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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 | -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 | AC/DC 100V | APPLICABLE CONNECTOR | DF50A-*S-1C |
| | CURRENT | AWG 28 : 1.0 A<br>AWG 30 : 0.9 A | APPLICABLE CONTACT | DF50-2830SCFA |

# 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 | AC 20mV MAX 1mA (DC OR 1000 Hz). | 30mΩ MAX. | X | — |
| INSULATION RESISTANCE | 100V DC. | 500MΩ MIN. | X | — |
| VOLTAGE PROOF | 300V AC FOR 1 min. | NO FLASHOVER OR BREAKDOWN. | X | — |
| **MECHANICAL CHARACTERISTICS** | | | | |
| MECHANICAL OPERATION | 30TIMES INSERTIONS AND EXTRACTIONS. | ① CONTACT RESISTANCE: 50mΩ MAX.<br>② NO DAMAGE, CRACK OR LOOSENESS OF PARTS. | X | – |
| VIBRATION | FREQUENCY 10 TO 55 Hz, SINGLE AMPLITUDE 0.75 mm, AT 10 CYCLE FOR EACH, FOR 3 DIRECTIONS. | ① NO ELECTRICAL DISCONTINUITY OF 1μs.<br>② NO DAMAGE, CRACK OR LOOSENESS OF PARTS. | X | – |
| SHOCK | 490 m/s$^2$ DURATION OF PULSE 11 ms AT 3 TIMES FOR 3 DIRECTIONS. | | | |
| **ENVIRONMENTAL CHARACTERISTICS** | | | | |
| DAMP HEAT (STEADY STATE) | EXPOSED AT 40 ± 2 °C, 90 TO 95 %, 96 h. | ① CONTACT RESISTANCE: 50mΩ MAX.<br>② INSULATION RESISTANCE: 100MΩ MIN.<br>③ NO DAMAGE, CRACK OR LOOSENESS OF PARTS. | X | – |
| RAPID CHANGE OF TEMPERATURE | TEMPERATURE -55→+85℃<br>TIME 30→ 30min.<br>UNDER 5 CYCLES.<br>THE TRANSFERRING TIME OF THE TANK IS 2～3 min. | ① CONTACT RESISTANCE: 50mΩ MAX.<br>② INSULATION RESISTANCE: 500MΩ MIN.<br>③ NO DAMAGE, CRACK OR LOOSENESS OF PARTS. | X | – |

| | COUNT | DESCRIPTION OF REVISIONS | DESIGNED | CHECKED | DATE |
|---|---|---|---|---|---|
| 0 | | | | | |

| | | |
|---|---|---|
| APPROVED | KI. AKIYAMA | 12. 06. 26 |
| CHECKED | HK. UMEHARA | 12. 06. 26 |
| DESIGNED | ST. SATO | 12. 06. 26 |
| DRAWN | ST. SATO | 12. 06. 26 |

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

DRAWING NO. ELC4-346572-01

HRS

SPECIFICATION SHEET

HIROSE ELECTRIC CO., LTD.

PART NO. DF50A-*P-1H(51)

CODE NO. CL665- 0



FORM HD0011-2-1

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# SPECIFICATIONS

| ITEM | TEST METHOD | REQUIREMENTS | QT | AT |
|---|---|---|---|---|
| SOLDERABILITY | SOLDERED AT SOLDER TEMPERATURE,<br>245°C FOR INSERTION DURATION, 5 sec. | SOLDER SHALL COVER A MINIMUM OF<br>95 % OF THE SURFACE BEING IMMERSED. | X | – |
| RESISTANCE TO<br>SOLDERING HEAT | 1) REFLOW SOLDERING<br>≪REFLOW AREA≫<br>MAX250℃ WITHIN 10 sec<br>MIN 220℃ WITHIN 60 sec<br>《PREHEATING AREA》<br>150～180℃ 90～120s<br>2) MANUAL SOLDERING<br>SOLDERING IPON TEMPERRATURE 350±10℃<br>SOLDERING TIME 3～4s.<br>NO STRENGTH ON CONTACT. | NO DEFORMATION OF CASE OF<br>EXCESSIVE LOOSENESS OF THE<br>TERMINALS. | X | – |
| | | | | |

REMARKS
NOTE 1: INCLUDING THE TEMPERATURE RISE BY CURRENT.
NOTE 2: NON-CONDENSING
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

Unless otherwise specifid , refer to JIS C 5402.