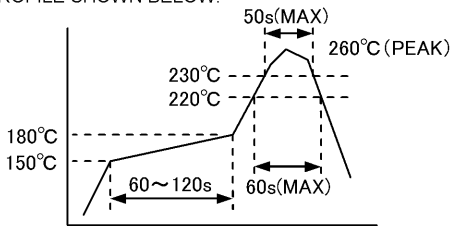


| APPLICABLE STANDARD                                                                                                                                                                                                                                                                                                                                              |                             |                                                                                                                                                                                                                        |             |                                                                                                                       |                                |   |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-----------------------------------------------------------------------------------------------------------------------|--------------------------------|---|
| RATING                                                                                                                                                                                                                                                                                                                                                           | OPERATING TEMPERATURE RANGE | -55 °C TO 85 °C <sup>(1) (2)</sup>                                                                                                                                                                                     |             | STORAGE TEMPERATURE RANGE                                                                                             | -10 °C TO 60 °C <sup>(3)</sup> |   |
|                                                                                                                                                                                                                                                                                                                                                                  | OPERATING HUMIDITY RANGE    | RH 85 % MAX <sup>(2) (4)</sup>                                                                                                                                                                                         |             | STORAGE HUMIDITY RANGE                                                                                                | RH 70 % MAX <sup>(3) (4)</sup> |   |
|                                                                                                                                                                                                                                                                                                                                                                  | VOLTAGE                     | 60 V AC                                                                                                                                                                                                                |             | 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                                                                                                                                                                                                                                                                                                                                               |                             | 20 mV MAX, 1 mA(DC OR 1000Hz)                                                                                                                                                                                          |             | 80 mΩ MAX. <sup>(5)</sup>                                                                                             | x                              |   |
| INSULATION RESISTANCE                                                                                                                                                                                                                                                                                                                                            |                             | 100 V DC.                                                                                                                                                                                                              |             | 500 MΩ MIN.                                                                                                           | x                              |   |
| VOLTAGE PROOF                                                                                                                                                                                                                                                                                                                                                    |                             | 200 V AC FOR 1 min.                                                                                                                                                                                                    |             | NO FLASHOVER OR BREAKDOWN.                                                                                            | x                              |   |
| MECHANICAL CHARACTERISTICS                                                                                                                                                                                                                                                                                                                                       |                             |                                                                                                                                                                                                                        |             |                                                                                                                       |                                |   |
| INSERTION AND WITHDRAWAL FORCES                                                                                                                                                                                                                                                                                                                                  |                             | MEASURED BY APPLICABLE CONNECTOR.                                                                                                                                                                                      |             | INSERTION FORCE: 20.5 N MAX.<br>WITHDRAWAL FORCE: 2.05 N MIN.                                                         | x                              |   |
| MECHANICAL OPERATION                                                                                                                                                                                                                                                                                                                                             |                             | 50 TIMES INSERTIONS AND EXTRACTIONS.                                                                                                                                                                                   |             | ① CONTACT RESISTANCE: NO VARIATION OF 20 mΩ OR MORE FROM INITIAL VALUE.<br>② NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | x                              |   |
| VIBRATION                                                                                                                                                                                                                                                                                                                                                        |                             | FREQUENCY 10 TO 55 Hz,<br>SINGL AMPLITUDE : 0.75 mm,<br>FOR 2 h IN 3 DIRECTIONS.                                                                                                                                       |             | ① NO ELECTRICAL DISCONTINUITY OF 1 μs.<br>② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.                                  | x                              |   |
| SHOCK                                                                                                                                                                                                                                                                                                                                                            |                             | 490 m/s <sup>2</sup> , DURATION OF PULSE 11 ms<br>FOR 3 TIMES IN 3 DIRECTIONS.                                                                                                                                         |             |                                                                                                                       | x                              |   |
| ENVIRONMENTAL CHARACTERISTICS                                                                                                                                                                                                                                                                                                                                    |                             |                                                                                                                                                                                                                        |             |                                                                                                                       |                                |   |
| DAMP HEAT (STEADY STATE)                                                                                                                                                                                                                                                                                                                                         |                             | EXPOSED AT 40±2 °C, 90 ~ 95 %, 96 h.                                                                                                                                                                                   |             | ① CONTACT RESISTANCE: NO VARIATION OF 20 mΩ OR MORE FROM INITIAL VALUE.                                               | x                              |   |
