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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(NOTE 1) | STORAGE TEMPERATURE RANGE | -10°C TO +60°C(NOTE 3) | |
| | OPERATING HUMIDITY RANGE | 40 % TO 80 % (NOTE 2) | STORAGE HUMIDITY RANGE | 40 % TO 70 %(NOTE 3) | |
| | CURRENT | 1 A/pin | VOLTAGE | 150 V AC (DC) | |
| | APPLICABLE CONNECTOR | DF14-*S-1.25C | APPLICABLE CONTACT | DF14-****SCFA(##) | |
| 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 | 20 mV MAX, 1mA (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. | | | | |
| ENVIRONMENTAL CHARACTERISTICS | | | | | |
| RAPID CHANGE OF TEMPERATURE | TEMPERATURE -55→ 5 TO 35→ +85→ 5 TO 35 °C TIME 30→ 10 TO 15→30→ 10 TO 15 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 ~ 95 %, 96 h. | | | | |
| RESISTANCE TO SOLDERING HEAT | 1) REFLOW SOLDERING «REFLOW AREA» MAX 250°C WITHIN 10 sec MIN 230°C WITHIN 60 sec «PREHEATING AREA» 170°C TO 190°C 60 sec TO 120 sec PUT THROUGH IN REFLOW FUMACE TWICE. LEAVE IN AMBIENT TEMPERATURE AND HUMIDITY FOR 1 HOUR. CONNECTOR TEMPERATURE TO BE AMBIENT FOR SECOND REFLOW. 2) MANUAL SOLDERING SOLDERING IRON TEMPERATURE 350±5 °C, FOR5±1 sec. NO STRENGTH ON CONTACT. | NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINALS. | X | — | |
| SOLDERABILITY | SOLDERING TEMPERATURE : 245±5°C DURATION OF IMMERSION : SOLDERING, FOR 3sec. | A NEW UNIFORM COATING OF SOLDER SHALL COVER MINIMUM OF 95 % OF THE SURFACE BEING IMMersed. | X | — | |
| REMARKS | | | | | |
| NOTE1: INCLUDING THE TEMPERATURE RISE BY CURRENT | | | | | |
| NOTE2: NO CONDENSING | | | | | |
| NOTE3: APPLY TO THE CONDITION OF LONG TERM STORAGE FOR UNUSED PRODUCTS BEFORE MOUNTED ON PCB. | | | | | |
| AFTER MOUNTED ON PCB, OPERATING TEMPERATURE AND HUMIDITY RANGE IS APPLIED FOR INTERIM STORAGE DURING TRANSPORTATION. | | | | | |
| | COUNT | DESCRIPTION OF REVISIONS | DESIGNED | CHECKED | DATE |
| | | | | | |
| Unless otherwise specified, refer to IEC 60512. | | | APPROVED | HS.OKAWA | 20200316 |
| | | | CHECKED | TS.KUMAZAWA | 20200316 |
| | | | DESIGNED | HK.HAYASHI | 20200316 |
| | | | DRAWN | DS.HIROWATARI | 20200311 |
| Note | QT: Qualification Test AT: Assurance Test X:Applicable Test | | DRAWING NO. | ELC-160307-52-00 | |
| | SPECIFICATION SHEET | | PART NO. | DF14-*P-1.25H(52) | |
| | HIROSE ELECTRIC CO., LTD. | | CODE NO. | CL538 | 1/1 |