|   | COUNT               | DESCRIPTION OF  | ESCRIPTION OF REVI  |   | ISIONS BY CHKD DA |        | DATE        | TE COUNT                        |   | NT   | DESCRIPTION OF REVISI           |               | /ISIONS   | BY         | CHKD           | DA       | TE  |
|---|---------------------|---|---|---|-------------------|--------|-------------|---------------------------------|---|--|---------------------------------|---------------|-----------|------------|----------------|----------|-----|
|   |                     |   |   |   |                   |        |             |                                 |   |  |                                 |               |           |            |                |          |     |
|   | 1.7047              | N E OTANDADE  |   |   |                   |        |             | $\Box \triangle$                |   |  |                                 |               |           |            |                |          |     |
| APPLICABLE STANDARD  Operating   55°0 + 105°0 (N + 1)   Storage   10°0 + 50°0 (N + 1) |                     |   |   |   |                   |        |             |                                 |   |  |                                 |               |           |            |                |          |     |
| RATING  |                     | Temperature Range   |   |   |                   |        |             |                                 |   | emperature Range -10°C to 60°C (   |                                 |               |           | Note3      | )              |          |     |
|   |                     | Operating Humidity<br>Range   |   | 20% to 80% (Note2)                                    |                   |        |             |                                 |   | orage Humidity 40% to 70% (Not   |                                 |               |           | ote3)      |                |          |     |
|   |                     | Current   |   |   |                   |        | WG 30       | G 30 : 1.0A                     |   |  | oltage 100V AC/I                |               |           | AC/D       | ЭС             |          |     |
| Guilent   |                     |   | AWG 28 : 1.0A   |   |                   |        |             | Applicable Connector KW30-4P-1C |   |  |                                 | ###)          |           |            |                |          |     |
|   |                     |   | SPECIFICATION   |   |                   |        |             |                                 | <u> ONS</u>   |  |                                 |               |           |            |                |          |     |
|   |                     | ITEM  | TEST METHOD   |   |                   |        |             |                                 |   | REQUIREMENTS   |                                 |               |           | QT         | AT             |          |     |
|   |                     | UCTION  | lve u   |   |                   |        |             |                                 |   |  |                                 |               |           |            |                | 1 -      |     |
| Gene<br>Mark  |                     | mination  | Visually and by measuring instrument.  According to drawing.                          |   |                   |        |             |                                 |   |  | 0                               | 0             |           |            |                |          |     |
|   |                     | CAL CHARAC  | Confirmed visually.   |   |                   |        |             |                                 |   |  |                                 |               |           |            |                |          |     |
|   | act Res             |   |   | 1 ERIS 11GS 20mV MAX, 10mA (DC or 1000Hz). 30 mΩ MAX. |                   |        |             |                                 |   |  |                                 | 1             |           |            |                |          |     |
|   |                     | el Method   | 30 III& WAY.  |   |                   |        |             |                                 |   |  | 0                               | -             |           |            |                |          |     |
|   |                     | sistance  | 250 V DC. 100   |   |                   |        |             |                                 |   | 100 MΩ MIN.  |                                 |               |           | 0          | <del>  -</del> |          |     |
| Volta   | ge Proc             | of  | 500 V AC for 1 min. No flashover or breakdown.  |   |                   |        |             |                                 |   |  | 0                               | _             |           |            |                |          |     |
| ME  | CHAN                | ICAL CHARAC   | TER   | ISTIC   | S                 |        |             |                                 |   |  |                                 |               |           |            |                |          |     |
| Matir   | ng and u            | nmating   | It takes out and inserts with a conformity connector ①Insertion Force : 14N MAX       |   |                   |        |             |                                 |   |  | Т <sub>о</sub>                  |               |           |            |                |          |     |
| force   | )                   |   |   |   |                   |        |             |                                 | (2  | ②Extraction Force : 1.5N MIN   |                                 |               |           | L          |                |          |     |
| Mech  | nanical (           | Operation   | 30 times insertion and extraction.  |   |                   |        |             |                                 | 1 2   | ①Contact resistance : 50mΩ MAX   |                                 |               |           |            |                |          |     |
