

2011/12/15 03:54:57 CAROL TRIBBLE

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
△					△				
△					△				
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 ① SIGNAL ONLY ② 1.8 A/pin (PIN No.1,5) ② POWER APPLY 0.5 A/pin (PIN No.2-4)			APPLICABLE CABLE	—			
<b>SPECIFICATIONS</b>									
ITEM		TEST METHOD			REQUIREMENTS			QT	AT
<b>CONSTRUCTION</b>									
GENERAL EXAMINATION		VISUALLY AND BY MEASURING INSTRUMENT.			ACCORDING TO DRAWING.			×	×
MARKING		CONFIRMED VISUALLY.						×	×
<b>ELECTRICAL CHARACTERISTICS</b>									
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			×	—
<b>MECHANICAL CHARACTERISTICS</b>									
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 EXTRACTIONS. 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 <sup>2</sup> DIRECTIONS OF PULSE 11 ms AT 3 TIMES FOR 6 DIRECTIONS, TOTAL 18 TIMES.						×	—
<b>ENVIRONMENTAL CHARACTERISTICS</b>									
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									
<b>HRS</b> 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	



TO

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.	×	—

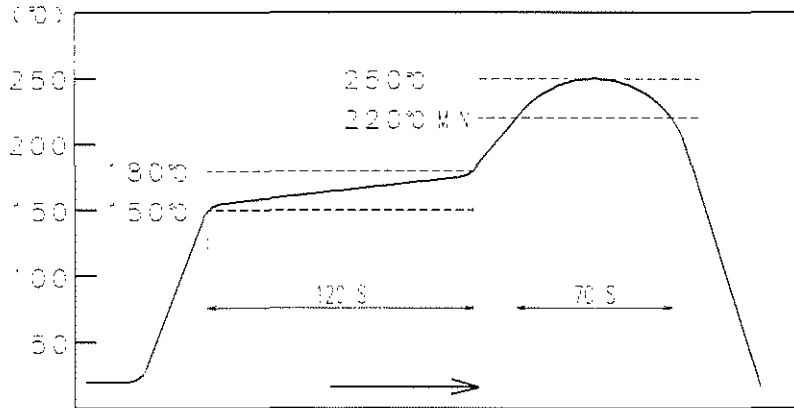


FIG - 1 RESISTANCE TO SOLDERING HEAT (TEMPERATURE AT TOP SURFACE OF CONNECTOR)

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

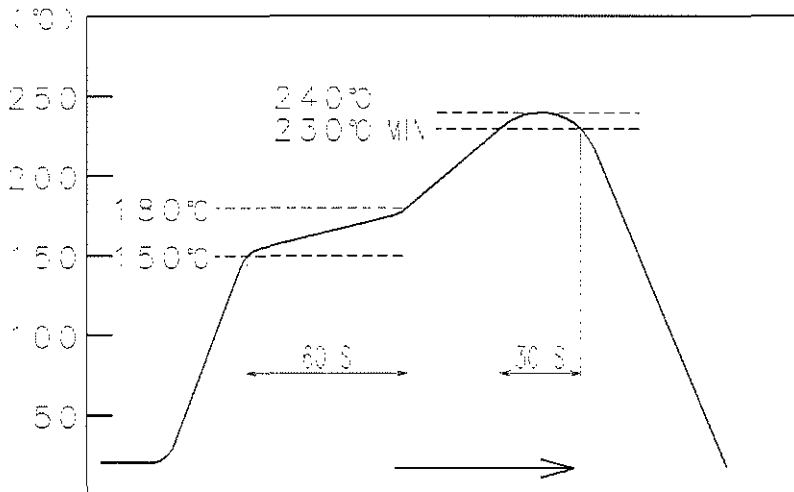


FIG - 2 RECOMMENDED REFLOW PROFILE TEMPERATURE

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.	Feng Wang 08.4.15	M. Shioyama 08.4.15	J. Asu 08.04.15	N. Miyoshi 08.04.15	
Unless otherwise specified, refer to USB2.0 or EIA364					

