

2012/05/04 03:48:39 ctanke

DRAWING FOR REFERENCE: This is subject to change without notice

TO

| COUNT | DESCRIPTION OF REVISIONS | BY | CHKD | DATE | COUNT | DESCRIPTION OF REVISIONS | BY | CHKD | DATE |
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| APPLICABLE STANDARD | | USB2.0 SPECIFICATION AND MICRO-USB CABLES AND CONNECTORS SPECIFICATION | | | | | | | |
| RATING | OPERATING TEMPERATURE RANGE | -30 °C TO +85 °C | | | STORAGE TEMPERATURE RANGE | -30 °C TO +85 °C | | | |
| | VOLTAGE | AC 30V | | | OPERATING HUMIDITY RANGE | — % TO — % | | | |
| | CURRENT | ① 1 A/pin | | | APPLICABLE CABLE | — | | | |
| | ① SIGNAL ONLY | ② 1.8 A/pin (PIN No.1,5) | | | | | | | |
| ② POWER APPLY | 0.5 A/pin (PIN No.2-4) | | | | | | | | |
| SPECIFICATIONS | | | | | | | | | |
| ITEM | | TEST METHOD | | | REQUIREMENTS | | | QT | AT |
| CONSTRUCTION | | | | | | | | | |
| GENERAL EXAMINATION | | VISUALLY AND BY MEASURING INSTRUMENT. | | | ACCORDING TO DRAWING. | | | × | × |
| MARKING | | CONFIRMED VISUALLY. | | | | | | × | × |
| ELECTRICAL CHARACTERISTICS | | | | | | | | | |
| CONTACT RESISTANCE | | 100 mA (DC OR 1000 Hz). | | | 30 mΩ MAX. | | | × | × |
| INSULATION RESISTANCE | | 500 V DC. | | | 100 MΩ MIN. | | | × | × |
| VOLTAGE PROOF | | 100 V AC FOR 1 min. | | | NO FLASHOVER OR BREAKDOWN. | | | × | × |
| CAPASITANCE | | MEASURE ADJACENT TWO CONTACTS AT 1000±10Hz AC VOLTAGE. | | | 2 pF MAX | | | × | — |
| MECHANICAL CHARACTERISTICS | | | | | | | | | |
| INSERTION AND WITHDRAWAL FORCES | | A MAXIMUM RATE OF 12.5mm/min. MEASURED BY APPLICABLE CONNECTOR. | | | INSERTION FORCE 35 N MAX. WITHDRAWAL FORCE 8 N MIN. | | | × | — |
| MECHANICAL OPERATION | | 10000 TIMES INSERTIONS AND EXTRACTATIONS. MATING SPEED - MECHANICALLY OPERATED : 500 CYCLES / h - MANUALLY OPERATED : 200 CYCLES / h | | | ① CONTACT RESISTANCE : NO INCREASE OF MORE THAN 10 mΩ FROM INITIAL VALUE. ② INSERTION FORCE 35 N MAX. WITHDRAWAL FORCE 8 N MIN. ③ NO DAMAGE, CRACK AND LOOSENESS, OF PARTS. | | | × | — |
| VIBRATION | | FREQUENCY 10 TO 55 Hz, SINGLE AMPLITUDE 0.75 mm, AT 2 h, FOR 3 AXIAL DIRECTIONS, TOTAL 6 h. | | | ① NO ELECTRICAL DISCONTINUITY OF 1 μs. ② NO DAMAGE, CRACK AND LOOSENESS, OF PARTS. | | | × | — |
| RANDOM VIBRATION | | FREQUENCY 50 TO 2000 Hz, AT 15 min, FOR 3 AXIAL DIRECTIONS. | | | | | | × | — |
| SHOCK | | 490m/s ² DIRECTIONS OF PULSE 11 ms AT 3 TIMES FOR 6 DIRECTIONS, TOTAL 18 TIMES. | | | | | | × | — |
| ENVIRONMENTAL CHARACTERISTICS | | | | | | | | | |
| THERMAL SHOCK | | TEMP -55 → 15 TO 35 → 85 → 15 TO 35 °C TIME 30 → 2 TO 3 → 30 → 2 TO 3 min UNDER 10 CYCLES. (MATED WITH APPLICABLE CONNECTOR) | | | ① CONTACT RESISTANCE : 70 mΩ MAX. ② INSULATION RESISTANCE : 10 MΩ MIN. ③ NO DAMAGE, CRACK AND LOOSENESS, OF PARTS. | | | × | — |
| HUMIDITY LIFE | | TEMPERATURE -10~65 °C, HUMIDITY 90 TO 98 %, UNDER 7 CYCLES (168 h) (MATED WITH APPLICABLE CONNECTOR) | | | NO DAMAGE, CRACK AND LOOSENESS, OF PARTS. | | | × | — |
| REMARKS | | | | | DRAWN | DESIGNED | CHECKED | APPROVED | RELEASED |
| HIROSE will not guarantee the performance on these specifications in case this product will be mated with the others which is not HIROSE's. | | | | | <i>Fong Wong</i> | <i>M. Shimoyama</i> | <i>J. Aso</i> | <i>N. Mizoguchi</i> | |
| Unless otherwise specified, refer to USB2.0 or EIA364 | | | | | 08.4.14 | 08.4.14 | 08.04.14 | 08.04.15 | |
| Note QT:Qualification Test AT:Assurance Test ×:Applicable Test | | | | | | | | | |
| HRS HIROSE ELECTRIC CO., LTD. | | | | SPECIFICATION SHEET | | | PART NO. ZX80-B-5P | | |
| CODE NO.(OLD) | | DRAWING NO. ELC4-126723 | | | CODE NO. CL242-0051-0 | | | 1/2 | |



