
| HYDROGEN SULPHIDE | EXPOSED IN 3 PPM FOR 96 h. (TEST STANDARD: JEIDA 38) | | | x | - |
| RESISTANCE TO SOLDERING HEAT | 1) REFLOW SOLDERING : 250 °C MAX, : 220 °C MIN, FOR 60 s | | NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINALS. | x | - |
| | 2) SOLDERING IRONS : 360 °C, FOR 5 s | | | x | - |
| SOLDERABILITY | SOLDERED AT SOLDER TEMPERATURE, 240±3°C, FOR IMMERSION DURATION, 2s. | | A NEW UNIFORM COATING OF SOLDER SHALL COVER A MINIMUM OF 95 % OF THE SURFACE BEING IMMERSERD. | x | - |
| | | | | | |
| | COUNT | DESCRIPTION OF REVISIONS | DESIGNED | CHECKED | DATE |
|  | | | | | |
| REMARK ⁽¹⁾ TEMPERATURE RISE INCLUDED WHEN ENERGIZED. ⁽²⁾ THIS STORAGE INDICATES A LONG-TERM STORAGE STATE FOR THE UNUSED PRODUCT BEFORE THE BOARD MOUNTED. | | | APPROVED | HS. OKAWA | 07. 10. 19 |
| | | | CHECKED | HS. OZAWA | 07. 10. 19 |
| | | | DESIGNED | SY. KAMIGA | 07. 10. 19 |
| Unless otherwise specified, refer to MIL-STD-1344. | | | DRAWN | HK. SUNADORI | 07. 10. 19 |
| Note | QT:Qualification Test AT:Assurance Test X:Applicable Test | | DRAWING NO. | ELC4-082419-21 | |
|  | SPECIFICATION SHEET | | PART NO. | FX2-60S-1. 27SVL (71) | |
| | HIROSE ELECTRIC CO., LTD. | | CODE NO. | CL572-2155-2-71 |  1/1 |