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In case of consideration for using Automotive equipment/device which demand high reliability, kindly contact our sales window correspondents.

| Applicable standard | | | | | |
|---|---|---|---|---|---|
| Rating △3 | Operating Temperature Range | -55to +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 | DF51A-3P-2DSA(##)<br>DF51-3P-2DS(##)<br>DF51-3EP-2C(##) | Current | | AWG 22 to 26 : 2.0A<br>AWG 28 : 1.0A<br>AWG 30 : 0.5A |
| | Applicable Contact | DF11-22SC(A)/SCF(A)<br>DF11-2428SC(A)/SCF(A)<br>DF11-30SC(A)/SCF(A) | UL・C-UL Rating | Voltage | 30 V AC/DC |
| | | | | Current | AWG 22 : 2.0A<br>AWG 24 to 28 : 1.0A<br>AWG 30 : 0.5A |
| | Voltage | 250 V AC/DC | | | |

# 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** △3 | | | | |
| Insulation Resistance | 500 V DC. | 1000 MΩ MIN. | X | — |
| Voltage Proof | 650 V AC for 1 min. | No flashover or breakdown. | X | — |
| **Mechanical Characteristics** | | | | |
| Mechanical Operation (Sn Plating) | 30 times insertion and extraction. | No damage, crack or looseness of parts. △3 | X | — |
| Mechanical Operation (Au Plating) | 50 times insertion and extraction. | | X | — |
| Mating and unmating Force (Sn Plating) | It takes out and inserts with a conformity connector. | 1.Insertion Force : 26.0N MAX.<br>2.Extraction Force : 0.75N MIN. | X | — |
| Mating and unmating Force (Au Plating) | It takes out and inserts with a conformity connector. | 1.Insertion Force : 17.7N MAX.<br>2.Extraction Force : 0.75N MIN. | X | — |
| Vibration | Frequency 10 to 55 Hz, single amplitude 0.75 mm, at 10 cycles for 3 direction. | No damage, crack or looseness of parts. △3 | X | — |
| Shock | Acceleration 490 $m/s^2$ duration of pulse 11 ms at 3 times for 3 directions. | | X | — |
| Contact extraction force | Pull out the cable after housing fixation. | 11.8N MIN | X | — |
| **Environmental Characteristics** | | | | |
| Damp Heat (Steady State) | Exposed at 40 ± 2°C , humidity 90 to 95 %, 96 h.<br>(After leaving the room temperature for 1 to 2h.) | 1.Insulation resistance: 500 MΩ MIN. △3<br>2.No damage, crack or looseness of parts. | X | — |
| Rapid Change Of Temperature | Temperature -55°C→ +105°C<br>Time 30min→ 30min<br>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.) | 1.Insulation resistance: 1000 MΩ MIN. △3<br>2.No damage, crack or looseness of parts. | X | — |
| Dry Heat | Exposed at 105±2°C, 96h | | X | — |
| Cold | Exposed at -55±3°C, 96h | | 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 before mount on pcb,
After mounted on pcb, operating temperature and humidity range is applied for interim storage during transportation.

| | COUNT | DESCRIPTION OF REVISIONS | DESIGNED | CHECKED | DATE |
|---|---|---|---|---|---|
| △3 | 6 | DIS-H-00004567 | TS.MIYAKI | SZ.ONO | 20190110 |

| | | |
|---|---|---|
| APPROVED | YN.TAKASHITA | 20160127 |
| CHECKED | YN.TAKASHITA | 20160127 |
| DESIGNED | TT.OHSAKO | 20160127 |
| DRAWN | TT.OHSAKO | 20160127 |

Unless otherwise specified, refer to IEC 60512.

Note QT:Qualification Test AT:Assurance Test X:Applicable Test

DRAWING NO. ELC-363930-00-00

| | | | | |
|---|---|---|---|---|
| HRS | SPECIFICATION SHEET | PART NO. | DF51-3S-2C | |
| | HIROSE ELECTRIC CO., LTD. | CODE NO. | CL543-5121-0-00 △3 | 1/1 |

FORM HD0011-2-1