| APPLICA  | BLE STAN                       | DARD   |   |       |  |  |                    | -                           |                  |                 |
|--|--------------------------------|--|---|-------|--|--|--------------------|-----------------------------|------------------|-----------------|
|  | OPERATING<br>TEMPERATURE RANGE |  | $\Gamma \Gamma_{0} O$ TO $\Omega \Gamma_{0} O$ (NOTE 1) |       |  | TORAGE<br>EMPERATURE RANGE   |                    | -10°C TO 60°C               |                  |                 |
| RATING   | VOLTAGE                        |  | 30V AC/DC   |       |  | APPLICABLE<br>CONNECTOR  |                    | DF40GB (*) -10DS-0. 4V (**) |                  |                 |
|  | CURRENT                        |  | 0. 3A   | 0. 3A |  |  |                    |                             |                  |                 |
|  |                                |  | SPEC  | IFICA |  | NS   |                    |                             |                  |                 |
| TI   | EM                             |  | TEST METHOD   |       |  |  | REC                | QUIREMENTS                  | QT               | A               |
|  | UCTION                         |  |   |       |  | •  |                    |                             |                  |                 |
|  |                                | VISUALLY AND BY MEASURING INSTRUMENT.  |   |       |  | ACCORDING TO DRAWING.  |                    |                             | Х                | Х               |
| MARKING<br>ELECTRIC CHARA                                      |                                | CONFIRMED VISUALLY.  |   |       |  |  |                    |                             | Х                | )               |
|  |                                |  | OR LESS 1khz,1m A .                                     |       |  | 90mΩ I   |                    |                             |                  | 1               |
|  |                                |  |   |       |  |  |                    |                             | Х                | -               |
| INSULATION RESISTANCE  |                                | 100V DC.   |   |       |  | 50MΩ MIN.  |                    |                             | Х                | -               |
| VOLTAGE PROOF  |                                | 100V AC FOR 1 min.   |   |       | NO FLASHOVER OR BREAKDOWN.   |  |                    | Х                           | _                |                 |
| MECHAN   | ICAL CHA                       | RACTE  | RISTICS   |       |  |  |                    |                             |                  | -               |
|  |                                | 30TIMES INSERTIONS AND EXTRACTIONS.  |   |       |  | <ol> <li>CONTACT RESISTANCE: 90mΩ MAX.</li> <li>NO DAMAGE, CRACK OR LOOSENESS OF<br/>PARTS.</li> </ol> |                    |                             | x                | _               |
| VIBRATION  |                                | FREQUENCY 10 TO 55 TO 10 Hz,APPROX 5min,<br>SINGLE AMPLITUDE 0.75 mm,10CYCLES,   |   |       | <ol> <li>NO ELECTRICAL DISCONTINUITY OF 1 μs.</li> <li>NO DAMAGE, CRACK OR LOOSENESS OF</li> </ol>   |  |                    | x                           | -                |                 |
| SHOCK  |                                | FOR 3 DIRECTIONS.<br>490 m/s <sup>2</sup> DURATION OF PULSE 11 ms AT 3 TIMES<br>FOR 3 DIRECTIONS.  |   |       | MES  | PARTS.<br>① NO ELECTRICAL DISCONTINUITY OF 1 μs.<br>② NO DAMAGE, CRACK OR LOOSENESS OF PARTS.          |                    |                             | x                | -               |
| ENVIRO   |                                | CHAR/  | CTERISTICS  |       |  | L. V.  |                    |                             | 1                | <u> </u>        |
| RAPID CHANGE OF<br>TEMPERATURE                                 |                                | TEMPERATURE -55 $\rightarrow$ 5 TO 35 $\rightarrow$ 85 $\rightarrow$ 5 TO 35 $^{\circ}$ CTIME30 $\rightarrow$ 5 MAX $\rightarrow$ 30 $\rightarrow$ 5 MAX minUNDER 5 CYCLES.  |   |       | <ol> <li>CONTACT RESISTANCE: 90mΩ MAX.</li> <li>INSULATION RESISTANCE: 50MΩ MIN.</li> <li>NO DAMAGE, CRACK OR LOOSENESS OF<br/>PARTS.</li> </ol> |  |                    | х                           | -                |                 |
| DAMP HEAT<br>(STEADY STATE)                                    |                                | EXPOSED AT 40 ± 2 °C, 90 TO 95 %, 96 h.  |   |       | <ol> <li>CONTACT RESISTANCE: 90mΩ MAX.</li> <li>INSULATION RESISTANCE: 25MΩ MIN.</li> <li>NO DAMAGE, CRACK OR LOOSENESS OF<br/>PARTS.</li> </ol> |  |                    | x                           | -                |                 |
| SULPHUR DIIOXIDE   |                                | EXPOSED IN 25 PPM FOR 96h,25°C,75%.  |   |       | <ol> <li>CONTACT RESISTANCE: 180mΩ MAX.</li> <li>NO DAMAGE, CRACK OR LOOSENESS OF<br/>PARTS.</li> </ol>  |  |                    | x                           | -                |                 |
|  |                                |  |   |       |  |  |                    |                             | Х                | _               |
| HEAT RESISTANCE OF<br>SOLDERING                                |                                | RECOMMENDED TEMPERATURE PROFILE<br>SOLDERING AREA<br>MAX 250°C, 220°C FOR 60 SECONDS MAX.<br>PREHEATING AREA<br>150 TO 180°C 90 TO 120SECONDS.<br>MAXIMUM TWICE ACTION IS ALLOWED UNDER THE<br>SAME CONDITION.<br>RECOMMENDED MANUAL SOLDERING CONDITION<br>SOLDERING IRON TEMPERATURE 350°C.<br>SOLDERING TIME: WIHTIN 3 SECONDS. |   |       | NO DEFORMATION OF CASE OF EXCESSIVE<br>LOOSENESS OF THE TERMINALS.   |  |                    | x                           | _                |                 |
| SOLDERABILITY  |                                | SOLDERING TEMPERATURE: 245±5°C<br>DURATION OF IMMERSION: SOLDERING FOR 3<br>±0.5 SECONDS.  |   |       | 83   | A NEW UNIFORM COATING OF SOLDER<br>SHALL COVER MINIMUM OF 95% OF THE<br>SURFACE BEING IMMERSED.        |                    |                             | х                | -               |
| COUN   | T DE                           |  | ON OF REVISIONS   |       | DESIG  | GNED   |                    | CHECKED                     | DA               | TE              |
|  |                                |  |   |       |  |  |                    |                             |                  |                 |
| REMARKS<br>NOTE1: INCLUDE THE TEMPERATURE RISING BY CURRENT    |                                |  |   |       |  |  | APPROVE<br>CHECKEI | D TS. MIYAZAKI              | 15.07.<br>15.07. |                 |
| Unless otherwise specified, re                                 |                                |  | , refer to JIS C 5402, IEC 60512.                       |       |  |  | DESIGNE            |                             | 15.0<br>15.0     |                 |
| Note QT:Qualification Test AT:Assurance Test X:Applicable Test |                                |  |   |       | יח   | DRAWN RR. AJ110<br>DRAWING NO. ELC-359672-58   |                    |                             |                  |                 |
|  |                                |  |   |       | PART   |  |                    | DF40GB-10DP-0. 4V (58       |                  | •               |
|  |                                |  | DSE ELECTRIC CO., LTD.                                  |       |  | NO.  |                    |                             |                  | 1/ <sup>.</sup> |

FORM HD0011-2-1