

APPLICABLE STANDARD		USB2.0 SPECIFICATION			
RATING	OPERATING TEMPERATURE RANGE	0 °C TO +50° C	STORAGE TEMPERATURE RANGE	-20 °C TO +60 °C	
	VOLTAGE	30V AC	OPERATING HUMIDITY RANGE	- % TO - %	
	CURRENT 1) SIGNAL ONLY 2) POWER APPLY	1) 1 A/pin 2) 1.8 A/pin (PIN No.1,5) 0.5 A/pin (PIN No.2-4)	APPLICABLE CABLE	USB CABLE 1) SIGNAL : AWG 28 MAX 2) POWER : AWG 26 MAX	
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
CAPACITANCE	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. WITHDRAWAL FORCE 8 N MIN.	X	—
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.	X	—
VIBRATION	FREQUENCY 10 TO 55 Hz, SINGLE AMPLITUDE 0.75 mm, AT 2h FOR 3 DIRECTIONS, TOTAL 6 h.		1) NO ELECTRICAL DISCONTINUITY OF 1 μs. 2) NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	X	—
RANDOM VIBRATION	FREQUENCY 50 TO 2000 Hz AT 15 min FOR 3 DIRECTIONS.			X	—
SHOCK	490 m/s <sup>2</sup> DIRECTIONS 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 TIME 30 → 2 TO 3 → 30 → 2 TO 3 min. UNDER 10 CYCLES. (MATING APPLICABLE CONNECTOR)		1) CONTACT RESISTANCE: 70 mΩ MAX. 2) INSULATION RESISTANCE: 10 MΩ MIN. 3) NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	X	—
HUMIDITY LIFE	TEMPERATURE -10 TO 65 °C, HUMIDITY 90 TO 98 % UNDER 7 CYCLES. (168 h) (MATING APPLICABLE CONNECTOR)		NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	X	—
DRY HEAT	EXPOSED AT 85±2 °C, 96 h. (MATING APPLICABLE CONNECTOR)		NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	X	—
COLD	EXPOSED AT -40±2 °C, 96 h. (MATING APPLICABLE CONNECTOR)		NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	X	—
CORROSION SALT MIST	EXPOSED IN 5 % SALT WATER, 35 °C, FOR 48 ± 4 h.		NO HEAVY CORROSION.	X	—
RESISTANCE TO SOLDERING HEAT	TEMPERATURE : 350±10 °C TIME : 5±1 s AT SOLDERING PARTS		NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	X	—
	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
0					
REMARK			APPROVED	A0. SUZUKI	07.03.06
			CHECKED	HK. TANAKA	07.03.06
			DESIGNED	TS. SAKAI ZAWA	07.03.06
			DRAWN	TS. SAKAI ZAWA	07.03.06
Unless otherwise specified, refer to USB2.0 or EIA364					
Note QT:Qualification Test AT:Assurance Test X:Applicable Test			DRAWING NO.	ELC4-126085-00	
<b>HRS</b>	SPECIFICATION SHEET		PART NO.	ZX20-B-5S-UNIT	
	HIROSE ELECTRIC CO., LTD.		CODE NO.	CL242-0012-8-00	△ 1/1

