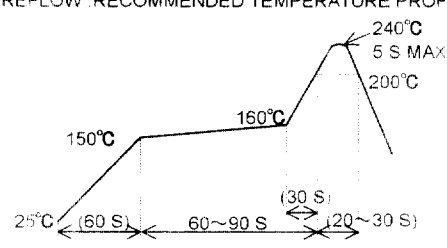


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| △   | COUNT                       | DESCRIPTION OF REVISIONS  | BY              | CHKD | DATE                   | △  | COUNT                | DESCRIPTION OF REVISIONS                                       | BY       | CHKD                          | DATE |
|---|-----------------------------|---|-----------------|------|------------------------|--|----------------------|--|----------|-------------------------------|------|
| △   | 1                           | RE-F-06478  | J.M             | M.✓  | 99.7.29                | △  |                      |  |          |                               |      |
| △   |                             |   |                 |      |                        | △  |                      |  |          |                               |      |
| <b>APPLICATION STANDARD</b>                                       |                             |   |                 |      |                        |  |                      |  |          |                               |      |
| RATING  | OPERATING TEMPERATURE RANGE |   | -55 °C TO 85 °C |      |                        | STORAGE TEMPERATURE RANGE  |                      | -10 °C TO 60 °C  |          |                               |      |
|   | VOLTAGE                     |   | AC 50 V         |      |                        | OPERATING HUMIDITY RANGE   |                      | RELATIVE HUMIDITY: 95 % MAX (NO DEW CONDENSATION IS PERMITTED) |          |                               |      |
|   | CURRENT                     |   | 0.3 A           |      |                        |  |                      |  |          |                               |      |
| <b>SPECIFICATIONS</b>   |                             |   |                 |      |                        |  |                      |  |          |                               |      |
| ITEM  |                             | TEST METHOD   |                 |      |                        | REQUIREMENT  |                      |  |          | QT                            | AT   |
| <b>CONSTRUCTION</b>   |                             |   |                 |      |                        |  |                      |  |          |                               |      |
| GENERAL EXAMINATION   |                             | VISUALLY AND BY MEASURING INSTRUMENT.   |                 |      |                        | ACCORDING TO DRAWING   |                      |  |          | ○                             | ○    |
| MARKING   |                             | CONFIRMED VISUALLY.   |                 |      |                        |  |                      |  |          | ○                             | ○    |
| <b>ELECTRICAL CHARACTERISTICS</b>                                 |                             |   |                 |      |                        |  |                      |  |          |                               |      |
| CONTACT RESISTANCE  |                             | 100 mA (DC OR 1000 Hz).   |                 |      |                        | 60 mΩ MAX.   |                      |  |          | ○                             | ○    |
| INSULATION RESISTANCE   |                             | 100 V DC.   |                 |      |                        | 100 MΩ MIN.  |                      |  |          | ○                             | -    |
| VOLTAGE PROOF   |                             | 150 V AC FOR 1 min.   |                 |      |                        | NO FLASHOVER OR BREAKDOWN.   |                      |  |          | ○                             | ○    |
| <b>MECHANICAL CHARACTERISTICS</b>                                 |                             |   |                 |      |                        |  |                      |  |          |                               |      |
| INSERTION AND WITHDRAWAL FORCES                                   |                             | MEASURED BY APPLICABLE CONNECTOR.   |                 |      |                        | INSERTION FORCE: 40.8 N MAX.<br>WITHDRAWAL FORCE: 1.7 N MIN.                             |                      |  |          | ○                             | -    |
| MECHANICAL OPERATION  |                             | 50 TIMES INSERTION AND EXTRACTIONS.   |                 |      |                        | 1)CONTACT RESISTANCE: 70 mΩ MAX.<br>2) NO DAMAGE, CRACK AND LOOSENESS OF PART            |                      |  |          | ○                             | -    |