| SPECIFICATIONS | | | | |
|---------------------------------|--|--|----|----|
| ITEM | TEST METHOD | REQUIREMENTS | QT | AT |
| DRY HEAT | EXPOSED AT +85±2 °C, 96 h. (MATED WITH APPLICABLE CONNECTOR) | NO DAMAGE, CRACK AND LOOSENESS, OF PARTS. | × | — |
| COLD | EXPOSED AT -40±2 °C, 96 h. (MATED WITH APPLICABLE CONNECTOR) | NO DAMAGE, CRACK AND LOOSENESS, OF PARTS. | × | — |
| CORROSION SALT MIST | EXPOSED IN 5 % SALT WATER, 35 °C FOR 48 h. (LEFT UNDER UNMATED CONDITION) | NO HEAVY CORROSION. | × | — |
| SOLDERABILITY | SOLDERING POINT IMMERSED IN SOLDER BATH OF 255±5 °C, 5sec.(USING TYPE R FLUX) | SOLDER SHALL COVER MINIMUM OF 95 % OF THE SURFACE BEING IMMERSED. | × | — |
| RESISTANCE TO SOLDERING HEAT | A PROFILE IS SHOWN IN FIG-1, UNDER 2 CYCLES | NO DEFORMATION OR SIGNIFICANT LOOSENESS OF CONTACTS. | × | — |

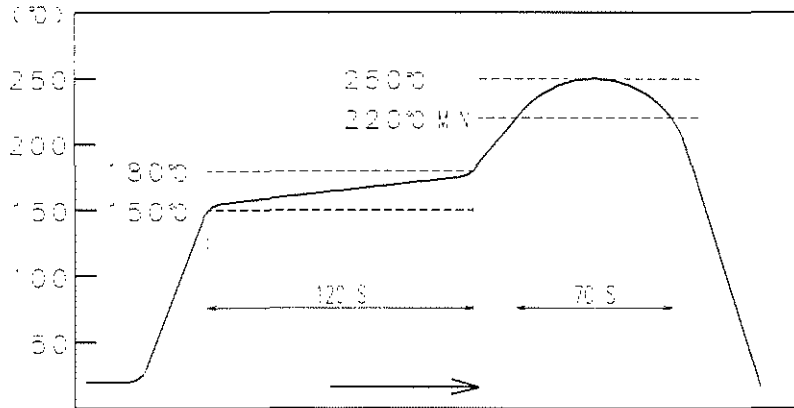


FIG - 1 RESISTANCE TO SOLDERING HEAT
(TEMPERATURE AT TOP SURFACE OF CONNECTOR)

