

| APPLICABLE STANDARD | | | | |
|--|---|--|---------------------------|----------------------|
| RATING | OPERATING TEMPERATURE RANGE | -55°C TO 85°C (NOTE 1) | STORAGE TEMPERATURE RANGE | -10°C TO 60°C |
| | VOLTAGE | 30V AC | APPLICABLE CONNECTOR | DF40C-20DS-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 | 100V AC FOR 1 min. | NO FLASHOVER OR BREAKDOWN. | X | - |
| MECHANICAL CHARACTERISTICS | | | | |
| MECHANICAL OPERATION | 30TIMES INSERTIONS AND EXTRACTIONS. | ① CONTACT RESISTANCE: 90mΩ MAX. 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. 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. 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 TIME 30→ 5 MAX → 30→ 5 MAX min UNDER 5 CYCLES. | ① CONTACT RESISTANCE: 90mΩ MAX. ② INSULATION RESISTANCE: 50MΩ MIN. 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. ② INSULATION RESISTANCE: 25MΩ MIN. ③ NO DAMAGE, CRACK OR LOOSENESS OF PARTS. | X | - |
| SULPHUR DIOXIDE | EXPOSED IN 25 PPM FOR 96h,25°C,75%. | ① CONTACT RESISTANCE: 180mΩ MAX. ② NO DAMAGE, CRACK OR LOOSENESS OF PARTS. | X | - |
| HEAT RESISTANCE OF SOLDERING | RECOMMENDED TEMPERATURE PROFILE SOLDERING AREA MAX 250°C, 220°C FOR 60 SECONDS MAX. PREHEATING AREA 150 TO 180°C 90 TO 120SECONDS. MAXIMUM TWICE ACTION IS ALLOWED UNDER THE SAME CONDITION. RECOMMENDED MANUAL SOLDERING CONDITION SOLDERING IRON TEMPERATURE 350°C. SOLDERING TIME: WITHIN 3 SECONDS. | NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINALS. | X | - |
| SOLDERABILITY | SOLDERING TEMPERATURE: 245±5°C 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 |
| △ | | | | |
| REMARKS | | APPROVED | MO. ISHIDA | 16.06.16 |
| NOTE1: INCLUDE THE TEMPERATURE RISING BY CURRENT | | CHECKED | TS. MIYAZAKI | 16.06.16 |
| | | DESIGNED | SH. HOSODA | 16.06.14 |
| Unless otherwise specified, refer to JIS C 5402, IEC 60512. | | DRAWN | SN. NUMAZAKI | 16.06.14 |
| Note QT:Qualification Test AT:Assurance Test X:Applicable Test | | DRAWING NO. | ELC-311342-58-00 | |
| HRS | SPECIFICATION SHEET | PART NO. | DF40C-20DP-0.4V (58) | |
| | HIROSE ELECTRIC CO., LTD. | CODE NO. | CL684-4010-9-58 | △ 1/1 |