

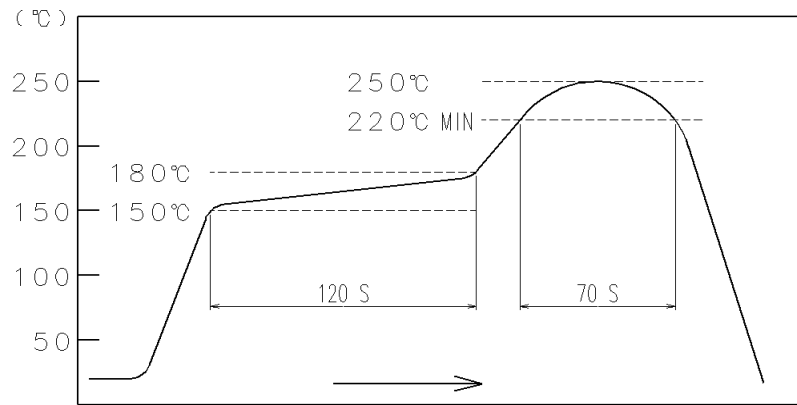
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| APPLICABLE STANDARD  |   | USB3.0 SPECIFICATION AND MICRO-USB CABLE AND CONNECTORS SPECIFICATION. |  |                   |   |             |
|--|---|--|--|-------------------|---|-------------|
| RATING   | OPERATING TEMPERATURE RANGE   | -30°C TO +85°C   | STORAGE TEMPERATURE RANGE  | -30°C TO +60°C    |   |             |
|  | VOLTAGE   | 30V 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,) |             |
| <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   | 100 mA (DC OR 1000 Hz).   |  | 30 mΩ MAX.   |                   | X   | X           |
| INSULATION RESISTANCE  | 500 V DC.   |  | 1000 MΩ MIN.   |                   | X   | X           |
| VOLTAGE PROOF  | 100 V AC FOR 1 min.   |  | NO FLASHOVER OR BREAKDOWN.   |                   | X   | X           |
| CAPACITANCE  | MEASURE ADJACENT TWO CONTACTS AT<br>1000 ± 10 Hz AC VOLTAGE.  |  | 2 pF MAX.  |                   | X   | -           |
| <b>MECHANICAL CHARACTERISTICS</b>  |   |  |  |                   |   |             |
| INSERTION AND WITHDRAWAL FORCES  | A MAXIMUM RATE OF 12.5 mm/min<br>MEASURED BY APPLICABLE CONNECTOR   |  | INSERTION FORCE 35 N MAX.<br>WITHDRAWAL FORCE 10 N MIN.(INITIAL)   |                   | 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:<br>NO INCREASE OF MORE THAN 10 mΩ<br>FROM INITIAL VALUE.<br>2) INSERTION FORCE 35 N MAX.<br>WITHDRAWAL FORCE 8 N MIN.<br>3) NO DAMAGE, CRACK AND LOOSENESS<br>OF PARTS. |                   | X   | -           |
| VIBRATION  | FREQUENCY 10 TO 55 Hz<br>SINGLE AMPLITUDE 0.75 mm, AT 2h<br>(6 HOURS IN TOTAL) FOR 3 AXIAL DIRECTIONS.  |  | 1) NO ELECTRICAL DISCONTINUITY OF<br>1μs.<br>2) NO DAMAGE, CRACK AND LOOSENESS<br>OF PARTS.  |                   | X   | -           |
| RANDOM VIBRATION   | FREQUENCY 50 TO 2000 Hz AT 15 min<br>(45 MINUTES IN TOTAL) FOR 3 AXIAL DIRECTIONS.  |  |  |                   | X   | -           |
| SHOCK  | 490 m/s <sup>2</sup> DIRECTIONS OF PULSE 11 ms AT 3 TIMES FOR<br>6 DIRECTIONS. (18 TIMES.)  |  |  |                   | X   | -           |
| <b>ENVIRONMENTAL CHARACTERISTICS</b>   |   |  |  |                   |   |             |
| 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: 100 MΩ MIN.<br>3) NO DAMAGE, CRACK AND LOOSENESS<br>OF PARTS.   |                   | X   | -           |
| HUMIDITY LIFE  | TEMPERATURE -10~65 °C, HUMIDITY 90 TO<br>98 %, UNDER 7 CYCLES (168 h)<br>(MATING APPLICABLE CONNECTOR)  |  | NO DAMAGE, CRACK AND LOOSENESS OF<br>PARTS.  |                   | X   | -           |
| DRY HEAT   | EXPOSED AT 85 ± 2 +25 °C, 96 h.<br>(MATING APPLICABLE CONNECTOR)  |  | NO DAMAGE, CRACK AND LOOSENESS OF<br>PARTS.  |                   | X   | -           |
| COLD   | EXPOSED AT -40 ± 2 +25 °C, 96 h.<br>(MATING APPLICABLE CONNECTOR)   |  | NO DAMAGE, CRACK AND LOOSENESS OF<br>PARTS.  |                   | X   | -           |
| CORROSION SALT MIST  | EXPOSED AT 5 % SALT WATER, 35 °C, FOR 48h.<br>(LEFT UNDER UNMATED CONDITION.)   |  | NO HEAVY CORROSION.  |                   | X   | -           |
| RESISTANCE TO SOLDERING HEAT   | A PROFILE IS SHOWN IN FIG-1, UNDR 2 CYCLES.   |  | NO DEFORMATION OR SIGNIFICANT<br>LOOSENESS OF CONTACTS.  |                   | X   | -           |
|  | COUNT   | DESCRIPTION OF REVISIONS   | DESIGNED   | CHECKED           | DATE  |             |
| △  |   |  |  |                   |   |             |
| REMARK   |   |  | APPROVED   | NM. NISHIMATSU    | 15. 10. 27  |             |
| 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 USB3.0, EIA364 or IEC 60512. |   |  | CHECKED  | KN. ICHIKAWA      | 15. 10. 27  |             |
|  |   |  | DESIGNED   | TS. ITO           | 15. 10. 27  |             |
|  |   |  | DRAWN  | AK. AKIYAMA       | 15. 10. 27  |             |
|  |   |  | Note QT:Qualification Test AT:Assurance Test X:Applicable Test   |                   |   | DRAWING NO. |
| <b>HRS</b>   | SPECIFICATION SHEET   |  | PART NO.   | ZX360D-B-10P (30) |   |             |
|  | HIROSE ELECTRIC CO., LTD.   |  | CODE NO.   | CL242-0500-1-30   | △   | 1/2         |