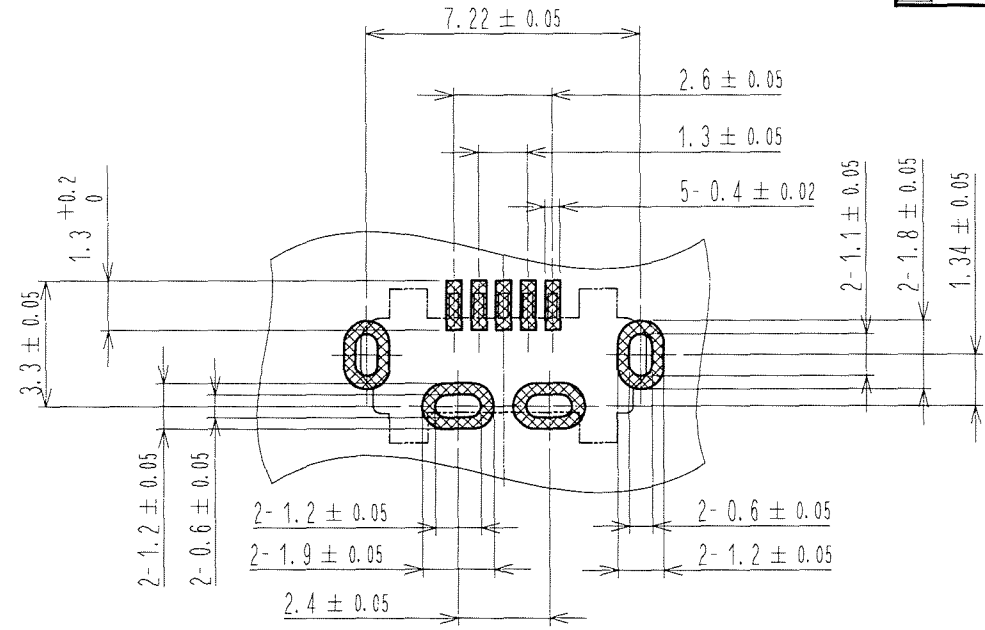
Note QT:Qualification Test AT:Assurance Test X:Applicable Test