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

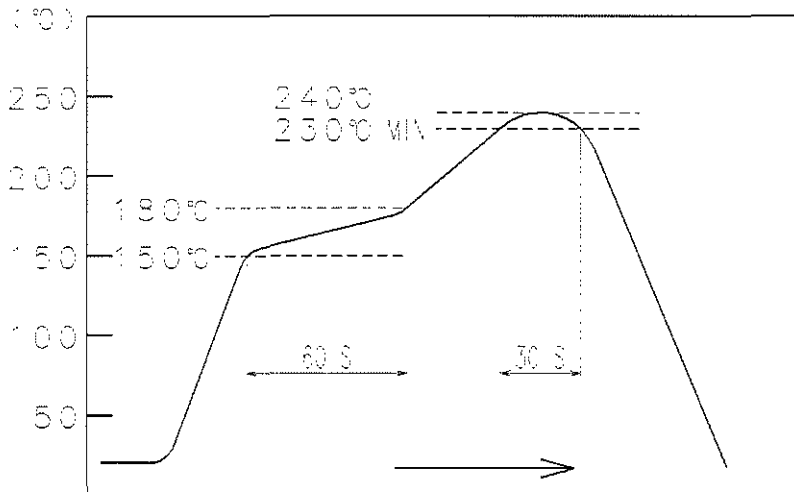


FIG - 2 RECOMMENDED REFLOW PROFILE TEMPERATURE

| | | | | | |
|---|-----------------------------|-------------------------------|---------------------------|-------------------------------|----------|
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| | <i>Feng Wang</i> 08.4.15 | <i>M. Shioyama</i> 08.4.15 | <i>J. Asu</i> 08.04.15 | <i>N. Miyoshi</i> 08.04.15 | |

Note QT:Qualification Test AT:Assurance Test X:Applicable Test

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| HRS HIROSE ELECTRIC CO., LTD. | SPECIFICATION SHEET | PART NO. ZX80-B-5P |
| CODE NO.(OLD) | DRAWING NO. ELC4-126723 | CODE NO. CL242-0051-0 |

