




| APPLICABLE STANDARD | | | | | |
|---|---|--|---------------------------|--------------------------------|---|
| RATING | OPERATING TEMPERATURE RANGE | -35°C TO 85°C (NOTE 1) | STORAGE TEMPERATURE RANGE | -10°C TO 60°C | |
| | VOLTAGE | 30V AC | APPLICABLE CONNECTOR | DF40*-20DP-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±0.5 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 | KH. IKEDA | 13. 02. 12 |
| NOTE1: INCLUDE THE TEMPERATURE RISING BY CURRENT | | | CHECKED | TS. MIYAZAKI | 13. 02. 12 |
| Unless otherwise specified, refer to JIS C 5402, IEC 60512. | | | DESIGNED | TY. YAMASAKI | 13. 02. 11 |
| | | | DRAWN | NT. SEKI | 13. 02. 09 |
| Note | QT:Qualification Test | AT:Assurance Test | X:Applicable Test | DRAWING NO. | ELC4-345683-01 |
|  | SPECIFICATION SHEET | | PART NO. | DF40HC (3. 5) -20DS-0. 4V (51) | |
| | HIROSE ELECTRIC CO., LTD. | | CODE NO. | CL684-4188-0-51 |  1/1 |