<b>HRS</b> 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

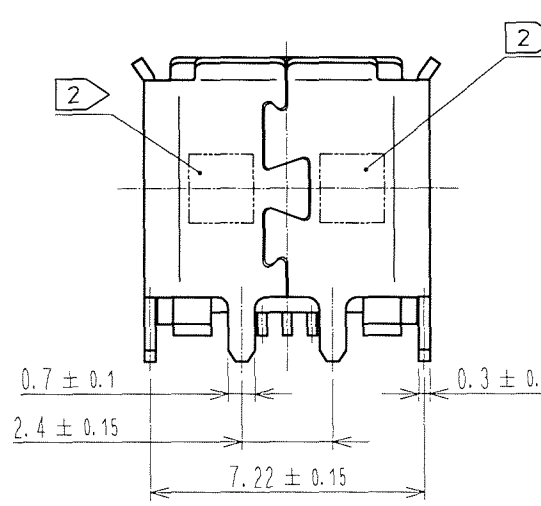
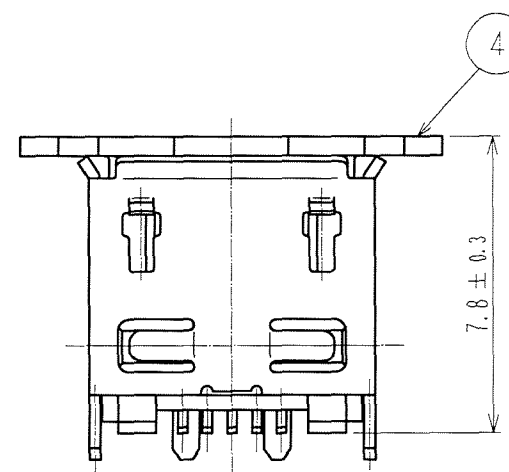
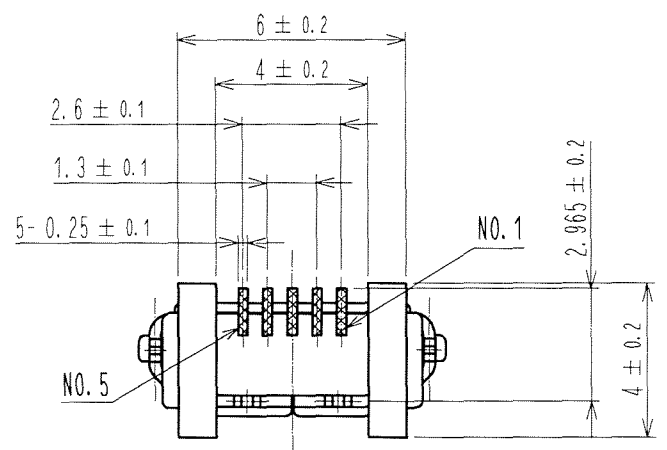
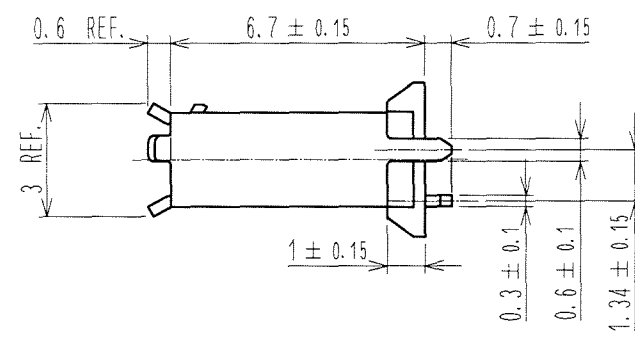
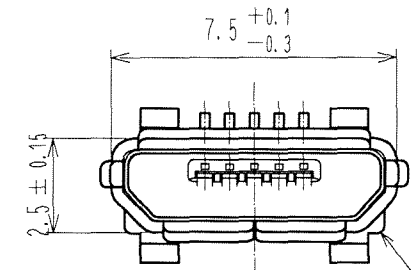
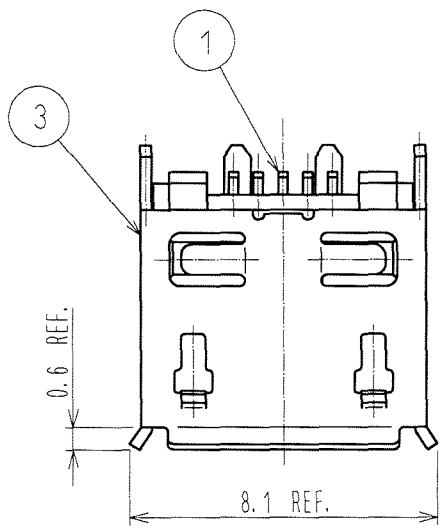
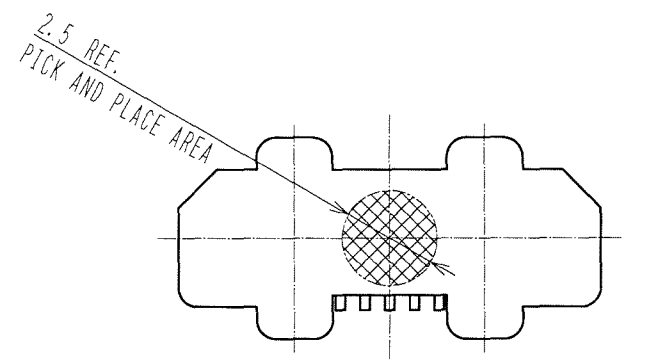
TO

COUNT	DESCRIPTION OF REVISIONS	BY	CHKD	DATE	COUNT	DESCRIPTION OF REVISIONS	BY	CHKD	DATE
1	DIS-E-002592	F. Wang	H.T	08.12.15					

PCB LAYOUT



PICK AND PLACE CAP



- NOTE
- 1 CO-PLANARITY IS WITHIN 0.08.
  - 2 LOT No. SHALL BE INDICATED AT THE POSITION AS SHOWN.
  - 3 PLATING  
CONTACT AREA : GOLD PLATE 0.75 μm MIN.  
LEAD AREA : GOLD PLATE 0.05 μm MIN.  
UNDER PLATING : NICKEL 2 μm MIN.
  - 4 PACKING  
300 PCS PER TRAY.
  - 5 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.

