





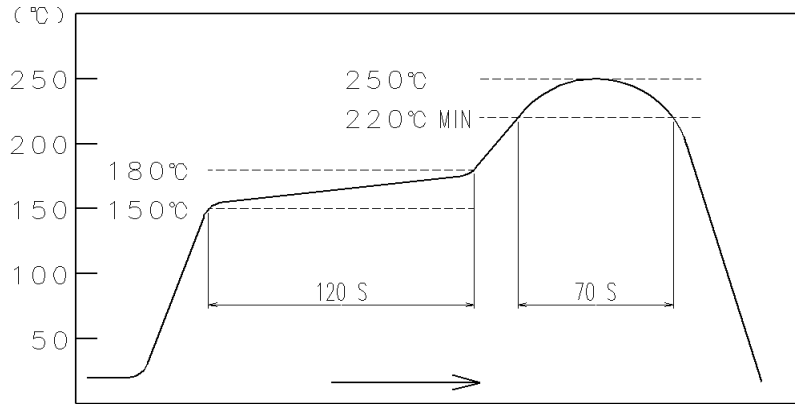
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| APPLICABLE STANDARD  |   | USB2.0 SPECIFICATION AND MICRO-USB CABLE AND CONNECTORS SPECIFICATION. |   |   |   |
|--|---|--|---|---|---|
| RATING   | OPERATING TEMPERATURE RANGE   | -30°C TO +85°C   | STORAGE TEMPERATURE RANGE   | -30°C TO +60 °C  |   |
|  | VOLTAGE   | 30 V AC  | CURRENT   | SIGNAL ONLY   | 1.0 A/pin   |
|  |   |  |   | POWER APPLY   | 1.8 A/pin (PIN No.1, No.5)<br>0.5 A/pin (PIN No.2-No.4)                                   |
| SPECIFICATIONS   |   |  |   |   |   |
| ITEM   | TEST METHOD   |  | REQUIREMENTS  | QT  | AT  |
| CONSTRUCTION   |   |  |   |   |   |
| GENERAL EXAMINATION  | VISUALLY AND BY MEASURING INSTRUMENT.   |  | ACCORDING TO DRAWING.   | X   | X   |
| MARKING  | CONFIRMED VISUALLY.   |  |   | X   | X   |
| ELECTRIC CHARACTERISTICS   |   |  |   |   |   |
| CONTACT RESISTANCE   | 100 mA (DC OR 1000 Hz).   |  | 30 mΩ MAX.  | X   | X   |
| INSULATION RESISTANCE  | 500 V DC.   |  | 100 MΩ MIN.   | X   | X   |
| VOLTAGE PROOF  | 100 V AC FOR 1 min.   |  | NO FLASHOVER OR BREAKDOWN.  | X   | X   |
| CAPASITANCE  | MEASURE ADJACENT TWO CONTACTS AT 1000±10 Hz AC VOLTAGE.   |  | 2 pF MAX.   | X   | —   |
| MECHANICAL CHARACTERISTICS   |   |  |   |   |   |
| INSERTION AND WITHDRAWAL FORCES  | A MAXIMUM RATE OF 12.5 mm/min. MEASURED BY APPLICABLE CONNECTOR.  |  | INSERTION FORCE 35 N MAX.<br>WITHDRAWAL FORCE 8 N MIN.  | X   | —   |
| MECHANICAL OPERATION   | 10000 TIMES INSERTIONS AND EXTRACTIONS.<br>MATING SPEED<br>- MECHANICALLY OPERATED: 500 CYCLES / h<br>OR<br>- MANUALLY OPERATED: 200 CYCLES / h |  | 1) CONTACT RESISTANCE: NO INCREASE OF MORE THAN 10 mΩ FROM INITIAL VALUE.<br>2) INSERTION FORCE 35 N MAX. WITHDRAWAL FORCE 8 N MIN.<br>3) NO DAMAGE, CRACK AND LOOSENESS, OF PARTS. | X   | —   |
| VIBRATION  | FREQUENCY 10 TO 55 Hz<br>SINGLE AMPLITUDE 0.75 mm, AT 2h<br>FOR 3 AXIAL DIRECTIONS, TOTAL 6h.   |  | 1) NO ELECTRICAL DISCONTINUITY OF 1 μs.<br>2) NO DAMAGE, CRACK AND LOOSENESS, OF PARTS.   | X   | —   |
| RANDOM VIBRATION   | FREQUENCY 50 TO 2000 Hz AT 15 min<br>FOR 3 AXIAL DIRECTIONS.  |  |   | X   | —   |
| SHOCK  | 490m/s <sup>2</sup> DURATIONS OF PULSE 11 ms AT 3 TIMES FOR 6 DIRECTIONS, TOTAL 18 TIMES.   |  |   | X   | —   |
| ENVIRONMENTAL CHARACTERISTICS  |   |  |   |   |   |
| THERMAL SHOCK  | TEMP -55 → +15 TO +35 → +85 → +15 TO +35 °C<br>TIME 30 → 2 TO 3 → 30 → 2 TO 3 min<br>UNDER 10 CYCLES.<br>(MATING APPLICABLE CONNECTOR)          |  | 1) CONTACT RESISTANCE: 70 mΩ MAX.<br>2) INSULATION RESISTANCE: 10 MΩ MIN.<br>3) NO DAMAGE, CRACK AND LOOSENESS, OF PARTS.   | X   | —   |
| HUMIDITY LIFE  | TEMPERATURE -10~65 °C, HUMIDITY 90 TO 98 %, UNDER 7 CYCLES (168 h)<br>(MATING APPLICABLE CONNECTOR)   |  | NO DAMAGE, CRACK AND LOOSENESS, OF PARTS.   | X   | —   |
| DRY HEAT   | EXPOSED AT +85±2 °C , 96 h.<br>(MATING APPLICABLE CONNECTOR)  |  | NO DAMAGE, CRACK AND LOOSENESS, OF PARTS.   | X   | —   |
| COLD   | EXPOSED AT -40±2 °C , 96 h.<br>(MATING APPLICABLE CONNECTOR)  |  | NO DAMAGE, CRACK AND LOOSENESS, OF PARTS.   | X   | —   |
| CORROSION SALT MIST  | EXPOSED AT 5 % SALT WATER, 35 °C,<br>FOR 48h. (LEFT UNDER UNMATED CONDITION.)   |  | NO HEAVY CORROSION.   | X   | —   |
|  | COUNT   | DESCRIPTION OF REVISIONS   | DESIGNED  | CHECKED   | DATE  |
|   | 1   | DIS-E-00010987   | KG. OKITA   | MN. KENJO   | 20220829  |
| REMARK   |   |  | APPROVED  | NM. NISHIMATSU  | 20151027  |
| HIROSE will not guarantee the performance on these specifications in case this product will be mated with the others which is not HIROSE's.<br>Unless otherwise specified, refer to USB2.0, EIA364 or IEC 60512. |   |  | CHECKED   | KN. ICHIKAWA  | 20151027  |
|  |   |  | DESIGNED  | TS. ITO   | 20151027  |
|  |   |  | DRAWN   | AK. AKIYAMA   | 20151027  |
| Note QT:Qualification Test AT:Assurance Test X:Applicable Test   |   |  | DRAWING NO.   | ELC-126332-33-00  |   |
|   | SPECIFICATION SHEET   |  | PART NO.  | ZX62-B-5PA (33)   |   |
|  | HIROSE ELECTRIC CO., LTD.   |  | CODE NO.  | CL0242-0033-8-33  |  1/2 |