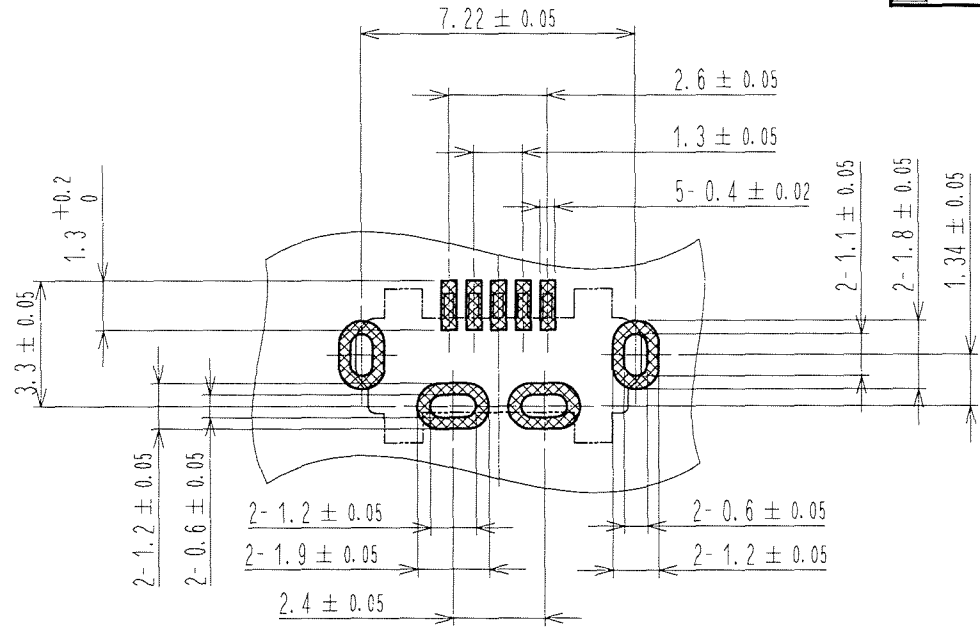
2/2



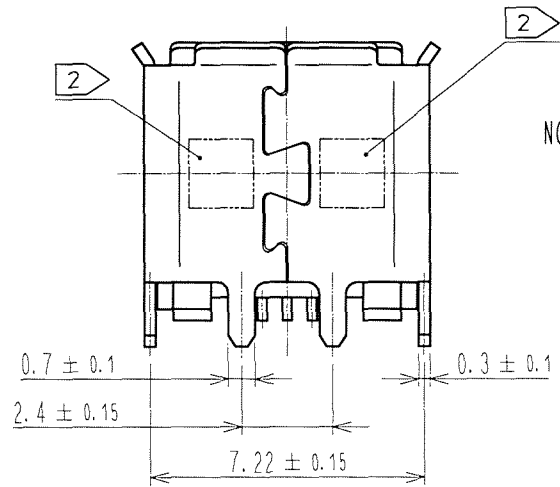
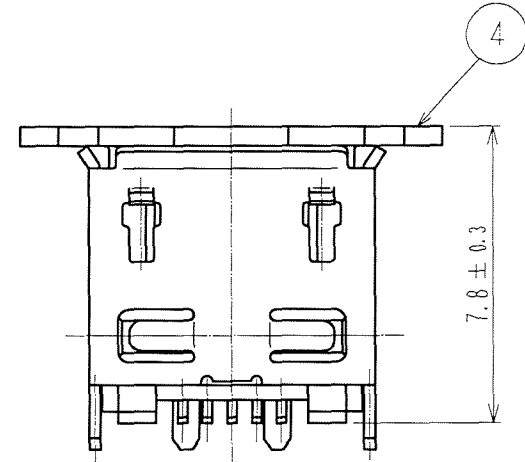
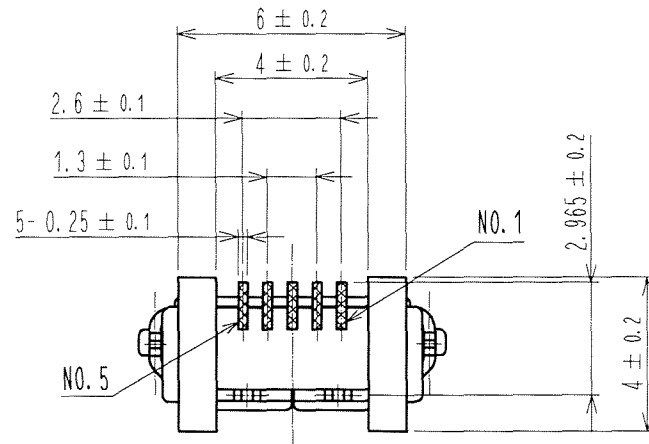
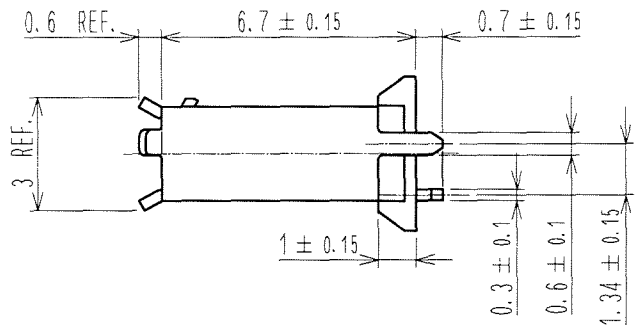
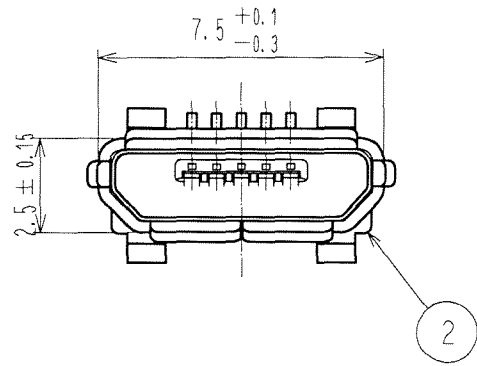
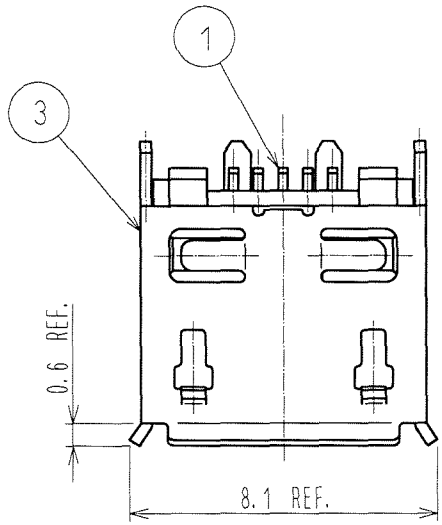
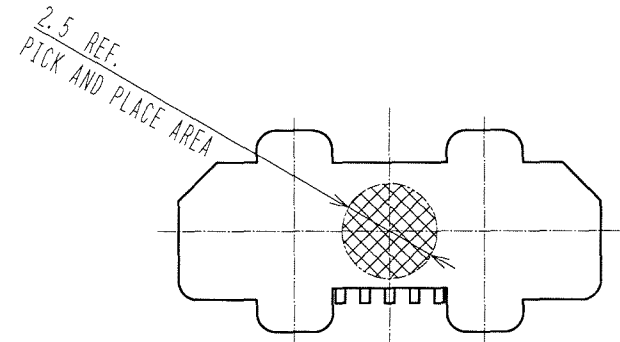
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| 1 | DIS-E-002592 | F. Wang | H. T | 08.12.15 | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

