









| Applicable standard   |   |                          |  |  |   |   |
|---|---|--------------------------|--|--|---|---|
| Rating  | Operating temperature range   | -35°C to +85°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)  |   |   |
|   | Voltage   | 150 V AC/DC              | Current                           | AWG 26 : 2.5A AWG 28 : 2.0A<br>AWG 30 : 1.0A AWG 32 : 1.0A                         |   |   |
|   | Applicable connector  | DF13-2S-1.25C(##)        | Applicable crimp contact          | DF13-2630SCFA(04)<br>DF13G-2630SCFA<br>DF13-3032SCFA                               |   |   |
| Specifications  |   |                          |  |  |   |   |
| Item  | Test method   |                          | Requirements   | QT   | AT  |   |
| <b>Construction</b>   |   |                          |  |  |   |   |
| General examination   | Visually and by measuring instrument.   |                          | According to drawing.  | X  | X   |   |
| Marking   | Confirmed visually.   |                          |  | X  | X   |   |
| <b>Electric characteristics</b>   |   |                          |  |  |   |   |
| Contact resistance  | 100 mA (DC or 1000Hz).  |                          | 30 mΩ MAX.   | X  | -   |   |
| Insulation resistance   | 100 V DC.   |                          | 500 MΩ MIN.  | X  | -   |   |
| Voltage proof   | 500 V AC for 1 min.   |                          | No flashover or breakdown.   | X  | -   |   |
| <b>Mechanical characteristics</b>   |   |                          |  |  |   |   |
| 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 1μs.<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.   |                          |  |  | X   | - |
| <b>Environmental characteristics</b>  |   |                          |  |  |   |   |
| Rapid change of temperature   | Temperature -55→ 5 to 35→+85→ 5 to 35 °C<br>Time 30→ 5 to 15→ 30→ 5 to 15 min.<br>Under 5 cycles.   |                          | ① Contact resistance: 30mΩ MAX.<br>② Insulation resistance: 500 MΩ MIN.<br>③ No damage, crack or looseness of parts. | X  | -   |   |
| Damp heat (Steady state)  | Exposed at 40 ± 2 °C, 90 to 95 %, 96 h.   |                          |  | X  | -   |   |
| Resistance to soldering heat   | 1) Flow soldering 250°C, for 10 sec.<br>2) Manual soldering Soldering iron temperature :300°C, Soldering time : 3sec. No strength on contact. |                          |  | No deformation of case of excessive looseness of the terminals.                    | X   | - |
| Solderability    | Soldered at solder temperature, 240°C for insertion duration, 3sec.   |                          | Solder shall cover a minimum of 95 % of the surface being immersed.  | X  | -   |   |
| 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 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  |   |
|   | 5   | DIS-H-00004896           | HT. SATO   | SZ. ONO  | 20190527  |   |
| Unless otherwise specified, refer to IEC60512.  |   |                          | Approved   | TS. SAKATA   | 20080401  |   |
|   |   |                          | Checked  | HK. UMEHARA  | 20080307  |   |
|   |   |                          | Designed   | TS. KUMAZAWA   | 20080307  |   |
|   |   |                          | Drawn  | YK. NAKATSU  | 20080229  |   |
| Note QT:Qualification Test AT:Assurance Test X:Applicable Test  |   |                          | Drawing no.  |  | ELC-081815-50-01  |   |
|    | Specification sheet   |                          | Part no.   | DF13-2P-1.25DS (50)  |   |   |
|   | Hirose electric co., ltd.   |                          | Code no.   | CL536-0151-7-50  |  1/1 |   |