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

| APPLICABLE STANDARD   |   |                                |   |                                |          |
|---|---|--------------------------------|---|--------------------------------|----------|
| RATING  | OPERATING TEMPERATURE RANGE   | -55 °C TO 85 °C <sup>(1)</sup> | STORAGE TEMPERATURE RANGE   | -10 °C TO 60 °C <sup>(2)</sup> |          |
|   | VOLTAGE   | 125 V AC                       | OPERATING HUMIDITY RANGE  | 40 % TO 80 %                   |          |
|   | CURRENT   | 0.5 A                          | STORAGE HUMIDITY RANGE  | 40 % TO 70 % <sup>(2)</sup>    |          |
| SPECIFICATIONS  |   |                                |   |                                |          |
| ITEM  | TEST METHOD   |                                | REQUIREMENTS  | QT                             | AT       |
| CONSTRUCTION  |   |                                |   |                                |          |
| GENERAL EXAMINATION   | VISUALLY AND BY MEASURING INSTRUMENT.   |                                | ACCORDING TO DRAWING.   | ×                              | ×        |
| MARKING   | CONFIRMED VISUALLY.   |                                |   | ×                              | ×        |
| ELECTRIC CHARACTERISTICS  |   |                                |   |                                |          |
| CONTACT RESISTANCE  | 100 mA (DC OR 1000 Hz).   |                                | 45mΩ MAX.   | ×                              |          |
| CONTACT RESISTANCE MILLIVOLT LEVEL METHOD   | 20 mV MAX, 1 mA(DC OR 1000Hz)   |                                | 55mΩ MAX.   | ×                              |          |
| INSULATION RESISTANCE   | 250 V DC.   |                                | 100 MΩ MIN.   | ×                              |          |
| VOLTAGE PROOF   | 300 V AC FOR 1 min.   |                                | NO FLASHOVER OR BREAKDOWN.  | ×                              |          |
| MECHANICAL CHARACTERISTICS  |   |                                |   |                                |          |
| MECHANICAL OPERATION  | 500 TIMES INSERTIONS AND EXTRACTIONS.   |                                | ① CONTACT RESISTANCE: 55 mΩ MAX.<br>② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.              | ×                              |          |
| 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.        | ×                              |          |
| SHOCK   | 490 m/s <sup>2</sup> , DURATION OF PULSE 11 ms<br>AT 3 TIMES FOR 3 DIRECTIONS.                      |                                |   | ×                              |          |
| 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.                    | ×                              |          |
| 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.  | ×                              |          |
| CORROSION SALT MIST   | EXPOSED IN 5 % SALT WATER SPRAY FOR 48 h.   |                                | ① CONTACT RESISTANCE: 55mΩ MAX.<br>② NO HEAVY CORROSION.                                    | ×                              |          |
| HYDROGEN SULPHIDE   | EXPOSED IN 3 PPM FOR 96 h.<br>(TEST STANDARD: JEIDA-38)   |                                |   | ×                              |          |
| 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.                              | ×                              |          |
| SOLDRABILITY  | 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. | ×                              |          |
|   |   |                                |   |                                |          |
|   | COUNT   | DESCRIPTION OF REVISIONS       | DESIGNED  | CHECKED                        | DATE     |
| △   |   |                                |   |                                |          |
| REMARK <sup>(1)</sup> TEMPERATURE RISE INCLUDED WHEN ENERGIZED.<br><sup>(2)</sup> THIS STORAGE INDICATES A LONG-TERM STORAGE STATE FOR THE UNUSED PRODUCT BEFORE THE BOARD MOUNTED. |   |                                | APPROVED  | HS. OKAWA                      | 05.08.06 |
|   |   |                                | CHECKED   | HS. OZAWA                      | 05.08.06 |
|   |   |                                | DESIGNED  | TK. YANAGISAWA                 | 05.08.04 |
| Unless otherwise specified, refer to MIL-STD-1344.  |   |                                | DRAWN   | TK. YANAGISAWA                 | 05.08.04 |
| Note QT:Qualification Test AT:Assurance Test X:Applicable Test  |   |                                | DRAWING NO.   | ELC4-152588-21                 |          |
| <b>HRS</b>  | SPECIFICATION SHEET   |                                | PART NO.  | FX2-**P-0. 635SH (71)          |          |
|   | HIROSE ELECTRIC CO., LTD.   |                                | CODE NO.  | △                              | 1/1      |