PCB LAYOUT



PICK AND PLACE CAP



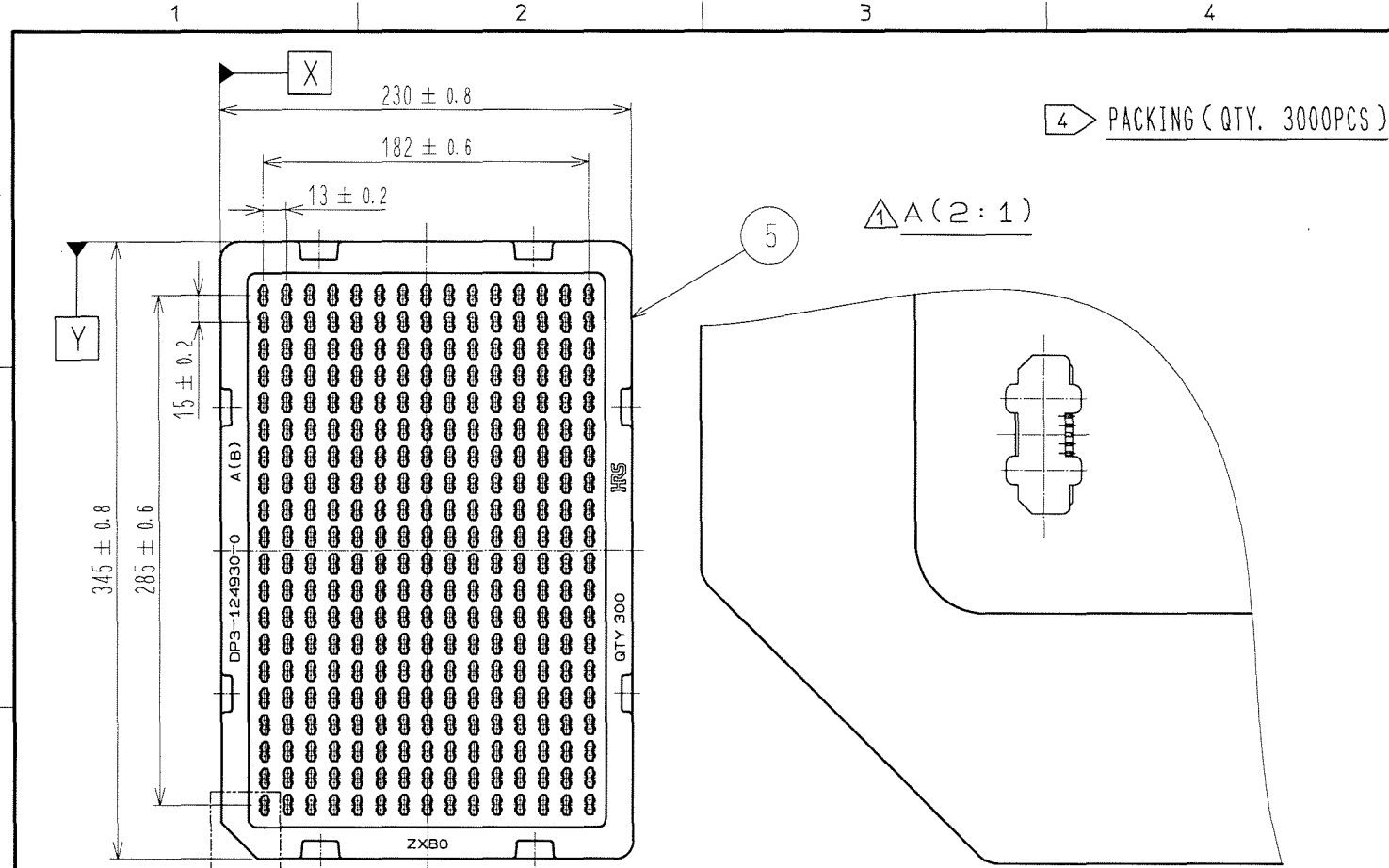
- NOTE
- CO-PLANARITY IS WITHIN 0.08.
 - LOT No. SHALL BE INDICATED AT THE POSITION AS SHOWN.
 - PLATING
CONTACT AREA : GOLD PLATE 0.75 μm MIN.
LEAD AREA : GOLD PLATE 0.05 μm MIN.
UNDER PLATING : NICKEL 2 μm MIN.
 - PACKING
300 PCS PER TRAY.
 - AS FOR PART No. 3, THE PERFORMANCE REMAINS GOOD EVEN IF THERE IS A RUBBING WOUND BY THE ASSEMBLY PROCESS, AND THE PERFORMANCE REMAINS GOOD EVEN IF THERE IS A DIFFERENCE OF THE COLOR OF PLATING WITH THE MANUFACTURING LOT.