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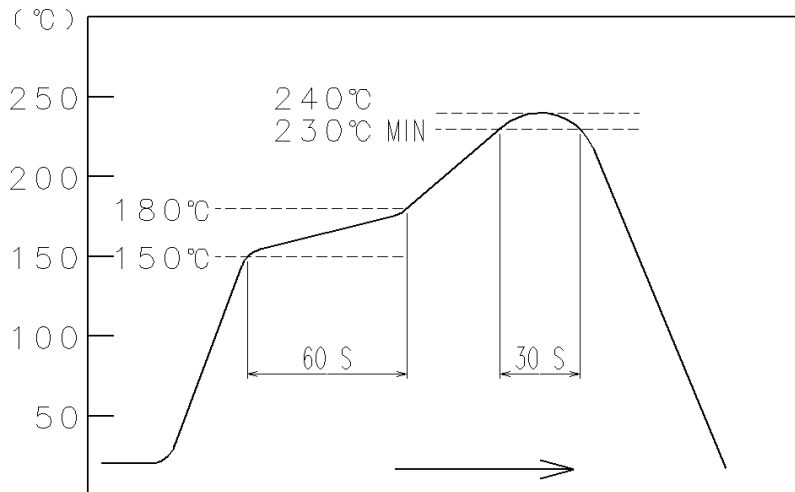
## SPECIFICATIONS

| ITEM                         | TEST METHOD  | REQUIREMENTS  | QT | AT |
|------------------------------|--|---|----|----|
| SOLDERABILITY                | SOLDERING POINT IMMERSED IN SOLDER BATH OF 255±5°C, 5 sec. (USING TYPE R FLAX) | SOLDER SHALL COVER MINIMUM OF 95% OF THE SURFACE BEING IMMERSED | X  | —  |
| RESISTANCE TO SOLDERING HEAT | A PROFILE IS SHOWN IN FIG-1, UNDER 2 CYCLES.                                   | NO DEFORMATION OR SIGNIFICANT LOOSENESS OF CONTACTS.            | X  | —  |



**FIG - 1 RESISTANCE TO SOLDERING HEAT**  
(TEMPERATURE AT TOP SURFACE OF CONNECTOR)

RECOMMENDED PROFILE REFERS TO FIG - 2.  
(TEMPERATURE AT SMT LEADS)



**FIG - 2 RECOMMENDED REFLOW PROFILE TEMPERATURE**

|  |                           |                              |                  |
|--|---------------------------|------------------------------|------------------|
| Note QT:Qualification Test AT:Assurance Test X:Applicable Test |                           | DRAWING NO. ELC-126332-33-00 |                  |
| <b>HRS</b>   | SPECIFICATION SHEET       | PART NO.                     | ZX62-B-5PA (33)  |
|  | HIROSE ELECTRIC CO., LTD. | CODE NO                      | CL0242-0033-8-33 |