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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 85 °C (1) | STORAGE TEMPERATURE RANGE | -10 °C TO 60 °C (2) |
| | VOLTAGE | 200 V AC | OPERATING HUMIDITY RANGE | 40 % TO 80 %. |
| | CURRENT | 1 A | STORAGE HUMIDITY RANGE | 40 % TO 70 % (2) |

## SPECIFICATIONS

| ITEM | TEST METHOD | REQUIREMENTS | QT | AT |
|---|---|---|---|---|
| **CONSTRUCTION** | | | | |
| GENERAL EXAMINATION | VISUALLY AND BY MEASURING INSTRUMENT. | ACCORDING TO DRAWING. | × | × |
| MARKING | CONFIRMED VISUALLY. | | × | × |
| **ELECTRIC CHARACTERISTICS** | | | | |
| CONTACT RESISTANCE | 100 mA (DC OR 1000 Hz). | 15 mΩ MAX. | × | – |
| INSULATION RESISTANCE | 500 V DC | 1000 MΩ MIN. | × | – |
| VOLTAGE PROOF | 650 V AC FOR 1 min. | NO FLASHOVER OR BREAKDOWN. | × | – |
| **MECHANICAL CHARACTERISTICS** | | | | |
| CONTACT INSERTION AND EXTRACTION FORCES | □0.5±0.002mm BY STEEL GAUGE. | INSERTION FORCE: 2.45 N MAX.<br>EXTRACTION FORCE: 0.24 N MIN. | × | – |
| MECHANICAL OPERATION | 100 TIMES INSERTIONS AND EXTRACTIONS. | ①CONTACT RESISTANCE: 20 mΩ MAX.<br>②NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | × | – |
| VIBRATION | FREQUENCY 10 TO 55 Hz,<br>AMPLITUDE : 1.5 mm,<br>AT 2 h FOR 3 DIRECTIONS. | ①NO ELECTRICAL DISCONTINUITY OF 1 μs.<br>②NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | × | – |
| SHOCK | 490 m/s$^2$, DURATION OF PULSE 11 ms<br>AT 3 TIMES FOR 3 DIRECTIONS. | | × | – |
| **ENVIRONMENTAL CHARACTERISTICS** | | | | |
| DAMP HEAT (STEADY STATE) | EXPOSED AT 40±2 °C, 90 ～ 95 %, 96 h. | ①CONTACT RESISTANCE: 20 mΩ MAX.<br>②INSULATION RESISTANCE:1000 MΩ MIN. | × | – |
| RAPID CHANGE OF TEMPERATURE | TEMPERATURE-55→+15～+35→+85→+15～+35°C<br>TIME 30 → 5 MAX → 30 → 5 MAX min.<br>UNDER 5 CYCLES. | ③NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | × | – |
| CORROSION SALT MIST | EXPOSED IN 5 % SALT WATER SPRAY FOR 48 h. | ①CONTACT RESISTANCE: 20 mΩ MAX.<br>②NO HEAVY CORROSION. | × | – |
| SULPHUR DIOXIDE | EXPOSED IN 10 PPM FOR 96 h.<br>(TEST STANDARD: JEIDA - 39) | | × | – |
| RESISTANCE TO SOLDERING HEAT | 1) REFLOW SOLDERING :250 ℃ MAX,<br>220 ℃ MIN,<br>FOR 60 s | NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINALS. | × | – |
| | 2) SOLDERING IRON :360 ℃,<br>FOR 5 s | | × | – |
| SOLDERABILITY | SOLDERED AT SOLDER TEMPERATURE,<br>245±3°C,<br>FOR IMMERSION DURATION, 3 s. | A NEW UNIFORM COATING OF SOLDER SHALL COVER A MINIMUM OF 95 % OF THE SURFACE BEING IMMERSED. | × | – |

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

REMARK (1) TEMPERATURE RISE INCLUDED WHEN ENERGIZED.
(2) THIS STORAGE INDICATES A LONG-TERM STORAGE STATE FOR THE UNUSED PRODUCT BEFORE THE BOARD MOUNTED.

Unless otherwise specified, refer to MIL-STD-1344.

| | | |
|---|---|---|
| APPROVED | HS.OKAWA | 06.05.10 |
| CHECKED | HS.OZAWA | 06.05.10 |
| DESIGNED | KY.NAKAMURA | 06.05.10 |
| DRAWN | AK.SUZUKAWA | 06.04.18 |

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

DRAWING NO. ELC4-082603-21

HRS

SPECIFICATION SHEET

HIROSE ELECTRIC CO., LTD.

PART NO. A3-*DA-2SV(71)

CODE NO. CL621 △0 1/1

FORM HD0011-2-1