




| 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*-50DP-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.<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 <sup>2</sup> 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 DIOXIDE   | EXPOSED IN 25 PPM FOR 96h,25°C,75%.   | ① CONTACT RESISTANCE: 180mΩ MAX.<br>② NO DAMAGE, CRACK OR LOOSENESS OF PARTS.                                      | X                         | -                    |   |
| HEAT RESISTANCE OF SOLDERING  | <b>RECOMMENDED TEMPERATURE PROFILE</b><br><b>SOLDERING AREA</b><br>MAX 250°C, 220°C FOR 60 SECONDS MAX.<br><b>PREHEATING AREA</b><br>150 TO 180°C 90 TO 120SECONDS.<br>MAXIMUM TWICE ACTION IS ALLOWED UNDER THE SAME CONDITION.<br><b>RECOMMENDED MANUAL SOLDERING CONDITION</b><br>SOLDERING IRON TEMPERATURE 350°C.<br>SOLDERING TIME: WITHIN 3 SECONDS. | NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINASL.  | X                         | -                    |   |
| SOLDERABILITY   | SOLDERING TEMPERATURE: 245±5°C<br>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                  | MO. ISHIDA           | 16. 10. 05  |
| NOTE1: INCLUDE THE TEMPERATURE RISING BY CURRENT                                    |   |  | CHECKED                   | TS. MIYAZAKI         | 16. 10. 05  |
| Unless otherwise specified, refer to JIS C 5402, IEC 60512.                         |   |  | DESIGNED                  | SH. HOSODA           | 16. 10. 05  |
|   |   |  | DRAWN                     | SN. NUMAZAKI         | 16. 10. 04  |
| Note  | QT:Qualification Test AT:Assurance Test X:Applicable Test   | DRAWING NO.  | ELC-311341-58-01          |                      |   |
|  | SPECIFICATION SHEET   |  | PART NO.                  | DF40C-50DS-0.4V (58) |   |
|   | HIROSE ELECTRIC CO., LTD.   |  | CODE NO.                  | CL684-4009-0-58      |  1/1 |