

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

| APPLICABLE STANDARD   |  |   |                     | STORAGE TEMPERATURE RANGE | -10 °C TO 60 °C ② |
|---|--|---|---------------------|---------------------------|-------------------|
| RATING  | OPERATING TEMPERATURE RANGE  | -55 °C TO 85 °C ①   |                     | OPERATING HUMIDITY RANGE  | 40 % TO 80 %      |
|   | VOLTAGE  | 125 V AC  |                     | STORAGE HUMIDITY RANGE    | 40 % TO 70 % ②    |
|   | CURRENT  | 0.5 A   |                     |                           |                   |
| 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  | 100 mA (DC OR 1000 Hz).  | 45mΩ MAX.   | X                   |                           |                   |
| CONTACT RESISTANCE  | 20 mV MAX, 1 mA(DC OR 1000Hz)  | 55mΩ MAX.   | X                   |                           |                   |
| MILLIVOLT LEVEL METHOD  |  |   |                     |                           |                   |
| INSULATION RESISTANCE   | 250 V DC.  | 100 MΩ MIN.   | X                   |                           |                   |
| VOLTAGE PROOF   | 300 V AC FOR 1 min.  | NO FLASHOVER OR BREAKDOWN.  | X                   |                           |                   |
| MECHANICAL CHARACTERISTICS  |  |   |                     |                           |                   |
| MECHANICAL OPERATION  | 500 TIMES INSERTIONS AND EXTRACTIONS.  | ① CONTACT RESISTANCE: 55 mΩ MAX.<br>② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.              | X                   |                           |                   |
| VIBRATION   | FREQUENCY 10 TO 55 Hz,<br>AMPLITUDE: 1.52 mm,<br>AT 2 h FOR 3 DIRECTION.                           | ① NO ELECTRICAL DISCONTINUITY OF 1 μs.<br>② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.        | X                   |                           |                   |
| SHOCK   | 490 ms <sup>2</sup> , DURATION OF PULSE 11 ms<br>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: 55 mΩ MAX.<br>② INSULATION RESISTANCE: 100 MΩ MIN.                    | X                   |                           |                   |
| RAPID CHANGE OF TEMPERATURE   | TEMPERATURE:55→+15~+35→+85→+15~+35°C<br>TIME 30→10~15→30→10~15<br>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: 55mΩ MAX.<br>② NO HEAVY CORROSION.                                    | X                   |                           |                   |
| HYDROGEN SULPHIDE   | EXPOSED IN 3 PPM FOR 96 h.<br>(TEST STANDARD: JEIDA-38)  |   | X                   |                           |                   |
| RESISTANCE TO SOLDERING HEAT  | 1) REFLOW SOLDERING:250 °C MAX,<br>220 °C MIN,<br>FOR 60 s<br>2) SOLDERING IRON 360 °C,<br>FOR 5 s | NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINAL.                              | X                   |                           |                   |
| SOLDERABILITY   | SOLDERED AT SOLDER TEMPERATURE 240±3°C FOR IMMERSION DURATION: 3s.                                 | A NEW UNIFORM COATING OF SOLDER SHALL OVER A MINIMUM OF 95 % OF THE SURFACE BEING IMMERSED. | X                   |                           |                   |
| COUNT   | DESCRIPTION OF REVISIONS   | DESIGNED  | CHECKED             | DATE                      |                   |
| REMARK ① TEMPERATURE RISE INCLUDED WHEN ENERGIZED.<br>② THIS STORAGE INDICATES A LONG-TERM STORAGE STATE FOR THE UNUSED PRODUCT BEFORE THE BOARD MOUNTED.<br>Unless otherwise specified, refer to MIL-STD-1344. |  |   | APPROVED            | HS. OKAWA                 | 05.08.06          |
|   |  |   | CHECKED             | HS. OZAWA                 | 05.08.06          |
|   |  |   | DESIGNED            | TK. YANAGISAWA            | 05.08.04          |
|   |  |   | DRAWN               | TK. YANAGISAWA            | 05.08.04          |
| Note QT:Qualification Test AT:Assurance Test X:Applicable Test  |  | DRAWING NO.   | ELG4-152588-21      |                           |                   |
| <b>HRS</b>  | SPECIFICATION SHEET  | PART NO.  | FX2-**P-0.635SH(71) |                           |                   |
|   | HIROSE ELECTRIC CO., LTD.  | CODE NO.  |                     |                           |                   |