| 2 | LCP | BLACK | UL94V-0 | 5 | PS | |
|-----|--------------|-----------------|---------|-----|-----------------|--|
| 1 | COPPER ALLOY | 3 | | 4 | POLYAMIDE RESIN | |
| | | | | 3 | STAINLESS STEEL | UNDER PLATING: NICKEL 0.2 μm MIN. OVER PLATING : TIN 1 μm MIN. LUBRICANT |
| NO. | MATERIAL | FINISH, REMARKS | | NO. | MATERIAL | FINISH, REMARKS |

| CODE NO.(OLD) | DRAWN | DESIGNED | CHECKED | APPROVED | RELEASED |
|---------------|------------|--------------|-----------|-------------|----------|
| | Feng. Wang | M. Shimoyama | T. Aso | N. Miyazaki | |
| | 08. 4. 15 | 08. 4. 15 | 08. 4. 15 | 08. 4. 15 | |

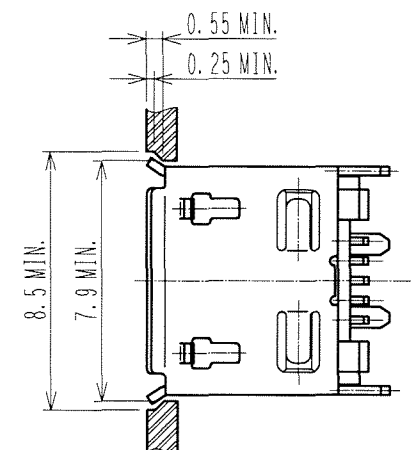
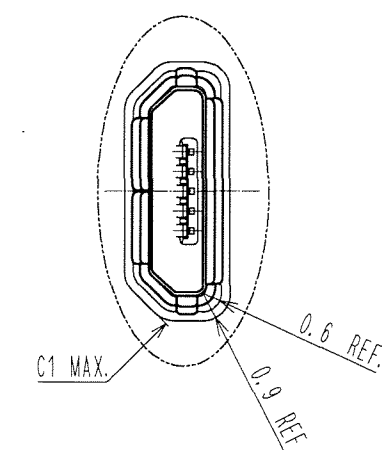
| | | |
|----------------|---------------------------------|--------------------------|
| SCALE 5 : 1 | DRAWING NO. EDC3-126723 | PART NO. ZX80-B-5P |
| UNITS mm | HRS HIROSE ELECTRIC CO., LTD | CODE NO. CL242-0051-0 |

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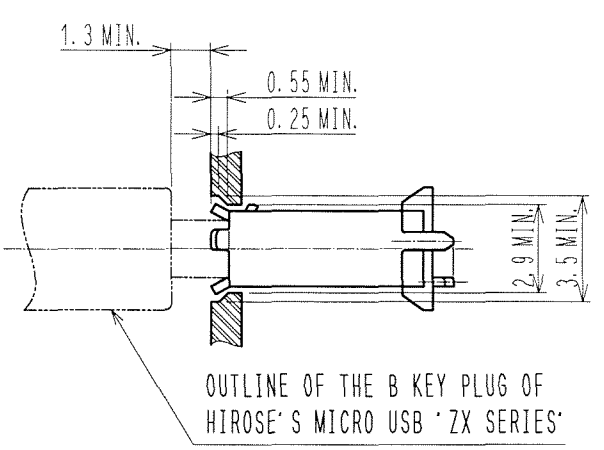


