

| Applicable standard | | | | | |
|---|---|--|---------------------------|-------------------------|------------------|
| Rating | Operating temperature range | -40 °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 | DF61Y-2S-2.2C | Current | AWG 28 : 3.0A | |
| | Voltage | 350 V AC/DC | | AWG 26 : 3.2A | |
| | | | | AWG 24 : 4.0A | |
| 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 millivolt level method | 20mV MAX, 1mA (DC or 1000Hz). | 10 mΩ MAX. | X | — | |
| Insulation resistance | 500 V DC. | 1000 MΩ MIN. | X | — | |
| Voltage proof | 1200 V AC for 1 MIN. | No flashover or breakdown. | X | — | |
| Mechanical characteristics | | | | | |
| Mechanical operation | 30 times insertion and extraction. | ①Contact resistance: 20 mΩ MAX. ②No damage, crack or looseness of parts. | X | — | |
| Contact insertion and extraction forces | It takes out and inserts with a conformity connector. | ①Insertion force : 20.0N MAX. ②Extraction force: 0.5N MIN. | X | — | |
| Vibration | Frequency 10 to 55 Hz, single amplitude 0.75 mm, at 10 cycles for 3 direction. | ①No electrical discontinuity of 1 μ s. ②No damage, crack or looseness of parts. | X | — | |
| Shock | 490 m/s ² duration of pulse 11 ms at 3 times for 3 directions. | | X | — | |
| Environmental characteristics | | | | | |
| Damp heat (Steady state) | Exposed at 40 ± 2°C , 90 to 95 %, 96 h. (after leaving the room temperature for 1-2h.) | ①Contact resistance: 20 mΩ MAX. ②Insulation resistance: 500 MΩ MIN. ③No damage, crack or looseness of parts. | X | — | |
| Rapid change of temperature | Temperature -55°C → +85°C Time 30MIN → 30MIN Under 5 cycles. (The transferring time of the tank is 2-3 MIN) (After leaving the room temperature for 1-2h.) | ①Contact resistance: 20 mΩ MAX. ②Insulation resistance: 500 MΩ MIN. ③No damage, crack or looseness of parts. | X | — | |
| Resistance to soldering heat | 1) Reflow soldering « Reflow time » Number of reflow cycles : 2 cycles MAX. Duration above 220 °C, 60 sec. MAX. Peak temperature: 250°C 10 sec. MAX. « Pre-heat time » Pre-heat temperature(MIN) :150 °C Pre-heat temperature(MAX) :180 °C Pre-heat time(MIN) : 90 sec. Pre-heat time(MAX) : 120 sec. 2) Manual soldering Soldering iron temperature :350±10°C, Soldering time : 3sec. No strength on contact. | No deformation of case of excessive looseness of the terminals. | X | — | |
| Solderability | Soldering temperature : 245°C Duration of immersion :soldering, for 5 sec. | New uniform coating of solder shall cover minimum of 95 % of the surface being immersed. | X | — | |
| Remarks | | | | | |
| Note 1: Include the temperature rising by current. | | | | | |
| Note 2: No condensing | | | | | |
| Note 3:Apply to the condition of long term storage for unused products befor pcb on board, After pcb on board, operating temperature and humiditty range is applied for interim storage during transportation. | | | | | |
| | Count | Description of revisions | Designed | Checked | Date |
| ① | 1 | | | | |
| Unless otherwise specifid , refer to IEC 60512. | | | Approved | KI. AKIYAMA | 15.06.11 |
| | | | Checked | HK. UMEHARA | 15.06.11 |
| | | | Designed | ST. SATO | 15.06.11 |
| | | | Drawn | MI. SAKIMURA | 15.06.11 |
| Note QT:Qualification Test AT:Assurance Test X:Applicable Test | | | Drawing no. | | ELC-361873-23-00 |
| HRS | Specification sheet | | Part no. | DF61Y-2P-2. 2V (23) | |
| | Hirose electric co., ltd. | | Code no. | CL666-5100-3-23 | ① 1/1 |