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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 | -35°C TO +85°C (NOTES 1) | STORAGE TEMPERATURE RANGE | -10°C TO +60°C (NOTE3) | |
| | OPERATING HUMIDITY RANGE | 20 % TO 80 % (NOTES 2) | STORAGE HUMIDITY RANGE | 40 % TO 70 % (NOTE3) | |
| | VOLTAGE | 150 V AC (DC) | CURRENT | 1 A | |
| | APPLICABLE CONNECTOR | DF13-*S-1.25C | APPLICABLE CONTACT | DF13(G)-2630SCFA DF13-3032SCFA | |
| 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 m A (DC OR 1000 Hz). | 30 mΩ MAX. | X | - | |
| INSULATION RESISTANCE | 100 V DC. | 500 MΩ MIN. | X | - | |
| VOLTAGE PROOF | 500 V AC FOR 1 min. | NO FLASHOVER OR BREAKDOWN. | X | - | |
| MECHANICAL CHARACTERISTICS | | | | | |
| MECHANICAL OPERATION | 50 TIMES INSERTIONS AND EXTRACTIONS. | ① CONTACT RESISTANCE: 30 mΩ MAX. ② NO DAMAGE, CRACK OR LOOSENESS OF PARTS. | X | - | |
| VIBRATION | FREQUENCY 10 TO 55 Hz, SINGLE AMPLITUDE 0.75 mm, AT 2 h, FOR 3 DIRECTIONS. | ① NO ELECTRICAL DISCONTINUITY OF 1μs. ② NO DAMAGE, CRACK OR LOOSENESS OF PARTS. | X | - | |
| SHOCK | 490 m/s ² DURATION OF PULSE 11 ms AT 3 TIMES FOR 3 DIRECTIONS. | | X | - | |
| ENVIRONMENTAL CHARACTERISTICS | | | | | |
| RAPID CHANGE OF TEMPERATURE | TEMPERATURE -55→ 15 TO 35→+85→ 15 TO 35 °C TIME 30→ 2 TO 3→30→ 2 TO 3 min. UNDER 5 CYCLES. | ① CONTACT RESISTANCE: 30mΩ MAX. ② INSULATION RESISTANCE: 500 MΩ MIN. ③ NO DAMAGE, CRACK OR LOOSENESS OF PARTS. | X | - | |
| DAMP HEAT (STEADY STATE) | EXPOSED AT 40 ± 2 °C, 90 TO 95 %, 96 h. | | X | - | |
| RESISTANCE TO SOLDERING HEAT | 1) REFLOW SOLDERING «REFLOW AREA» 250°C MAX 10 sec MAX 230°C MIN 60 sec MAX «PREHEATING AREA» 170°C TO 190°C 60 sec TO 120 sec PUT THROUGH IN REFLOW FURNACE TWICE, LEAVE IN AMBIENT TEMPERATURE AND HUMIDITY FOR 1 HOUR. 2) MANUAL SOLDERING SOLDERING IRON TEMPERATURE :350°C, SOLDERING TIME : 3sec. NO STRENGTH ON CONTACT. | NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINALS. | X | - | |
| SOLDERABILITY | SOLDERED AT SOLDER TEMPERATURE, 245°C FOR INSERTION DURATION, 3sec. | SOLDER SHALL COVER A MINIMUM OF 95 % OF THE SURFACE BEING IMMERSSED. | X | - | |
| REMARKS | | | | | |
| NOTE1: INCLUDE THE TEMPERATURE RISING BY CURRENT | | | | | |
| NOTE2:NO CONDENSING | | | | | |
| NOTE3:APPLY TO THE CONDITION OF LONG TERM STORAGE FOR UNUSED PRODUCTS BEFORE PCB ON BOARD, AFTER PCB BOARD , OPERATING TEMPERATURE AND HUMIDITY RANGE IS APPLIED FOR INTERIM STORAGE DURING TRANSPORTATION. | | | | | |
| Unless otherwise specified, refer to JIS C 5402. | | | | | |
| | COUNT | DESCRIPTION OF REVISIONS | DESIGNED | CHECKED | DATE |
| △ | | | | | |
| | | | APPROVED | TS. SAKATA | 09.11.04 |
| | | | CHECKED | TS. FUKUSHIMA | 09.11.04 |
| | | | DESIGNED | KT. ISHII | 09.11.01 |
| | | | DRAWN | KT. ISHII | 09.11.01 |
| Note | QT:Qualification Test AT:Assurance Test X:Applicable Test | | DRAWING NO. | | ELC4-162444-07 |
| HRS | SPECIFICATION SHEET | | PART NO. | DF13A-*P-1.25H(51) | |
| | HIROSE ELECTRIC CO., LTD. | | CODE NO. | CL536 | △ 1/1 |