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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 | △1 -55°C TO 85°C(NOTE 1) | STORAGE TEMPERATURE RANGE | -10°C TO 60°C |
| | VOLTAGE | △1 50V AC | APPLICABLE CONNECTOR | DF40C-40DP-0.4V(**) |
| | CURRENT | 0.3A | | |

# 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 | 20mV AC OR LESS 1kHz,1mA . | 90mΩ MAX. | X | — |
| INSULATION RESISTANCE | 100V DC. | 50MΩ MIN. | X | — |
| VOLTAGE PROOF | 150V AC FOR 1 min. △1 | NO FLASHOVER OR BREAKDOWN. | X | — |
| **MECHANICAL CHARACTERISTICS** | | | | |
| MECHANICAL OPERATION | 30TIMES INSERTIONS AND EXTRACTIONS. | ① CONTACT RESISTANCE: 90mΩ MAX.<br>② NO DAMAGE, CRACK OR LOOSENESS OF PARTS. | X | — |
| VIBRATION | FREQUENCY 10 TO 55 TO 10 Hz,APPROX 5min, SINGLE AMPLITUDE 0.75 mm,10CYCLES, FOR 3 DIRECTIONS. | ① NO ELECTRICAL DISCONTINUITY OF 1 μs.<br>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. | ① NO ELECTRICAL DISCONTINUITY OF 1 μs.<br>② NO DAMAGE, CRACK OR LOOSENESS OF PARTS. | X | — |
| **ENVIRONMENTAL CHARACTERISTICS** | | | | |
| RAPID CHANGE OF TEMPERATURE | TEMPERATURE -55→ 5 TO 35→85→ 5 TO 35 °C<br>TIME 30→ 5 MAX → 30→ 5 MAX min<br>UNDER 5 CYCLES. | ① CONTACT RESISTANCE: 90mΩ MAX.<br>② INSULATION RESISTANCE: 50MΩ MIN.<br>③ NO DAMAGE, CRACK OR LOOSENESS OF PARTS. | X | — |
| DAMP HEAT (STEADY STATE) | EXPOSED AT 40 ± 2 °C, 90 TO 95 %, 96 h. | ① CONTACT RESISTANCE: 90mΩ MAX.<br>② INSULATION RESISTANCE: 25MΩ MIN.<br>③ NO DAMAGE, CRACK OR LOOSENESS OF PARTS. | X | — |
| SULPHUR DIIOXIDE | EXPOSED IN 25 PPM FOR 96h,25℃,75%. | ① CONTACT RESISTANCE: 180mΩ MAX.<br>② NO DAMAGE, CRACK OR LOOSENESS OF PARTS. | X | — |
| HEAT RESISTANCE OF SOLDERING | **RECOMMENDED TEMPERATURE PROFILE**<br>**SOLDERING AREA**<br>MAX 250℃, 220℃ FOR 60 SECONDS MAX.<br>**PREHEATING AREA**<br>150 TO 180℃ 90 TO 120SECONDS.<br>MAXIMUM TWICE ACTION IS ALLOWED UNDER THE SAME CONDITION.<br>**RECOMMENDED MANUAL SOLDERING CONDITION**<br>SOLDERING IRON TEMPERATURE 350℃.<br>SOLDERING TIME: WIHTIN 3 SECONDS. | NO DEFORMATION OF CASE OF EXCESSIVE<br>LOOSENESS OF THE TERMINASL. | X | — |
| SOLDERABILITY | SOLDERING TEMPERATURE: 245±5℃<br>DURATION OF IMMERSION: SOLDERING FOR 3 SECONDS. | A NEW UNIFORM COATING OF SOLDER SHALL COVER MINIMUM OF 95% OF THE SURFACE BEING IMMERSED. | X | — |

| | COUNT | DESCRIPTION OF REVISIONS | DESIGNED | CHECKED | DATE |
|---|---|---|---|---|---|
| △1 | 3 | DIS-H-00019849 | RT. SHIMIZU | TY. OOI | 20240228 |

REMARKS
NOTE1: INCLUDE THE TEMPERATURE RISING BY CURRENT

Unless otherwise specified, refer to JIS C 5402, IEC 60512.

| | | |
|---|---|---|
| APPROVED | KH. IKEDA | 20110831 |
| CHECKED | TS. MIYAZAKI | 20110831 |
| DESIGNED | TR. YUNOKI | 20110831 |
| DRAWN | TR. YUNOKI | 20110831 |

Note QT:Qualification Test AT:Assurance Test X:Applicable Test

DRAWING NO. ELC4-340389-01

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|---|---|---|---|---|
| HRS | SPECIFICATION SHEET | PART NO. | DF40HC(3.0)-40DS-0.4V(51) | |
| | HIROSE ELECTRIC CO., LTD. | CODE NO. | CL0684-4169-6-51 △1 | 1/1 |

FORM HD0011-2-1