


| 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 | 50 V AC/DC | UL | VOLTAGE | 29 V AC/DC |
| | CURRENT | AWG 28 : 2.5 A AWG 30 : 1.5 A AWG 32 : 1.0 A AWG 34 : 0.8 A | C-UL RATING | CURRENT | 2.5A |
| | APPLICABLE CONNECTOR | DF57H-2S-1.2C(##) |  | OPERATING TEMPERATURE RANGE | -35 °C TO +75°C (NOTE1) |

SPECIFICATIONS

| ITEM | TEST METHOD | REQUIREMENTS | QT | AT |
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CONSTRUCTION

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| GENERAL EXAMINATION | VISUALLY AND BY MEASURING INSTRUMENT. | ACCORDING TO DRAWING. | X | X |
| MARKING | CONFIRMED VISUALLY. | | X | X |

ELECTRIC CHARACTERISTICS

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|---|-------------------------------|----------------------------|---|---|
| CONTACT RESISTANCE MILLIVOLT LEVEL METHOD | 20mV MAX, 1mA (DC or 1000Hz). | 10 mΩ MAX. | X | - |
| INSULATION RESISTANCE | 100 V DC. | 100 MΩ MIN. | X | - |
| VOLTAGE PROOF | 500 V AC FOR 1 min. | NO FLASHOVER OR BREAKDOWN. | X | - |


MECHANICAL CHARACTERISTICS

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| 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: 0.9N MIN. | X | - |
| VIBRATION | FREQUENCY 10 TO 55 Hz, SINGLE AMPLITUDE 0.75 mm, AT 10 CYCLES FOR 3 DIRECTION. | ①NO ELECTRICAL DISCONTINUITY OF 1 μs. 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



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| 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: 100 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: 100 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 | - |

NOTE 1: INCLUDE THE TEMPERATURE RISING BY CURRENT.
NOTE2:NO CONDENSING
NOTE3: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.

| | COUNT | DESCRIPTION OF REVISIONS | DESIGNED | CHECKED | DATE |
|---|-------|--------------------------|--------------|---------------|------------|
|  | 1 | DIS-H-008827 | MI. SAKIMURA | TS. FUKUSHIMA | 14. 07. 07 |

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| REMARKS Unless otherwise specified, refer to IEC 60512. | APPROVED | K1. AKIYAMA | 12. 03. 19 |
| | CHECKED | HK. UMEHARA | 12. 03. 19 |
| | DESIGNED | TS. KUMAZAWA | 12. 03. 19 |
| | DRAWN | TS. KUMAZAWA | 12. 03. 19 |

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| Note QT:Qualification Test AT:Assurance Test X:Applicable Test | DRAWING NO. | ELC4-343904-01 |
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|  | SPECIFICATION SHEET | PART NO. | DF57H-2P-1. 2V (21) | | |
| | HIROSE ELECTRIC CO., LTD. | CODE NO. | CL666-0104-7-21 |  | 1/1 |