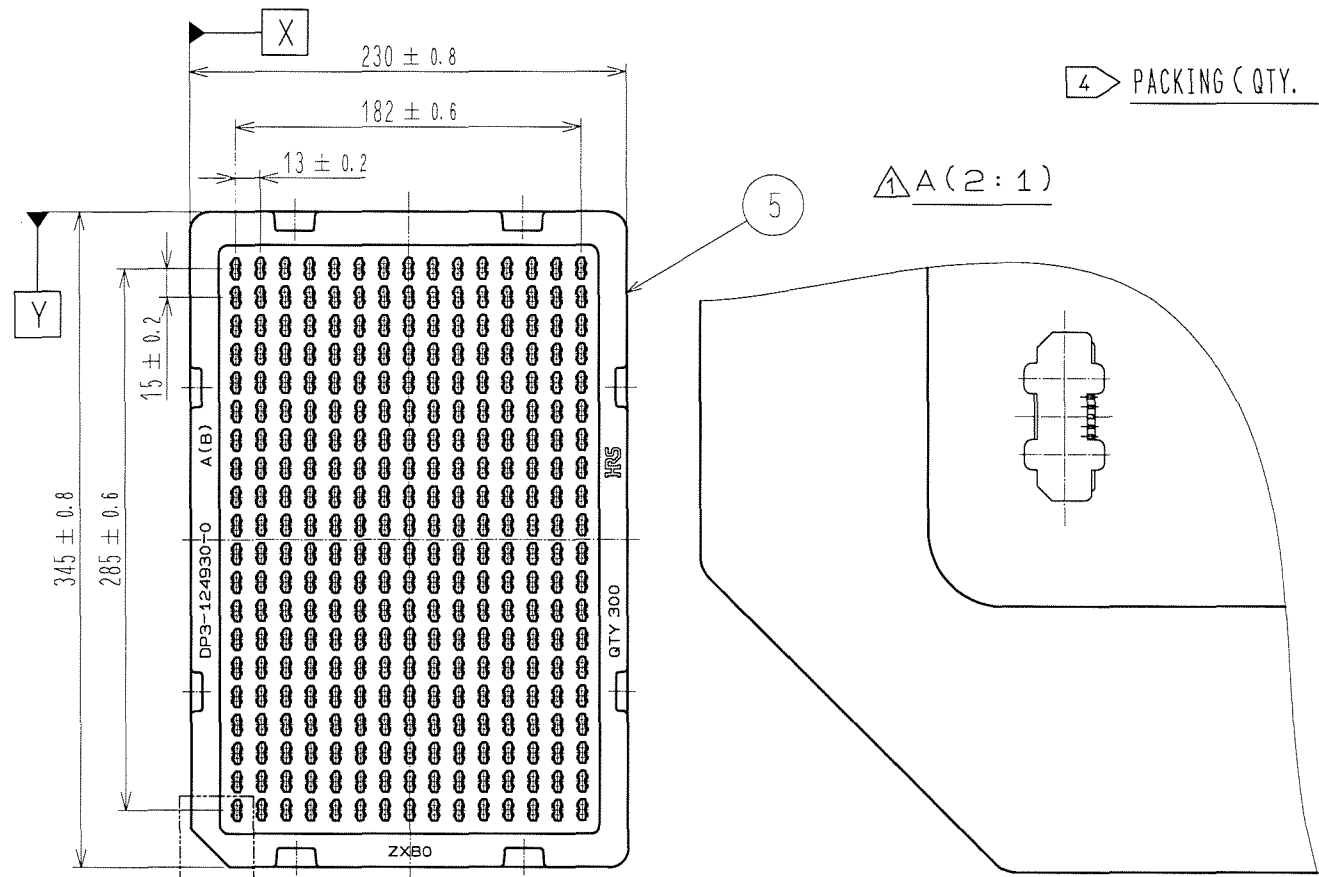
2	LCP	BLACK	UL94V-0	5	PS	
1	COPPER ALLOY	3		4	POLYAMIDE RESIN	
				3	STAINLESS STEEL	UNDER PLATING: NICKEL 0.2 μm MIN. OVER PLATING : TIN 1 μm MIN. LUBRICANT
NO.	MATERIAL	FINISH, REMARKS		NO.	MATERIAL	FINISH, REMARKS

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 UNITS mm	DRAWING NO. EDC3-126723 <b>HRS</b> HIROSE ELECTRIC CO., LTD	PART NO. ZX80-B-5P CODE NO. CL242-0051-0	1/2
-----------------------------------	--	---	-----

