



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 (1)                                       |         | STORAGE TEMPERATURE RANGE  | -10 °C TO 60 °C (2) |   |    |    |
|  | VOLTAGE  | 100 V AC  |         | OPERATING HUMIDITY RANGE   | 40 % TO 80 %        |   |    |    |
|  | CURRENT  | 0.5 A   |         | STORAGE HUMIDITY RANGE   | 40 % TO 70 % (2)    |   |    |    |
| SPECIFICATIONS   |  |   |         |  |                     |   |    |    |
| ITEM   | TEST METHOD  |   |         | REQUIREMENTS   |                     |   | QT | AT |
| GENERAL EXAMINATION  |  | VISUALLY AND BY MEASURING INSTRUMENT. CONFIRMED VISUALLY. |         | ACCORDING TO DRAWING.  |                     |   | X  | X  |
| MARKING  |  | CONFIRMED VISUALLY.                                       |         |  |                     |   | X  | X  |
| ELECTRIC CHARACTERISTICS   |  |   |         |  |                     |   |    |    |
| CONTACT RESISTANCE   | 100 mA (DC OR 1000 Hz).  |   |         | 40 mΩ MAX.   |                     |   | X  | -  |
| MILLIVOLT LEVEL METHOD   | 20 mV MAX, 1 mA(DC OR 1000Hz)  |   |         | 50 mΩ MAX.   |                     |   | X  | -  |
| INSULATION RESISTANCE  | 250 V DC   |   |         | 100 MΩ MIN.  |                     |   | X  | -  |
| VOLTAGE PROOF  | 300 V AC FOR 1 min.  |   |         | NO FLASHOVER OR BREAKDOWN.   |                     |   | X  | -  |
| MECHANICAL CHARACTERISTICS   |  |   |         |  |                     |   |    |    |
| INSERTION AND WITHDRAWAL FORCES  | MEASURED BY APPLICABLE CONNECTOR.  |   |         | INSERTION FORCE : 35.2 N MAX. WITHDRAWAL FORCE : 4.0 N MIN.  |                     |   | X  | -  |
| MECHANICAL OPERATION   | 100 TIMES INSERTIONS AND EXTRACTATIONS.  |   |         | ① CONTACT RESISTANCE: 50 mΩ MAX. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.                                      |                     |   | X  | -  |
| VIBRATION  | FREQUENCY 10 TO 55 Hz, AMPLITUDE : 1.5 mm, AT 2 h FOR 3 DIRECTIONS.                              |   |         | ① NO ELECTRICAL DISCONTINUITY OF 1 μs. ② 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   | -  |    |
| ENVIRONMENTAL CHARACTERISTICS  |  |   |         |  |                     |   |    |    |
| DAMP HEAT (STEADY STATE)   | EXPOSED AT 40±2 °C, 90 ~ 95 %, 96 h.   |   |         | ① CONTACT RESISTANCE: 50 mΩ MAX. ② INSULATION RESISTANCE: 100 MΩ MIN. ③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS. |                     |   | X  | -  |
| RAPID CHANGE OF TEMPERATURE  | TEMPERATURE-55→+15~+35→+85→+15~+35°C TIME 30 → MAX 5 → 30 → MAX 5 min UNDER 5 CYCLES.            |   |         |  |                     | X   | -  |    |
| CORROSION SALT MIST  | EXPOSED IN 5 % SALT WATER SPRAY FOR 48 h.  |   |         | ① CONTACT RESISTANCE: 50 mΩ MAX. ② NO HEAVY CORROSION.   |                     |   | X  | -  |
| HYDROGEN SULPHIDE  | EXPOSED IN 3 PPM FOR 96 h. (TEST STANDARD: JEIDA 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   |                     |   |    |    |
| △  |  |   |         |  |                     |   |    |    |
| REMARK (1) TEMPERATURE RISE INCLUDED WHEN ENERGIZED. (2) THIS STORAGE INDICATES A LONG-TERM STORAGE STATE FOR THE UNUSED PRODUCT BEFORE THE BOARD MOUNTED. |  |   |         |  |                     |   |    |    |
| Unless otherwise specified, refer to MIL-STD-1344.   |  | DRAWING NO.   |         | ELC4-084980-23   |                     |   |    |    |
| Note QT:Qualification Test AT:Assurance Test X:Applicable Test   |  |   |         |  |                     |   |    |    |
|   |  | SPECIFICATION SHEET                                       |         | PART NO.   |                     | FX6-40S-0.8SV2 (93)   |    |    |
|  |  | HIROSE ELECTRIC CO., LTD.                                 |         | CODE NO.   |                     | QL576-0123-0-93   |    |    |
|  |  |   |         |  |                     |  1/1 |    |    |