

May.1.2023 Copyright 2023 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 | 100 V AC | OPERATING HUMIDITY RANGE | 40 % TO 80 % | |
| | CURRENT | 0.5 A | STORAGE 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. | | × | × | |
| ELECTRICAL CHARACTERISTICS | | | | | |
| CONTACT RESISTANCE | 100 mA (DC OR 1000 Hz). | 50 mΩ MAX. | × | - | |
| CONTACT RESISTANCE MILLIVOLT LEVEL METHOD | 20 mV MAX, 1 mA(DC OR 1000Hz) | 60 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 : 32 N MAX WITHDRAWAL FORCE : 4 N MIN | × | - | |
| MECHANICAL OPERATION | 500 TIMES INSERTIONS AND EXTRACTIONS. | ① CONTACT RESISTANCE: 60 mΩ MAX. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | × | - | |
| VIBRATION | FREQUENCY 10 TO 55 Hz, AMPLITUDE : 0.75 mm, AT 10 CYCLES FOR 3 DIRECTIONS. | ① NO ELECTRICAL DISCONTINUITY OF 1 μs. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | × | - | |
| SHOCK | 490 m/s ² , DURATION OF PULSE 11 ms AT 3 TIMES FOR 3 DIRECTIONS. | | × | - | |
| ENVIRONMENTAL CHARACTERISTICS | | | | | |
| DAMP HEAT (STEADY STATE) | EXPOSED AT 40 ± 2 °C, 90 ~ 95 %, 96 h. | ① CONTACT RESISTANCE: 60 mΩ MAX. ② INSULATION RESISTANCE: 100 MΩ MIN. | × | - | |
| RAPID CHANGE OF TEMPERATURE | TEMPERATURE-55 → +15 ~ +35 → +85 → +15 ~ +35 °C TIME 30 → 2 ~ 3 → 30 → 2 ~ 3 min UNDER 5 CYCLES. | ③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | × | - | |
| DRY HEAT | EXPOSED AT 85 °C, 96 h. | ① CONTACT RESISTANCE: 60 mΩ MAX. ② NO DAMAGE, CRACK AND LOOSENESS OF PART | × | - | |
| CORROSION SALT MIST | EXPOSED IN 5 % SALT WATER SPRAY FOR 48 h. | ① CONTACT RESISTANCE: 60 mΩ MAX. ② NO HEAVY CORROSION. | × | - | |
| SULPHUR DIOXIDE | EXPOSED IN 10 PPM FOR 96 h. (TEST STANDARD: JEIDA-39) | | × | - | |
| RESISTANCE TO SOLDERING HEAT | 1) SOLDER BATH: SOLDER TEMPERATURE, 260 ± 5 °C FOR IMMERSION, DURATION, 10 ± 1 s. 2) SOLDERING IRONS : 360 °C FOR 5 s MAX. | NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINAL. | × | - | |
| SOLDRABILITY | SOLDERED AT SOLDER TEMPERATURE 240 ± 5 °C FOR IMMERSION DURATION, 3 s. | A NEW UNIFORM COATING OF SOLDER SHALL OVER A MINIMUM OF 95 % OF THE SURFACE BEING IMMERSED. | × | - | |
| | | | | | |
| | 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 | 06.10.06 |
| | | | CHECKED | HS. OZAWA | 06.10.06 |
| | | | DESIGNED | KY. NAKAMURA | 06.10.06 |
| Unless otherwise specified, refer to JIS C 5402 | | | DRAWN | AK. SUZUKAWA | 06.10.05 |
| Note QT:Qualification Test AT:Assurance Test X:Applicable Test | | | DRAWING NO. | ELC4-151519-21 | |
| HRS | SPECIFICATION SHEET | | PART NO. | FX5-40S2A-DSAL (71) | |
| | HIROSE ELECTRIC CO., LTD. | | CODE NO. | CL575-0125-0-71 | △ 1/1 |