

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

| APPLICABLE STANDARD   |  | TEST METHOD   |                                | REQUIREMENTS          |                 | Q/T | AT       |
|---|--|---|--------------------------------|-----------------------|-----------------|-----|----------|
| OPERATING TEMPERATURE RANGE   | -55 °C TO 85 °C <sup>(1)</sup>   | STORAGE TEMPERATURE RANGE   | -10 °C TO 60 °C <sup>(2)</sup> |                       |                 | ×   | ×        |
| VOLTAGE   | 200 V AC   | OPERATING HUMIDITY RANGE  | 40 % TO 80 %.                  |                       |                 | ×   | ×        |
| CURRENT   | 1 A  | STORAGE HUMIDITY RANGE  | 40 % TO 70 % <sup>(2)</sup>    |                       |                 |     |          |
| <b>SPECIFICATIONS</b>   |  |   |                                |                       |                 |     |          |
| ITEM  | TEST METHOD  |   | REQUIREMENTS                   |                       | Q/T             | AT  |          |
| CONSTRUCTION  |  | VISUALLY AND BY MEASURING INSTRUMENT.   |                                | ACCORDING TO DRAWING. |                 | ×   | ×        |
| MARKING   |  | CONFIRMED VISUALLY.   |                                |                       |                 | ×   | ×        |
| <b>ELECTRIC CHARACTERISTICS</b>   |  |   |                                |                       |                 |     |          |
| CONTACT RESISTANCE  | 100 mA (DC OR 1000 Hz).  | 15 m $\Omega$ MAX.  |                                |                       |                 | ×   | -        |
| INSULATION RESISTANCE   | 500 V DC   | 1000 M $\Omega$ MIN.  |                                |                       |                 | ×   | -        |
| VOLTAGE PROOF   | 650 V AC FOR 1 min.  | NO FLASHOVER OR BREAKDOWN.  |                                |                       |                 | ×   | -        |
| <b>MECHANICAL CHARACTERISTICS</b>   |  |   |                                |                       |                 |     |          |
| CONTACT INSERTION AND EXTRACTION FORCES   | $\square$ 0.5 $\pm$ 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 m $\Omega$ MAX.<br>②NO DAMAGE, CRACK AND LOOSENESS OF PARTS.          |                                |                       |                 | ×   | -        |
| VIBRATION   | FREQUENCY 10 TO 55 Hz.<br>AMPLITUDE : 1.5 mm,<br>AT 2h FOR 3 DIRECTIONS.   | ①NO ELECTRICAL DISCONTINUITY OF 1 $\mu$ s.<br>②NO DAMAGE, CRACK AND LOOSENESS OF PARTS.       |                                |                       |                 | ×   | -        |
| SHOCK   | 490 ms <sup>2</sup> , DURATION OF PULSE 11 ms<br>AT 3 TIMES FOR 3 DIRECTIONS.  |   |                                |                       |                 | ×   | -        |
| <b>ENVIRONMENTAL CHARACTERISTICS</b>  |  |   |                                |                       |                 |     |          |
| DAMP HEAT (STEADY STATE)  | EXPOSED AT 40 $\pm$ 2 °C, 90 ~ 95 %, 96 h.   | ①CONTACT RESISTANCE: 20 m $\Omega$ MAX.<br>②INSULATION RESISTANCE: 1000 M $\Omega$ MIN.       |                                |                       |                 | ×   | -        |
| RAPID CHANGE OF TEMPERATURE   | TEMPERATURE: -55 $\rightarrow$ +15 $\sim$ +35 $\rightarrow$ +85 $\rightarrow$ +15 $\sim$ +35 $\rightarrow$ 30 $\rightarrow$ 5 MAX $\rightarrow$ 30 $\rightarrow$ 5 MAX min.<br>UNDER 5 CYCLES. | ③NO DAMAGE, CRACK AND LOOSENESS OF PARTS.   |                                |                       |                 | ×   | -        |
| CORROSION SALT MIST   | EXPOSED IN 5 % SALT WATER SPRAY FOR 48h.   | ①CONTACT RESISTANCE: 20 m $\Omega$ MAX.<br>②NO HEAVY CORROSION.                               |                                |                       |                 | ×   | -        |
| SULPHUR DIOXIDE   | EXPOSED IN 10 PPM FOR 96h.<br>(TEST STANDARD: JEIDA - 39)  |   |                                |                       |                 | ×   | -        |
| RESISTANCE TO SOLDERING HEAT  | 1) REFLOW SOLDERING : 250 °C MAX, 220 °C MIN, FOR 60 s<br>2) SOLDERING IRON : 360 °C, FOR 5 s  | NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINALS.                               |                                |                       |                 | ×   | -        |
| SOLDERABILITY   | SOLDERED AT SOLDER TEMPERATURE: 245 $\pm$ 3 $\pm$ °C, FOR IMMERSION DURATION, 3 s.   | A NEW UNIFORM COATING OF SOLDER SHALL COVER A MINIMUM OF 95 % OF THE SURFACE BEING IMMERSSED. |                                |                       |                 | ×   | -        |
| COUNT   | DESCRIPTION OF REVISIONS   | DESIGNED  | CHECKED                        | DATE                  |                 |     |          |
| $\nabla$  |  |   |                                |                       |                 |     |          |
| REMARK <sup>(1)</sup> TEMPERATURE RISE INCLUDED WHEN ENERGIZED.<br><sup>(2)</sup> THIS STORAGE INDICATES A LONG-TERM STORAGE STATE FOR THE UNUSED PRODUCT BEFORE THE BOARD MOUNTED. |  |   |                                |                       |                 |     |          |
| Note QT: Qualification Test AT: Assurance Test X: Applicable Test   |  | DRAWING NO.   | ELC4-082603-21                 |                       |                 |     |          |
| <b>HRS</b>  |  | SPECIFICATION SHEET   |                                | PART NO.              | A3-*DA-2SV (71) |     |          |
|   |  | HIROSE ELECTRIC CO., LTD.   |                                | CODE NO.              | CL621           |     | $\nabla$ |
|   |  |   |                                |                       |                 |     | 1/1      |
|   | APPROVED   | HS. OKAWA   | 06.05.10                       |                       |                 |     |          |
|   | CHECKED  | HS. OZAWA   | 06.05.10                       |                       |                 |     |          |
|   | DESIGNED   | K.Y. NAKAMURA   | 06.05.10                       |                       |                 |     |          |
|   | DRAWN  | AK. SUZUKAWA  | 06.04.18                       |                       |                 |     |          |