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| Applicable standard                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                            |                                                                                                  |                                                                                                            |                                                                                     |                                                                                           |
| Rating                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Operating temperature range                                                                                | -35 °C to +85 °C(Notes 1)                                                                        | Storage temperature range                                                                                  | -10°C to +60 °C(Note 3)                                                             |                                                                                           |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Operating humidity range  | 20% to + 80%(Note 2)                                                                             | Storage humidity range  | 40% to + 70%(Note 3)                                                                |                                                                                           |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Voltage                                                                                                    | 150 V AC/DC                                                                                      | Current                                                                                                    |  |                                                                                           |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Applicable cable                                                                                           | 26 - 30 AWG                                                                                      | AWG 26 : 2.5A<br>AWG 28 : 2.0A<br>AWG 30 : 1.0A                                                            |                                                                                     |                                                                                           |
| 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<br>Millivolt level method                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                            | 20 mV MAX, 1mA (DC or 1000Hz).                                                                   | 30 mΩ MAX.                                                                                                 | X                                                                                   | —                                                                                         |
| Mechanical characteristics                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                            |                                                                                                  |                                                                                                            |                                                                                     |                                                                                           |
| Contact insertion and extraction force                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                            | <input type="checkbox"/> 0.35±0.002mm by steel gauge.                                            | Insertion force : 3.0N MAX.<br>Extraction force : 0.3N MIN.                                                | x                                                                                   | —                                                                                         |
| Mechanical operation                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                            | 50 times insertions and extractions.                                                             | ① Contact resistance: 30 mΩ MAX.<br>② No damage, crack or looseness of parts.                              | X                                                                                   | —                                                                                         |
| Vibration                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                            | Frequency 10 to 55 Hz, single amplitude 0.75 mm, at 2 h, for 3 directions.                       | ① No electrical discontinuity of 1 μs.<br>② No damage, crack or looseness of parts.                        | X                                                                                   | —                                                                                         |
| Shock                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                            | 490 m/s <sup>2</sup> duration of pulse 11 ms at 3 times for 3 directions.                        | ① No electrical discontinuity of 1 μs.<br>② No damage, crack or looseness of parts.                        | X                                                                                   | —                                                                                         |
| Environmental characteristics                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                            |                                                                                                  |                                                                                                            |                                                                                     |                                                                                           |
| Rapid change of temperature                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                            | Temperature -55→15 to 35 →+85→15 to35 °c<br>Time 30→10 to 15→ 30 →10 to 15min<br>Under 5 cycles. | ① Contact resistance: 30 mΩ MAX.<br>② No damage, crack or looseness of parts.                              | X                                                                                   | —                                                                                         |
| Damp heat (Steady state)                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                            | Exposed at 40 ± 2 °c, 90 to 95 %, 96 h.                                                          | ① Contact resistance: 30 mΩ MAX.<br>② No damage, crack or looseness of parts.                              | X                                                                                   | —                                                                                         |
| Corrosion salt mist                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                            | Exposed in 5 % salt water spray for 48h.                                                         | ① Contact resistance: 60 mΩ MAX.<br>② No heavy corrosion.                                                  | X                                                                                   | —                                                                                         |
| Sulphur dioxide                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                            | Exposed in 10 ppm for 96h                                                                        | ① Contact resistance: 60 mΩ MAX.<br>② No heavy corrosion.                                                  | X                                                                                   | —                                                                                         |
| Remarks                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                            |                                                                                                  |                                                                                                            |                                                                                     |                                                                                           |
| Note 1: Include the temperature rising by current.<br>Note 2: No condensing. <br>Note 3: Apply to the condition of long term storage for unused products before mounted on PCB. <br>After mounted on PCB, operation temperature and humidity range is applied for interim storage during transportation. |                                                                                                            |                                                                                                  |                                                                                                            |                                                                                     |                                                                                           |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Count                                                                                                      | Description of revisions                                                                         | Designed                                                                                                   | Checked                                                                             | Date                                                                                      |
|                                                                                                                                                                                                                                                                                                                                                                                              | 7                                                                                                          |                                                                                                  | HT. SATO                                                                                                   | SZ. ONO                                                                             | 20190531                                                                                  |
| Unless otherwise specified , refer to IEC 60512.                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                            |                                                                                                  | Approved                                                                                                   | TY. OMA                                                                             | 20060912                                                                                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                            |                                                                                                  | Checked                                                                                                    | HK. UMEHARA                                                                         | 20060906                                                                                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                            |                                                                                                  | Designed                                                                                                   | TS. KUMAZAWA                                                                        | 20060906                                                                                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                            |                                                                                                  | Drawn                                                                                                      | AK. MIURA                                                                           | 20060906                                                                                  |
| Note QT:Qualification Test AT:Assurance Test X:Applicable Test                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                            |                                                                                                  | Drawing no.                                                                                                | ELC-071220-41-02                                                                    |                                                                                           |
|                                                                                                                                                                                                                                                                                                                                                                                              | Specification sheet                                                                                        |                                                                                                  | Part no.                                                                                                   | DF13-2630SCFA (41)                                                                  |                                                                                           |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Hirose electric co., ltd.                                                                                  |                                                                                                  | Code no.                                                                                                   | CL536-0298-5-41                                                                     |  1/1 |