| DRY HEAT                                                                                                                                                                                                                                                                                                                                                         |                             | EXPOSED AT 85±2 °C, 96 h                                                                                                                                                                                               |             | ② INSULATION RESISTANCE: 500 MΩ MIN.                                                                                  | x                              |   |
| RAPID CHANGE OF TEMPERATURE                                                                                                                                                                                                                                                                                                                                      |                             | TEMPERATURE -55 → +5~+35 → +85 → +5~+35 °C<br>TIME 30 → 5 MAX → 30 → 5 MAX min.<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: NO VARIATION OF 20 mΩ OR MORE FROM INITIAL VALUE.                                               | x                              |   |
| SULFUR DIOXIDE                                                                                                                                                                                                                                                                                                                                                   |                             | EXPOSED IN 25 PPM FOR 96 h.<br>(TEST STANDARD: JIS C 60068)                                                                                                                                                            |             | ② NO DERECT SUCH AS CORROSION WHICH IMPAIRS THE FUNCTION OF CONNECTOR.                                                | x                              |   |
| RESISTANCE TO SOLDERING HEAT                                                                                                                                                                                                                                                                                                                                     |                             | 1)REFLOW SOLDERING :<br>REFLOW 2 TIMES UNDER THE TEMPERATURE PROFILE SHOWN BELOW.<br><br>2) SOLDERING IRONS : 360°C MAX. FOR 5 sec. |             | NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINAL.                                                        |                                | x |
| SOLDERABILITY                                                                                                                                                                                                                                                                                                                                                    |                             | SOLDERED AT SOLDER TEMPERATURE 240±3°C FOR IMMERSION DURATION, 3 sec.                                                                                                                                                  |             | 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                           |   |
| △0                                                                                                                                                                                                                                                                                                                                                               |                             |                                                                                                                                                                                                                        |             |                                                                                                                       |                                |   |
| REMARKS                                                                                                                                                                                                                                                                                                                                                          |                             |                                                                                                                                                                                                                        |             | APPROVED                                                                                                              | HS. OKAWA                      |   |
| (1) INCLUDE TEMPERATURE RISE CAUSED BY CURRENT-CARRYING.<br>(2) OPERATING TEMPERATURE SHOULD BE -55 TO 40°C WHEN HUMIDITY EXCEEDS 80% RH.<br>(3) "STORAGE" MEANS A LONG-TERM STORAGE STATE FOR THE UNUSED PRODUCT BEFORE ASSEMBLY TO PCB.<br>(4) THERE MUST NOT BE DEWFALL.<br>(5) DON'T INCLUDE CONDUCTOR RESISTANCE OF THE CABLE OF THE COMBINATION CONNECTOR. |                             |                                                                                                                                                                                                                        |             | CHECKED                                                                                                               | HT. YAMAGUCHI                  |   |
| Unless otherwise specified, refer to JIS-C-5402.                                                                                                                                                                                                                                                                                                                 |                             |                                                                                                                                                                                                                        |             | DESIGNED                                                                                                              | KN. SHIBUYA                    |   |
|                                                                                                                                                                                                                                                                                                                                                                  |                             |                                                                                                                                                                                                                        |             | DRAWN                                                                                                                 | KN. SHIBUYA                    |   |
| Note QT:Qualification Test AT:Assurance Test X:Applicable Test                                                                                                                                                                                                                                                                                                   |                             |                                                                                                                                                                                                                        | DRAWING NO. |                                                                                                                       | ELC4-330630-00                 |   |
| HRS                                                                                                                                                                                                                                                                                                                                                              |                             | SPECIFICATION SHEET                                                                                                                                                                                                    |             | PART NO. FX16M2-41S-0.5SH                                                                                             |                                |   |
|                                                                                                                                                                                                                                                                                                                                                                  |                             | HIROSE ELECTRIC CO., LTD.                                                                                                                                                                                              |             | CODE NO. CL575-3003-9-00                                                                                              |                                |   |
|                                                                                                                                                                                                                                                                                                                                                                  |                             |                                                                                                                                                                                                                        |             | △0 1/1                                                                                                                |                                |   |