4 PACKING (QTY. 3000PCS)

RECOMMENDED PANEL CUTOUT (4:1)

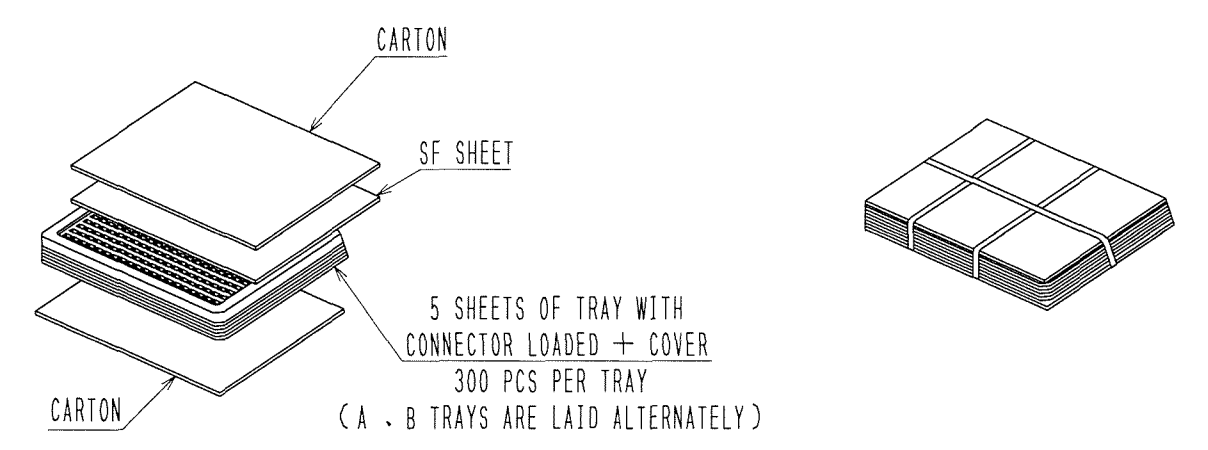


MATED WITH CORRESPONDING PLUG(4:1)

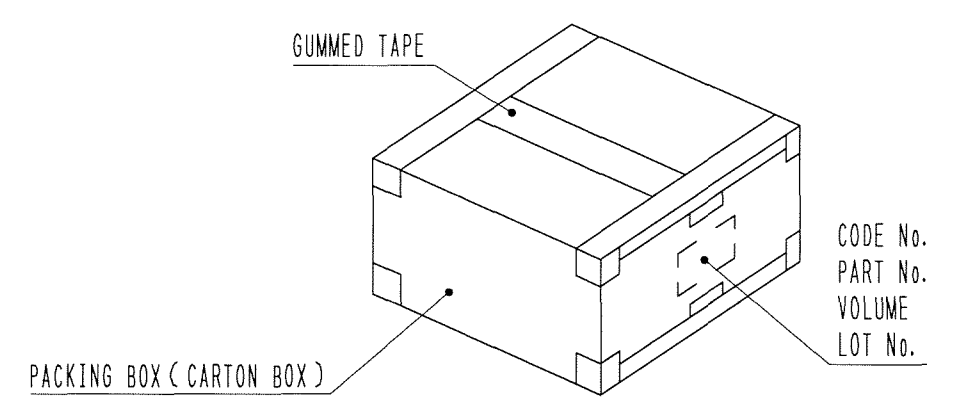


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| | | | | | | | | | |

- 1. STORE CONNECTORS IN A TRAY.
- 2. BAND TRAYS AS SHOWN BELOW.



- 3. STORE 2 UNITS OF BANDED TRAY INTO A CARTON BOX (K-1) (STORE A BOUNDARY PLATE ON TOP OF THE SURFACE, THEN CLOSE THE BOX BY STICKING GUMMED TAPE IN FOUR PARTS)



| NO. | MATERIAL | FINISH, REMARKS | NO. | MATERIAL | FINISH, REMARKS |
|-----|----------|-----------------|-----|----------|-----------------|
| | | | | | |
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| | 08. 4. 15 | 08. 4. 15 | 08. 4. 15 | 08. 4. 15 | |

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|-------|--------------------------|--------------|
| SCALE | DRAWING NO. | PART NO. |
| 1 : 4 | EDC3-126723 | ZX80-B-5P |
| UNITS | HIROSE ELECTRIC CO., LTD | CODE NO. |
| mm | | CL242-0051-0 |

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