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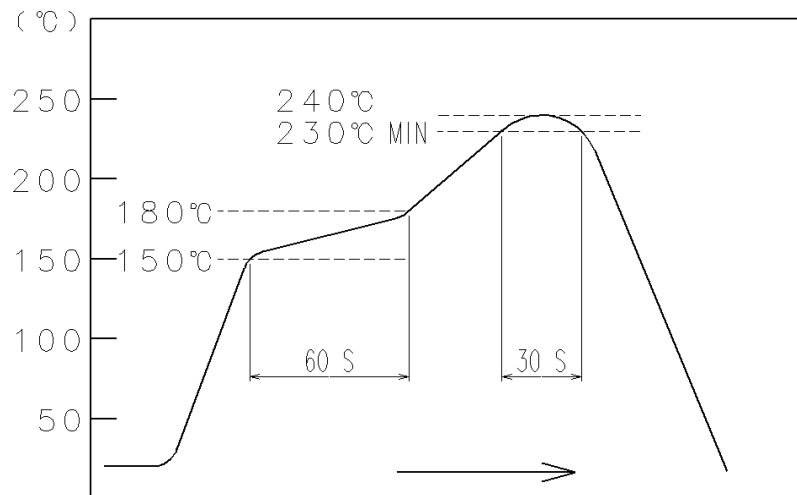
## SPECIFICATIONS

| ITEM | TEST METHOD | REQUIREMENTS | QT | AT |
|------|-------------|--------------|----|----|
|------|-------------|--------------|----|----|



**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-127028-30-00 |                            |
| <b>HRS</b>   | SPECIFICATION SHEET       |                              | PART NO. ZX360D-B-10P (30) |
|  | HIROSE ELECTRIC CO., LTD. |                              | CODE NO CL242-0500-1-30    |
|  |                           |                              | 2/2                        |