

| APPLICABLE STANDARD  |   |   |                             |                           |                         |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |   |   |
|--|---|---|-----------------------------|---------------------------|-------------------------|----|-----|----|----|-----|----|----|-----|----|----|-----|----|----|-----|----|----|-----|----|----|-----|----|---|---|
| RATING   | OPERATING TEMPERATURE RANGE   | -35°C TO +85°C (NOTES 1)  | STORAGE TEMPERATURE RANGE   | -10°C TO + 60°C (NOTES 2) |                         |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |   |   |
|  | VOLTAGE   | 50V AC  | APPLICABLE CONNECTOR        | DF17# (**)-*DS-0.5V (**)  |                         |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |   |   |
|  | CURRENT   | 0.3A  |                             |                           |                         |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |   |   |
| <b>SPECIFICATIONS</b>  |   |   |                             |                           |                         |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |   |   |
| ITEM   | TEST METHOD   | REQUIREMENTS  | QT                          | AT                        |                         |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |   |   |
| <b>CONSTRUCTION</b>  |   |   |                             |                           |                         |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |   |   |
| GENERAL EXAMINATION  | VISUALLY AND BY MEASURING INSTRUMENT.   | ACCORDING TO DRAWING.   | X                           | X                         |                         |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |   |   |
| MARKING  | CONFIRMED VISUALLY.   |   | X                           | X                         |                         |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |   |   |
| <b>ELECTRIC CHARACTERISTICS</b>  |   |   |                             |                           |                         |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |   |   |
| CONTACT RESISTANCE   | 100m A (DC OR 1000 Hz).   | 60mΩ MAX.   | X                           | -                         |                         |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |   |   |
| INSULATION RESISTANCE  | 100V DC.  | 500MΩ MIN.  | X                           | -                         |                         |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |   |   |
| VOLTAGE PROOF  | 150V AC FOR 1 min.  | NO FLASHOVER OR BREAKDOWN.  | X                           | -                         |                         |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |   |   |
| <b>MECHANICAL CHARACTERISTICS</b>  |   |   |                             |                           |                         |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |   |   |
| INSERTION AND WITHDRAWAL FORCES  | MEASURED BY APPLICABLE CONNECTOR.   | <table border="1"> <thead> <tr> <th>SIGNAL</th> <th>INSERTION FORCE (N)MAX</th> <th>WITHDRAWAL FORCE (N)MIN</th> </tr> </thead> <tbody> <tr><td>20</td><td>200</td><td>20</td></tr> <tr><td>30</td><td>300</td><td>30</td></tr> <tr><td>40</td><td>400</td><td>40</td></tr> <tr><td>50</td><td>500</td><td>50</td></tr> <tr><td>60</td><td>600</td><td>60</td></tr> <tr><td>70</td><td>700</td><td>70</td></tr> <tr><td>80</td><td>800</td><td>80</td></tr> </tbody> </table> | SIGNAL                      | INSERTION FORCE (N)MAX    | WITHDRAWAL FORCE (N)MIN | 20 | 200 | 20 | 30 | 300 | 30 | 40 | 400 | 40 | 50 | 500 | 50 | 60 | 600 | 60 | 70 | 700 | 70 | 80 | 800 | 80 | X | - |
| SIGNAL   | INSERTION FORCE (N)MAX  | WITHDRAWAL FORCE (N)MIN   |                             |                           |                         |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |   |   |
| 20   | 200   | 20  |                             |                           |                         |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |   |   |
| 30   | 300   | 30  |                             |                           |                         |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |   |   |
| 40   | 400   | 40  |                             |                           |                         |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |   |   |
| 50   | 500   | 50  |                             |                           |                         |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |   |   |
| 60   | 600   | 60  |                             |                           |                         |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |   |   |
| 70   | 700   | 70  |                             |                           |                         |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |   |   |
| 80   | 800   | 80  |                             |                           |                         |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |   |   |
