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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 | -40 °C TO +125 °C | STORAGE TEMPERATURE RANGE | -10 °C TO +60 °C ⁽¹⁾ | |
| | VOLTAGE | 60 V AC/DC | STORAGE HUMIDITY RANGE | RELATIVE HUMIDITY 85% MAX | |
| | CURRENT | 2 A | | (NOT DEWED) | |
| 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 | 1A DC. | 10 mΩ MAX . | x | - | |
| CONTACT RESISTANCE MILLIVOLT LEVEL METHOD | 10 mV AC MAX, 0.1 mA(DC OR 1000Hz) | 10 mΩ MAX . | x | - | |
| INSULATION RESISTANCE | 500 V DC. | 100 MΩ MIN. | x | - | |
| VOLTAGE PROOF | 1000 V AC FOR 1 min. | NO BREAKDOWN. | x | - | |
| MECHANICAL CHARACTERISTICS | | | | | |
| MECHANICAL OPERATION | 30 TIMES INSERTIONS AND EXTRACTIONS. | ① CONTACT RESISTANCE: 20 mΩ MAX. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | x | - | |
| VIBRATION | FREQUENCY 20 TO 200Hz (44m/s ²) SWEEP TIME 3min.(ROUND TRIP) AT 3h FOR 3 DIRECTIONS. | ① NO ELECTRICAL DISCONTINUITY OF 7ΩMIN , 1μs MIN. ② CONTACT RESISTANCE: 20 mΩ MAX. ③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | x | - | |
| SHOCK | 981m/s ² DURATION OF PULSE 6ms AT 3 TIMES FOR 6 DIRECTIONS. | ① NO ELECTRICAL DISCONTINUITY OF 7ΩMIN , 1μs MIN. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | x | - | |
| LOCK STRENGTH | MEASURE BREAK STRENGTH OF THE LOCK BY PULLING THE CONNECTOR IN THE MATING DIRECTION. | ① 100N MIN. | x | - | |
| ENVIRONMENTAL CHARACTERISTICS | | | | | |
| DAMP HEAT (STEADY STATE) | EXPOSED AT 60 °C, 90 ~ 95 %, 96 h. | ① CONTACT RESISTANCE: 20 mΩ MAX. ② INSULATION RESISTANCE:100 MΩ MIN. ③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | x | - | |
| RAPID CHANGE OF TEMPERATURE | TEMPERATURE- 40 →ROOM TEMP →125°C→ ROOM TEMP TIME 30 → 5 → 30 → 5 min UNDER 1000 CYCLES. | ① CONTACT RESISTANCE: 20 mΩ MAX. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | x | - | |
| DRY HEAT | EXPOSED AT 140°C, 120 h. | ① CONTACT RESISTANCE: 20 mΩ MAX. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | x | - | |
| COLD | EXPOSED AT -40°C , 120 h. | ① CONTACT RESISTANCE: 20 mΩ MAX. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | x | - | |
| RESISTANCE TO SO ₂ GAS | EXPOSED IN 25 PPM AT 75% MIN FOR 96h. | ① CONTACT RESISTANCE: 20 mΩ MAX. | x | - | |
| RESISTANCE TO SOLDERING HEAT | REFLOW TEMP. OVER 250°C , 10sec. PREHEAT 180°C MAX , 120sec. | NO PLATING PEELING OF THE TERMINALS, MELTINGS OF HOUSINGS. | x | - | |
| SOLDERABILITY | SOLDERED AT SPECIFIED TEMPERATURE PROFILE. | A NEW UNIFORM COATING OF SOLDER SHALL COVER A MINIMUM OF 95 % OF THE SURFACE BEING IMMERSSED. | x | - | |
| | COUNT | DESCRIPTION OF REVISIONS | DESIGNED | CHECKED | DATE |
| REMARK | | | APPROVED | MH. SHOUJI | 20230713 |
| (NOTE1) | | "STORAGE" means a long-term storage state for the unused product before assembly to PCB. | CHECKED | MH. SHOUJI | 20230713 |
| | | | DESIGNED | YANG CHUAN XING | 20230713 |
| | | | DRAWN | YANG CHUAN XING | 20230713 |
| Note | QT:Qualification Test AT:Assurance Test X:Applicable Test | | DRAWING NO. | | ELC-386853-80-00 |
| HRS | SPECIFICATION SHEET | | PART NO. | ZH05-16DS-2H (A) | |
| | HIROSE ELECTRIC CO., LTD. | | CODE NO. | CL0756-2101-0-80 | △ 1/1 |