

|   | COUNT                       | DESCRIPTION OF REVISIONS   | BY                      | CHKD | DATE                           |   | COUNT                                       | DESCRIPTION OF REVISIONS         | BY  | CHKD | DATE |
|---|-----------------------------|--|-------------------------|------|--------------------------------|---|---|----------------------------------|---|------|------|
| △   |                             |  |                         |      |                                | △   |   |                                  |   |      |      |
| △   |                             |  |                         |      |                                | △   |   |                                  |   |      |      |
| <b>APPLICABLE STANDARD</b>  |                             |  |                         |      |                                |   |   |                                  |   |      |      |
| RATING  | Operating Temperature Range |  | -55°C to +105°C (Note1) |      |                                | Storage Temperature Range   |   | -10°C to +60°C (Note3)           |   |      |      |
|   | Operating Humidity Range    |  | 20% to 80% (Note2)      |      |                                | Storage Humidity Range  |   | 40% to 70% (Note3)               |   |      |      |
|   | Applicable Connector        |  | DF51K-*(D)S-2C (###)    |      |                                | Voltage   |   | 250V AC/DC                       |   |      |      |
|   | Applicable Cable            |  | AWG#24 to 28            |      |                                | Current   | AWG 28 : 1A<br>AWG 26 : 1.5A<br>AWG 24 : 2A |                                  |   |      |      |
|   | Insulation Diameter         |  | φ 0.9 ~ φ 1.45 mm       |      |                                |   |   |                                  |   |      |      |
| <b>SPECIFICATIONS</b>   |                             |  |                         |      |                                |   |   |                                  |   |      |      |
| ITEM  |                             | TEST METHOD  |                         |      |                                | REQUIREMENTS  |   |                                  | QT  | AT   |      |
| <b>CONSTRUCTION</b>   |                             |  |                         |      |                                |   |   |                                  |   |      |      |
| General Examination   |                             | Visually and by measuring instrument.  |                         |      |                                | According to drawing.   |   |                                  | o   | o    |      |
| Marking   |                             | Confirmed visually.  |                         |      |                                |   |   |                                  | o   | o    |      |
| <b>ELECTRICAL CHARACTERISTICS</b>   |                             |  |                         |      |                                |   |   |                                  |   |      |      |
| Contact Resistance  |                             | 20mV MAX, 1mA (DC or 1000Hz).  |                         |      |                                | 30 mΩ MAX.  |   |                                  | o   | -    |      |
| Millivolt Level Method  |                             |  |                         |      |                                |   |   |                                  |   |      |      |
| <b>MECHANICAL CHARACTERISTICS</b>   |                             |  |                         |      |                                |   |   |                                  |   |      |      |
| Mechanical Operation<br>(Sn Plating)  |                             | 30 times insertion and extraction.   |                         |      |                                | ①Contact resistance: 30mΩ MAX<br>②No damage, crack or looseness of parts.         |   |                                  | o   | -    |      |
| Mechanical Operation<br>(Au Plating)  |                             | 50 times insertion and extraction.   |                         |      |                                | ①Contact resistance: 30mΩ MAX<br>②No damage, crack or looseness of parts.         |   |                                  | o   | -    |      |
| Vibration   |                             | Frequency 10 to 55 Hz, single amplitude 0.75 mm,<br>at 10 cycles for 3 direction.  |                         |      |                                | ①No electrical discontinuity of 1 μs.<br>②No damage, crack or looseness of parts. |   |                                  | o   | -    |      |
| Shock   |                             | Acceleration 490 m/s <sup>2</sup> duration of pulse 11 ms at 3<br>times for 3 directions.  |                         |      |                                |   |   |                                  | o   | -    |      |
|   |                             |  |                         |      |                                |   |   |                                  |   |      |      |
| <b>ENVIRONMENTAL CHARACTERISTICS</b>  |                             |  |                         |      |                                |   |   |                                  |   |      |      |
| Damp Heat<br>(Steady State)   |                             | Exposed at 40 ± 2 °C , humidity 90 to 95 %, 96 h.<br>(After leaving the room temperature for 1 to 2h.)   |                         |      |                                | ①Contact resistance: 30 mΩ MAX.<br>②No damage, crack or looseness of parts.       |   |                                  | o   | -    |      |
| Rapid Change of<br>Temperature  |                             | Temperature -55 °C→ +105 °C<br>Time 30min→ 30min Under 5 Cycles.<br>(The transferring time of the tank is 2 to 3 MIN)<br>(After leaving the room temperature for 1 to 2h.) |                         |      |                                | ①Contact resistance: 30 mΩ MAX.<br>②No damage, crack or looseness of parts.       |   |                                  | o   | -    |      |
| Remarks<br>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 pcb on board, after pcb board , operating temperature and humidity range is applied for interim storage during transportation. |                             |  |                         |      |                                |   |   |                                  |   |      |      |
|   |                             |  |                         |      | DRAWN<br>J.S CHOI<br>17.12.22  | DESIGNED<br>J.S CHOI<br>17.12.22  | CHECKED<br>S.M.LIM<br>17.12.22              | APPROVED<br>T.S KANG<br>17.12.22 | RELEASED<br><div style="border: 1px solid black; border-radius: 50%; padding: 5px; text-align: center;">           ENG<br/>           20.02.13<br/>           DEPT         </div> |      |      |
| Unless otherwise specified, refer to IEC 60512.   |                             |  |                         |      |                                |   |   |                                  |   |      |      |
| NOTE QT: QUALIFICATION TEST AT: ASSURANCE TEST O: APPLICABLE TEST   |                             |  |                         |      |                                |   |   |                                  |   |      |      |
| HIROSE KOREA CO.,LTD.   |                             |  | SPECIFICATION SHEET     |      |                                |   | PART NO.<br>DF51K-2428SCFA (800)            |                                  |   |      |      |
| CODE NO.(OLD)<br>CL   |                             | DRAWING NO.<br>ELC4-611495   |                         |      | CODE NO.<br>CL 6652-0042-9-800 |   |   |                                  | 1<br>1  |      |      |