| (Au Plating)  |                     |   |   |   |                   |        |             |                                 | 1.7   | ②No damage, crack or looseness of parts.   |                                 |               |           | 0          | -              |          |     |
| Vibra   | tion                |   | Francisco 10 to 55 Hz stoods on 19 1 4 50   |   |                   |        |             |                                 |   | ③Extraction Force: 1.5N MIN  |                                 |               |           | 1          |                |          |     |
| Vibra   | ition               |   | Frequency 10 to 55 Hz, single amplitude 1.52 mm, at 2 hours for 3 direction.          |   |                   |        |             |                                 | 1 2   | ①No electrical discontinuity of 1 $\mu$ s.<br>②Contact resistance : 50 m $\Omega$ MAX. |                                 |               |           | 0          | -              |          |     |
| Shoc  | k                   |   | Acceleration 490 m/s <sup>2</sup> duration of pulse 11 ms at 3times for 3 directions. |   |                   |        |             |                                 |   | ③No damage, crack or looseness of parts.   |                                 |               |           | 0          | _              |          |     |
| ENI   | /IDON               | IMENTAL CHA   |   |   |                   |        |             |                                 |   |  |                                 |               |           |            |                |          | L   |
|   |                     | IMENTAL CHA   |   |   |                   |        | -: d:+., 00 | ) +o 05                         | <b>%</b> 240  | ) h   G  | DO                              |               | 50 O M/   | \ <u> </u> |                | 1        |     |
| Damp Heat<br>(Steady State)   |                     |   | Exposed at 40 $\pm$ 2 $^{\circ}$ C , humidity 90 to 95 %, 240 h.                      |   |                   |        |             | 1.7                             | ①Contact resistance : 50 mΩ MAX.<br>②Insulation resistance : 100MΩ MIN. |  |                                 |               | 0         | _          |                |          |     |
|   |                     |   |   |   |                   |        |             |                                 | `   | ③No damage, crack or looseness of parts.   |                                 |               |           |            |                |          |     |
| Rapid   | d Chang             | e of  | Temperature -55 °C → 105 °C   |   |                   |        |             |                                 |   | ①Contact resistance : $50 \text{ m}\Omega$ MAX.  |                                 |               |           |            |                |          |     |
| Temp  | perature            |   | Time 30min → 30min  |   |                   |        |             |                                 | (2  | ②Insulation resistance : $100M\Omega$ MIN.   |                                 |               |           |            |                |          |     |
|   |                     |   | 25 Cycles. (The transferring time of the tank is 2 to 3 MIN)                          |   |                   |        |             |                                 | 1 -   | ③After Voltage proof test No flashover or breakdown.                                   |                                 |               |           | 0          | -              |          |     |
|   |                     |   |   |   |                   |        |             |                                 |   |  |                                 |               |           |            |                |          |     |
| Dry Heat  |                     |   | (After leaving the room temperature for 1 to 2h.)  Exposed at 105±2 °C. 250h          |   |                   |        |             |                                 |   | ④No damage, crack or looseness of parts.   |                                 |               |           | <u> </u>   |                |          |     |
|   |                     |   | ,   |   |                   |        |             |                                 |   |  |                                 |               |           |            |                | <u> </u> | _   |
| Cold  |                     |   | Exposed at -55±3 °C, 250h   |   |                   |        |             |                                 |   |  |                                 |               |           |            | 0              | -        |     |
| Corrosion, Salt Mist  |                     |   | Exposed in 35±2 % salt water spray for 48h.   |   |                   |        |             |                                 |   | С  | Contact resistance : 50 mΩ MAX. |               |           |            | 0              | _        |     |
| Hydrogen Sulfide  |                     |   | Exposed in $40\pm2^{\circ}$ C, humidity $80\pm5\%$ 3±1 ppm for 96h.                   |   |                   |        |             |                                 | C   | Contact resistance : 50 mΩ MAX.  |                                 |               |           | 0          | -              |          |     |
| Note  | 2: No c<br>3: Apply | de the temperature<br>ondensing<br>y to the condition o<br>humidity range is ap | of long t   | term sto  | orage fo          |        | •           |                                 |   | РСВ о  | n board.                        | After PCB on  | board, op | erating t  | temper         | ature    |     |
| Rem   | ark                 |   |   |   |                   |        |             | DRAV                            | VN  | DI   | ESIGNED                         | CHECKE        | D AP      | PROVE      | <del>-</del>   | RELEAS   | SED |