TO

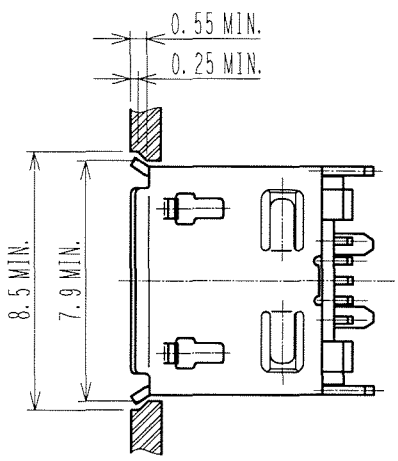
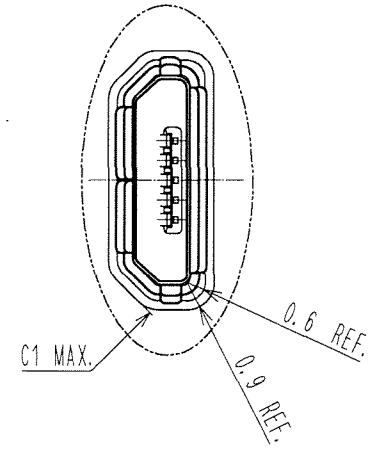
COUNT	DESCRIPTION OF REVISIONS	BY	CHKD	DATE	COUNT	DESCRIPTION OF REVISIONS	BY	CHKD	DATE



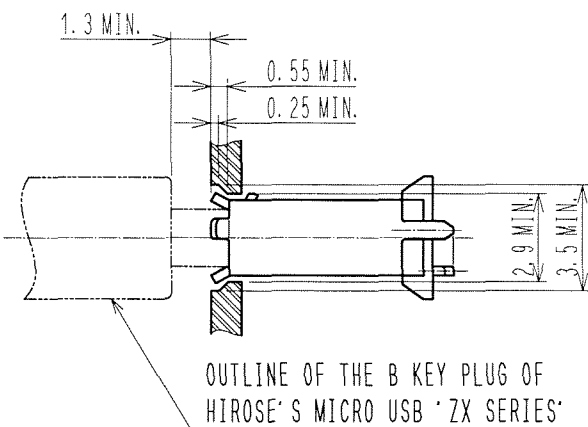
PACKING (QTY. 3000PCS)

A(2:1)

RECOMMENDED PANEL CUTOUT (4:1)



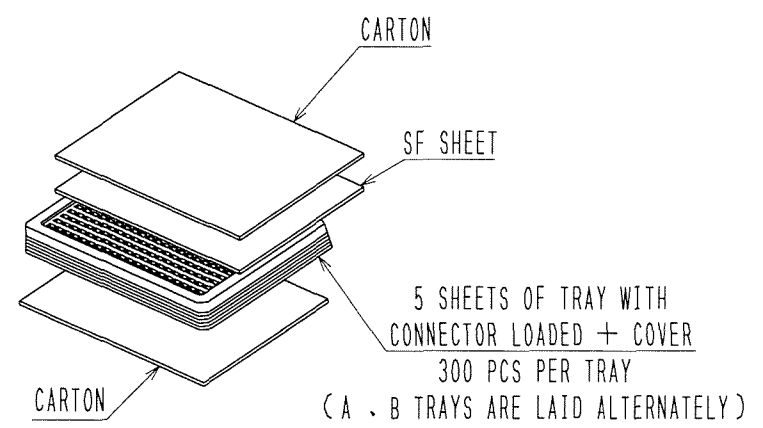
MATED WITH CORRESPONDING PLUG(4:1)



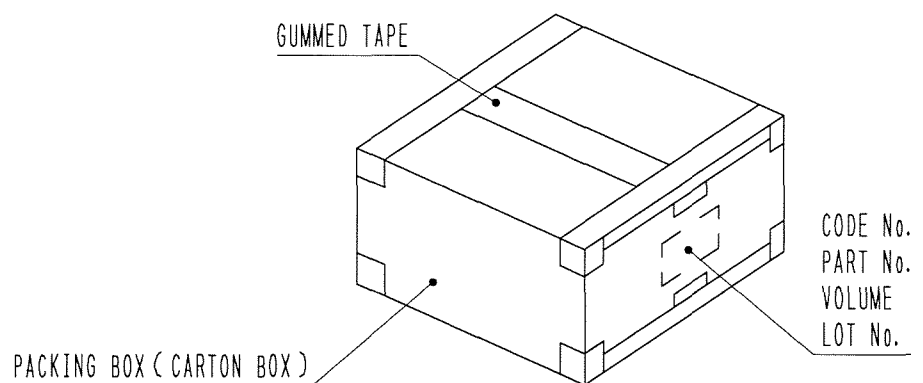
OUTLINE OF THE B KEY PLUG OF HIROSE'S MICRO USB 'ZX SERIES'

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

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