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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 | Operating Temperature Range | -55°C to 125°C(Notes 1) | Storage Temperature Range | -10°C TO 60°C | |
| | Voltage | 30V AC/DC | Mating Connector | DF40TC-50DP-0. 4V(**) | |
| | Current | 0. 3A | | | |
| SPECIFICATIONS | | | | | |
| ITEM | TEST METHOD | REQUIREMENTS | QT | AT | |
| CONSTRUCTION | | | | | |
| General Examination | Visually and by measuring instrument. | ① According to drawing. | X | X | |
| Marking. | Confirmed visually. | | X | X | |
| ELECTRIC CHARACTERISTICS | | | | | |
| Contact Resistance | 20mV AC or less 1kHz, 1mA. | ① 90mΩ MAX. | X | - | |
| Insulation Resistance | 100V DC. | ① 50MΩ MIN. | X | - | |
| Voltage Proof | 100V AC for 1 min. | ① No flashover or breakdown. | X | - | |
| MECHANICAL CHARACTERISTICS | | | | | |
| Mechanical Operation | 10times insertions and extractions. | ① Contact resistance: 90mΩ MAX. ② No damage, crack or looseness of parts. | X | - | |
| Vibration | Frequency 10 to 500, acceleration 49 m/s ² . Sweep time 1 oct/min. 8h for 3 axial directions. | ① No electrical discontinuity of 1 μs. ② No damage, crack or looseness of parts. | X | - | |
| Shock | Acceleration 980 m/s ² , duration of pulse 6 ms at 3 times for 3 directions. | | X | - | |
| ENVIRONMENTAL CHARACTERISTICS | | | | | |
| Rapid Change of Temperature | Temperature -55 → 125 °C Time 30 → 30 min Under 1000 cycles. | ① Contact resistance: 90mΩ MAX. ② No damage, crack or looseness of parts. | X | - | |
| Dry Heat | Exposed at 125 °C, 1,000 h. | | X | - | |
| Damp Heat | Exposed at 60 ± 2 °C Relative humidity 90 to 95 %, 1000 h. | ① Contact resistance: 90mΩ MAX. ② Insulation resistance: 25 MΩ MIN. ③ No damage, crack or looseness of parts. | X | - | |
| Damp Heat, Cyclic | Exposed at -10 to 65°C, Relative humidity 90 to 96%, 10cycles, total 240h. | | X | - | |
| Sulphur Dioxide | Exposed in 25 PPM for 96h, 40°C, Relative humidity 80%. | | X | - | |
| Heat Resistance of Soldering | Recommended temperature profile soldering area MAX 250°C, 220°C for 60 seconds MAX. Preheating area 150 to 180°C 90 to 120 seconds. Maximum twice action is allowed under the same condition. Recommended manual soldering condition Soldering iron temperature 350°C. Soldering time: within 3 seconds. | ① No deformation of case of excessive looseness of the terminals. | X | - | |
| Solderability | Soldering temperature: 245 ± 5°C Duration of immersion: soldering for 3±0.5 seconds. | A new uniform coating of solder shall cover a minimum of 95% of the surface being immersed. | X | - | |
| | COUNT | DESCRIPTION OF REVISIONS | DESIGNED | CHECKED | DATE |
| △ | 7 | DIS-H-00009674 | YK. SATAKE | TS. MIYAZAKI | 20210623 |
| REMARKS | | | APPROVED | WR. FUKUCHI | 20210402 |
| Note1: Include the temperature rising by current | | | CHECKED | TS. MIYAZAKI | 20210402 |
| | | | DESIGNED | YK. SATAKE | 20210402 |
| Unless otherwise specified, refer to JIS C 5402. IEC 60512. | | | DRAWN | YK. SATAKE | 20210402 |
| Note | QT:Qualification Test AT:Assurance Test X:Applicable Test | | DRAWING NO. | | ELC-389547-58-00 |
| HRS | SPECIFICATION SHEET | | PART NO. | DF40TC (2. 5) -50DS-0. 4V (58) | |
| | HIROSE ELECTRIC CO., LTD. | | CODE NO. | CL0684-4279-0-58 | △ 1/1 |