|   |                     |   |   |   |                   |        | 111011111   |                                 | Ι.  | I II ODINI   |                                 | IM CMITM      |           |            |                |          |     |
|   |                     |   |   |   |                   |        |             | J.H.SHIN                        |   | J.   | .H.SHIN                         | I S.M.LII     | M S.M.LIM |            |                |          |     |
|   |                     |   |   |   |                   |        | 22.11.14    |                                 | 2   | 22.11.14 22  |                                 | 1.14 22.11.14 |           | ;          |                |          |     |
|   |                     | ise specified, refer to   |   |   | 01:=:-            | 105 == | 27.2        | A B B                           | 0.4=:-  |  |                                 |               |           |            |                |          |     |
| NOT   | ⊨ QT:               | QUALIFICATION   | IEST  | AI: AS  | SUKAN             | NUE TE | SI 0:       | APPLI                           | CABLE   | : IES  | <u> </u>                        | PART NO.      |           |            |                |          |     |
| HIROSE KOREA CO.,LTD.   |                     |   |   | . SPECIFICATION SHEET                                 |                   |        |             | ET                              | KW30-4S-1H (800)  |  |                                 |               |           |            |                |          |     |
| CODE  | NO.(OL              | .D)   | DRAWING NO. CODE NO.  |   |                   |        | NO.         | o.<br>CL 6669-0006-7-800        |   |  |                                 |               |           |            |                |          |     |
| CL  |                     |   |   | ELC4-633959   |                   |        |             |                                 |   | OL 6   | 009-00                          |               | 000       |            | / 2            |          |     |

|   | ive equipment / device which demand high reliability, kindly contact our sales window correspondents. |
|---|---|
|   | ır sales wind   |
| s Reserved.                             | y contact ou  |
| ROSE ELECTRIC CO., LID. All Rights Rese | h reliability, kindly   |
| KIC CO., LI                             | and high reli   |
| SE ELECT                                | which dema  |
| 1 2024 HIRC                             | ent / device  |
| 24 Copyright 2024 HII                   | tive equipm   |
| May.1.202                               | ing Automot   |
|   | ation for us  |
|   | of consider   |
|   | In case   |

| Resista<br>Heat   | ance To Soldering | Duration | v time<br>er of reflow cycles : 2cycles MAX.<br>on above 220°C, 60sec. MAX.<br>emperature : 250°C 10sec. MAX. |            | ormation of case of excessive looseness terminals.                           | 0 | 1  |  |  |
|-------------------|-------------------|----------|---|------------|--|---|----|--|--|
| Soldera           | ability           | Solder   | ed at solder temperature 245 °C for<br>sion, duration, 5s.  |            | iform coating of solder shall cover<br>m of 95 % of the surface being<br>ed. | 0 | -  |  |  |
|                   |                   |          |   |            |  |   |    |  |  |
|                   |                   |          |   |            |  |   |    |  |  |
|                   |                   |          |   |            |  |   |    |  |  |
|                   |                   |          |   |            |  |   |    |  |  |
|                   |                   |          |   |            |  |   |    |  |  |
|                   |                   |          |   |            |  |   |    |  |  |
|                   |                   |          |   |            |  |   |    |  |  |
|                   |                   |          |   |            |  |   |    |  |  |
|                   |                   |          |   |            |  |   |    |  |  |
|                   |                   |          |   |            |  |   |    |  |  |
|                   |                   |          |   |            |  |   |    |  |  |
|                   |                   |          |   |            |  |   |    |  |  |
|                   |                   |          |   |            |  |   |    |  |  |
|                   |                   |          |   |            |  |   |    |  |  |
|                   |                   |          |   |            |  |   |    |  |  |
|                   |                   |          |   |            |  |   |    |  |  |
|                   |                   |          |   |            |  |   |    |  |  |
|                   |                   |          |   |            |  |   |    |  |  |
|                   |                   |          |   |            |  |   |    |  |  |
|                   |                   |          |   |            |  |   |    |  |  |
|                   |                   |          |   |            |  |   |    |  |  |
|                   |                   |          |   |            |  |   |    |  |  |
|                   |                   |          |   |            |  |   |    |  |  |
|                   |                   |          |   |            |  |   |    |  |  |
|                   |                   |          |   |            |  |   |    |  |  |
|                   |                   |          |   |            |  |   |    |  |  |
|                   |                   |          |   |            |  |   |    |  |  |
| NOTE              | QT: QUALIFICATIO  | N TEST   | AT: ASSURANCE TEST O: APPLIC  | CABLE TEST | PART NO.   |   |    |  |  |
| HIROSE KOREA CO   |                   |          |   |            | KW30-4S-1H (800)   |   |    |  |  |
| CODE NO.(OLD)  CL |                   |          | DRAWING NO.<br>ELC4-633959  | CODE NO.   | CL 6669-0006-7-800   |   | 2/ |  |  |