| MECHANICAL OPERATION   | 50TIMES INSERTIONS AND EXTRACTIONS.   | ① CONTACT RESISTANCE: 60mΩ MAX.<br>② NO DAMAGE, CRACK OR LOOSENESS OF PARTS.  | X                           | -                         |                         |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |   |   |
| VIBRATION  | FREQUENCY 10 TO 55 Hz, SINGLE AMPLITUDE 0.75 mm, AT 2 h, FOR 3 DIRECTIONS.  | ① NO ELECTRICAL DISCONTINUITY OF 1μs.<br>② NO DAMAGE, CRACK OR LOOSENESS OF PARTS.  | X                           | -                         |                         |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |   |   |
| SHOCK  | 490 m/s <sup>2</sup> DURATION OF PULSE 11 ms AT 3 TIMES FOR 3 DIRECTIONS.   | ① NO ELECTRICAL DISCONTINUITY OF 1μs.<br>② NO DAMAGE, CRACK OR LOOSENESS OF PARTS.  | X                           | -                         |                         |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |   |   |
| <b>ENVIRONMENTAL CHARACTERISTICS</b>   |   |   |                             |                           |                         |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |   |   |
| RAPID CHANGE OF TEMPERATURE  | TEMPERATURE -55→ 5 TO 35→ 85→ 5 TO 35°C<br>TIME 30→10 TO 15→ 30→10TO15min<br>UNDER 5 CYCLES.  | ① CONTACT RESISTANCE: 60mΩ MAX.<br>② INSULATION RESISTANCE: 500 MΩ MIN.<br>③ NO DAMAGE, CRACK OR LOOSENESS OF PARTS.  | X                           | -                         |                         |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |   |   |
| DAMP HEAT (STEADY STATE)   | EXPOSED AT 40 ± 2 °C, 90 TO 95 %, 96 h.   | ① CONTACT RESISTANCE: 60mΩ MAX.<br>② INSULATION RESISTANCE: 250 MΩ MIN.<br>③ NO DAMAGE, CRACK OR LOOSENESS OF PARTS.  | X                           | -                         |                         |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |   |   |
| CORROSION SALT MIST  | EXPOSED IN 5% SALT WATER SPRAY FOR 48 h.  | ① CONTACT RESISTANCE: 60 mΩ MAX.<br>② NO HEAVY CORROSION.   | X                           | -                         |                         |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |   |   |
| SULPHUR DIOXIDE  | EXPOSED IN 10 PPM FOR 96 h.<br>(TEST STANDARD:JEIDA-39)   | ① CONTACT RESISTANCE: 60 mΩ MAX.<br>② NO HEAVY CORROSION.   | X                           | -                         |                         |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |   |   |
| HEAT RESISTANCE OF SOLDERING   | [RECOMMENDED TEMPERATURE PROFILE]<br>《SOLDERING AREA》<br>MAX250°C, 220°C FOR 60 SECONDS MAX.<br>《PREHEATING AREA》<br>150 TO 180°C 90~120 SECONDS.<br>MAXIMUM TWICE ACTION IS ALLOWED UNDER THE SAME CONDITION.<br>[RECOMMENDED MANUAL SOLDELING CONDITION ]<br>SOLDERING IRON TEMPERATURE 350°C<br>SOLDERING TIME : WITHIN 3 SECONDS. | NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINALS.   | X                           | -                         |                         |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |   |   |
| COUNT  | DESCRIPTION OF REVISIONS  | DESIGNED  | CHECKED                     | DATE                      |                         |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |   |   |
| △  |   |   |                             |                           |                         |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |   |   |
| REMARKS  |   | APPROVED  | MO.NAKAMURA                 | 05.11.09                  |                         |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |   |   |
| NOTES1:INCLUDING THE TEMPERATURE RISE BY CURRENT.  |   | CHECKED   | TS.MIYAZAKI                 | 05.11.08                  |                         |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |   |   |
| NOTES2:STORAGEIS DEFINED AS LONG-TERM STORAGE OF UNUSED PRODUCTS. APPLY OPERATION TEMPERATURE RANGE TO PRODUCTS MOUNTED ON PCB WITHOUT POWER SUPPLY. |   | DESIGNED  | YH.MICHIDA                  | 05.11.08                  |                         |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |   |   |
| UNLESS OTHERWISE SPECIFIED,REFER TO JIS C 0806.  |   | DRAWN   | HK.MURAKAMI                 | 05.11.08                  |                         |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |   |   |
| Note   | QT:Qualification Test AT:Assurance Test X:Applicable Test   | DRAWING NO.   | ELC4-162141-07              |                           |                         |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |   |   |
|  | SPECIFICATION SHEET   | PART NO.  | DF17B (4. 0) -*DP-0.5V (57) |                           |                         |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |   |   |
|  | HIROSE ELECTRIC CO., LTD.   | CODE NO.  | CL683                       | △ 1/1                     |                         |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |    |     |    |   |   |