

In case of consideration for using Automotive equipment / device which demand high reliability, kindly contact our sales window correspondents.

| APPLICABLE STANDARD   |                               | TEST METHOD   |                           | REQUIREMENTS  |                   | QT       | AT |
|---|-------------------------------|---|---------------------------|---|-------------------|----------|----|
| RATING  | OPERATING TEMPERATURE RANGE   | -55 °C TO 85 °C   | STORAGE TEMPERATURE RANGE | -10 °C TO 60 °C (3)   |                   |          |    |
|   | VOLTAGE                       | 100 V AC  | OPERATING HUMIDITY RANGE  | 40 % TO 80 %  |                   |          |    |
|   | CURRENT                       | 0.4 A   | STORAGE HUMIDITY RANGE    | 40 % TO 70 % (3)  |                   |          |    |
| <b>SPECIFICATIONS</b>   |                               |   |                           |   |                   |          |    |
| ITEM  | TEST METHOD                   |   | REQUIREMENTS              |   | QT                | AT       |    |
| GENERAL EXAMINATION   |                               | VISUALLY AND BY MEASURING INSTRUMENT.   |                           | ACCORDING TO DRAWING.   |                   | X        | X  |
| MARKING   |                               | CONFIRMED VISUALLY.   |                           |   |                   | X        | X  |
| <b>ELECTRIC CHARACTERISTICS</b>   |                               |   |                           |   |                   |          |    |
| CONTACT RESISTANCE  | 100 mA (DC OR 1000 Hz).       | 80 mΩ MAX. (1)  | X                         | -   |                   |          |    |
| CONTACT RESISTANCE MILLIVOLT LEVEL METHOD   | 20 mV MAX, 1 mA(DC OR 1000Hz) | 100 mΩ MAX. (2)   | X                         | -   |                   |          |    |
| INSULATION RESISTANCE   | 250 V DC.                     | 100 MΩ MIN.   | X                         | -   |                   |          |    |
| VOLTAGE PROOF   | 300 V AC FOR 1 min.           | NO FLASHOVER OR BREAKDOWN.  | X                         | -   |                   |          |    |
| <b>MECHANICAL CHARACTERISTICS</b>   |                               |   |                           |   |                   |          |    |
| MECHANICAL OPERATION  |                               | 50 TIMES INSERTIONS AND EXTRACTIONS.  |                           | ① CONTACT RESISTANCE: 100 mΩ MAX. (2)<br>② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.   |                   | X        | -  |
| VIBRATION   |                               | FREQUENCY 10 TO 55 Hz, AMPLITUDE : 1.5 mm, AT 2 h FOR 3 DIRECTION.                              |                           | ① NO ELECTRICAL DISCONTINUITY OF 1 μs.<br>② CONTACT RESISTANCE: 100 mΩ MAX. (2)<br>③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS. |                   | X        | -  |
| SHOCK   |                               | 490 m/s <sup>2</sup> , DURATION OF PULSE 11 ms AT 3 TIMES FOR 3 DIRECTIONS.                     |                           |   |                   | X        | -  |
| <b>ENVIRONMENTAL CHARACTERISTICS</b>  |                               |   |                           |   |                   |          |    |
| DAMP HEAT (STEADY STATE)  |                               | EXPOSED AT 40±2 °C, 90 ~ 95 %, 96 h.  |                           | ① CONTACT RESISTANCE: 100 mΩ MAX. (2)<br>② INSULATION RESISTANCE: 100 MΩ MIN.   |                   | X        | -  |
| RAPID CHANGE OF TEMPERATURE   |                               | TEMPERATURE-55→+15~+35→+85→+15~+35°C TIME 30 → 2~3 → 30 → 2~3 min UNDER 5 CYCLES.               |                           | ③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS.  |                   | X        | -  |
| CORROSION SALT MIST   |                               | EXPOSED IN 5 % SALT WATER SPRAY FOR 48 h.   |                           | ① CONTACT RESISTANCE: 100 mΩ MAX. (2)<br>② NO HEAVY CORROSION.  |                   | X        | -  |
| HYDROGEN SULPHIDE   |                               | EXPOSED IN 3 PPM FOR 96 h. (TEST STANDARD: JEIDA-A-38)  |                           |   |                   | X        | -  |
| RESISTANCE TO SOLDERING HEAT  |                               | 1) REFLOW SOLDERING: 250 °C MAX, : 220 °C MIN, FOR 60 s<br>2) SOLDERING IRONS : 360 °C, FOR 5 s |                           | NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINALS.   |                   | X        | -  |
| SOLDERABILITY   |                               | SOLDERED AT SOLDER TEMPERATURE, 240 ± 3 °C, FOR IMMERSION DURATION, 3 s.                        |                           | A NEW UNIFORM COATING OF SOLDER SHALL COVER A MINIMUM OF 95 % OF THE SURFACE BEING IMMersed.                                  |                   | X        | -  |
| COUNT   | DESCRIPTION OF REVISIONS      | DESIGNED  | CHECKED                   | DATE  |                   |          |    |
| Δ   |                               |   |                           |   |                   |          |    |
| <b>REMARK</b>   |                               |   |                           |   |                   |          |    |
| (1) THIS CONNECTOR'S INITIAL CONTACT RESISTANCE SHALL BE 80 mΩ, BECAUSE OF THE BULK RESISTANCE OF STACKING HEIGHT 16 mm TYPE. |                               |   |                           | APPROVED  | HS. OKAWA         | 09.11.13 |    |
| (2) AFTER TEST, THE CHANGE OF THE CONTACT RESISTANCE SHALL BE 20 mΩ MAX.  |                               |   |                           | CHECKED   | HT. YAMAGUCHI     | 09.11.13 |    |
| (3) THIS STORAGE INDICATES A LONG-TERM STORAGE STATE FOR THE UNUSED PRODUCT BEFORE THE BOARD MOUNTED.                         |                               |   |                           | DESIGNED  | SY. KAMIGA        | 09.11.12 |    |
| Unless otherwise specified, refer to JIS C 5402.  |                               |   |                           | DRAWN   | HK. SUMADORI      | 09.11.12 |    |
| Note QT: Qualification Test AT: Assurance Test X: Applicable Test   |                               | DRAWING NO.   | ELC4-151169-22            |   |                   |          |    |
| <b>HRS</b>  |                               | SPECIFICATION SHEET   |                           | PART NO.  | FX8C-40P-SV6 (92) |          |    |
|   |                               | HIROSE ELECTRIC CO., LTD.   |                           | CODE NO.  | QL578-0609-5-92   |          |    |
|   |                               |   |                           |   |                   |          |    |