| VIBRATION   |                             | FREQUENCY: 10 TO 55 Hz, SINGLE<br>AMPLITUDE: 0.75 mm. — m/s <sup>2</sup><br>AT 10 CYCLES FOR 3 DIRECTIONS   |                 |      |                        | 1)NO ELECTRICAL DISCONTINUITY OF<br>1 μs MIN<br>2)NO DAMAGE, CRACK AND LOOSENESS OF PART |                      |  |          | ○                             | -    |
| SHOCK   |                             | 490 m/s <sup>2</sup> DURATION OF PULSE 11 ms AT 3 TIMES FOR 3 DIRECTIONS.   |                 |      |                        |  |                      |  |          | ○                             | -    |
| <b>ENVIRONMENTAL CHARACTERISTICS</b>                              |                             |   |                 |      |                        |  |                      |  |          |                               |      |
| DAMP HEAT (STEADY STATE)  |                             | EXPOSED AT 40±2 °C, 90~95 %, 96 h.  |                 |      |                        | 1)CONTACT RESISTANCE: 70 mΩ MAX.<br>2)INSULATION RESISTANCE: 100 MΩ MIN.                 |                      |  |          | ○                             | -    |
| RAPID CHAGE OF TEMPERTURE   |                             | TEMPERTURE -55→15~35→ 85→15~35°C<br>TIME 30→ 2~ 3→ 30→ 2~ 3 min.<br>UNDER 5 CYCLES.   |                 |      |                        | 3)NO DAMAGE, CRACK AND LOOSENESS OF PART   |                      |  |          | ○                             | -    |
| DRY HEAT  |                             | EXPOSED AT 85 °C, 96 h.   |                 |      |                        | 1)CONTACT RESISTANCE: 70 mΩ MAX.   |                      |  |          | ○                             | -    |
| COLD  |                             | EXPOSED AT -55 °C, 96 h.  |                 |      |                        | 2)NO DAMAGE, CRACK AND LOOSENESS OF PART.  |                      |  |          | ○                             | -    |
| CORROSION SALT MIST   |                             | EXPOSED IN 5 % SALT WATER SPRAY FOR 48 h.   |                 |      |                        | NO HEAVY CORROSION.  |                      |  |          | ○                             | -    |
| SULPHUR DIOXIDE   |                             | EXPOSED IN 10 PPM FOR 96 h.<br>(TEST STANDARD:JIS C 0090)   |                 |      |                        | 1)CONTACT RESISTANCE: 70 mΩ MAX.<br>2)NO HEAVY CORROSION.                                |                      |  |          | ○                             | -    |
| RESISTANCE TO SOLDERING HEAT                                      |                             | REFLOW :RECOMMENDED TEMPERATURE PROFILE<br><br>TO BE TESTED UNDER THE ABOVE CONDITIONS |                 |      |                        | NO MELTING OF RESIN WHICH AFFECTS THE PERFORMANCE OF COMPONENT.                          |                      |  |          | ○                             | -    |
| SOLDRABILITY  |                             | SOLDERED AT SOLDER TEMPERATURE, 235 °C FOR IMMERSION DURATION, 2 s.   |                 |      |                        | NO PINHOLE OR DEWETTING ON SOLDERED SURFACE.   |                      |  |          | ○                             | -    |
| REMARKS   |                             |   |                 |      | DRAWN                  | DESIGNED   | CHECKED              | APPROVED   | RELEASED |                               |      |
|   |                             |   |                 |      | S.Kitajima<br>99.05.25 | J. Matsukawa<br>99.05.25   | M.Ishida<br>99.05.26 | Y.Yoshimura<br>99.05.27  |          |                               |      |
| UNLESS OTERWISE SPECIFIED ,REFER TO JIS C 5402.                   |                             |   |                 |      |                        |  |                      |  |          |                               |      |
| NOTE QT: QUALIFICATION TEST AT: ASSURANCE TEST O: APPLICABLE TEST |                             |   |                 |      |                        |  |                      |  |          |                               |      |
| <b>HRS</b>  |                             | HIROSE ELECTRIC CO.,LTD.  |                 |      |                        | SPECIFICATION SHEET  |                      |  |          | PART NO.<br>FX11LB -68 S - SV |      |
| CODE NO.(OLD)<br>CL   |                             | DRAWING NO.<br>ELC4 - 152120-   |                 |      |                        | CODE NO.<br>CL 573 - 0152 - 0  |                      |  |          | 1                             | 1    |

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