2007/03/07 18:11:18 TS. SAKAI ZAWA

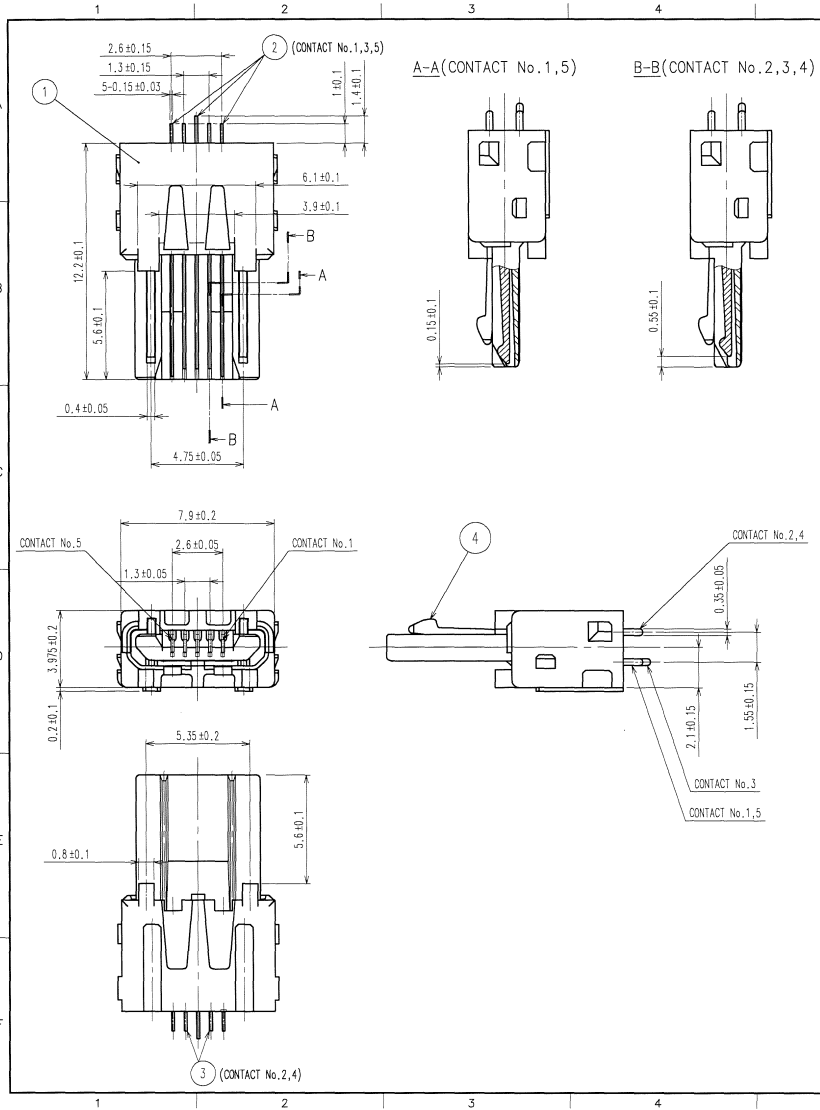
DRAWING FOR REFERENCE: This is subject to change without notice

APPLICABLE STANDARD		USB2.0 SPECIFICATION			
RATING	OPERATING TEMPERATURE RANGE	0 °C TO +50° C	STORAGE TEMPERATURE RANGE	-20 °C TO +60 °C	
	VOLTAGE	-	OPERATING HUMIDITY RANGE	- % TO - %	
	CURRENT	-	APPLICABLE CABLE	-	
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
	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
0					
REMARK			APPROVED	A0. SUZUKI	07. 03. 06
			CHECKED	HK. TANAKA	07. 03. 06
			DESIGNED	TS. SAKAI ZAWA	07. 03. 06
			DRAWN	TS. SAKAI ZAWA	07. 03. 06
Note QT:Qualification Test AT:Assurance Test X:Applicable Test			DRAWING NO.	ELC4-126148-00	
<b>HRS</b>	SPECIFICATION SHEET		PART NO.	ZX20-B-SLDC	
	HIROSE ELECTRIC CO., LTD.		CODE NO.	CL242-0022-1-00	△ 1/1

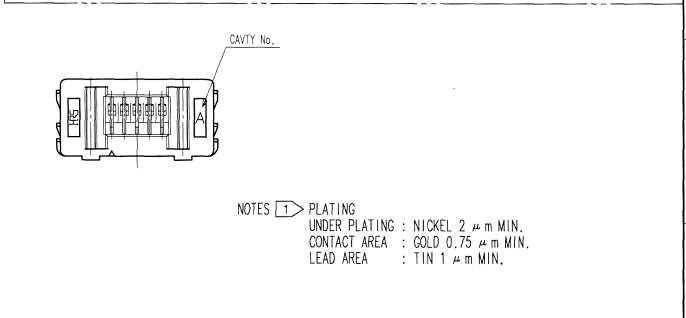
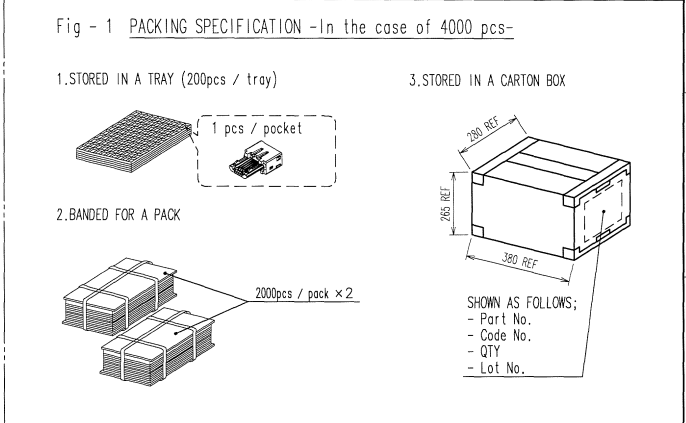
FORM HD0011-2-1

DRAWING FOR REFERENCE: This is subject to change without notice

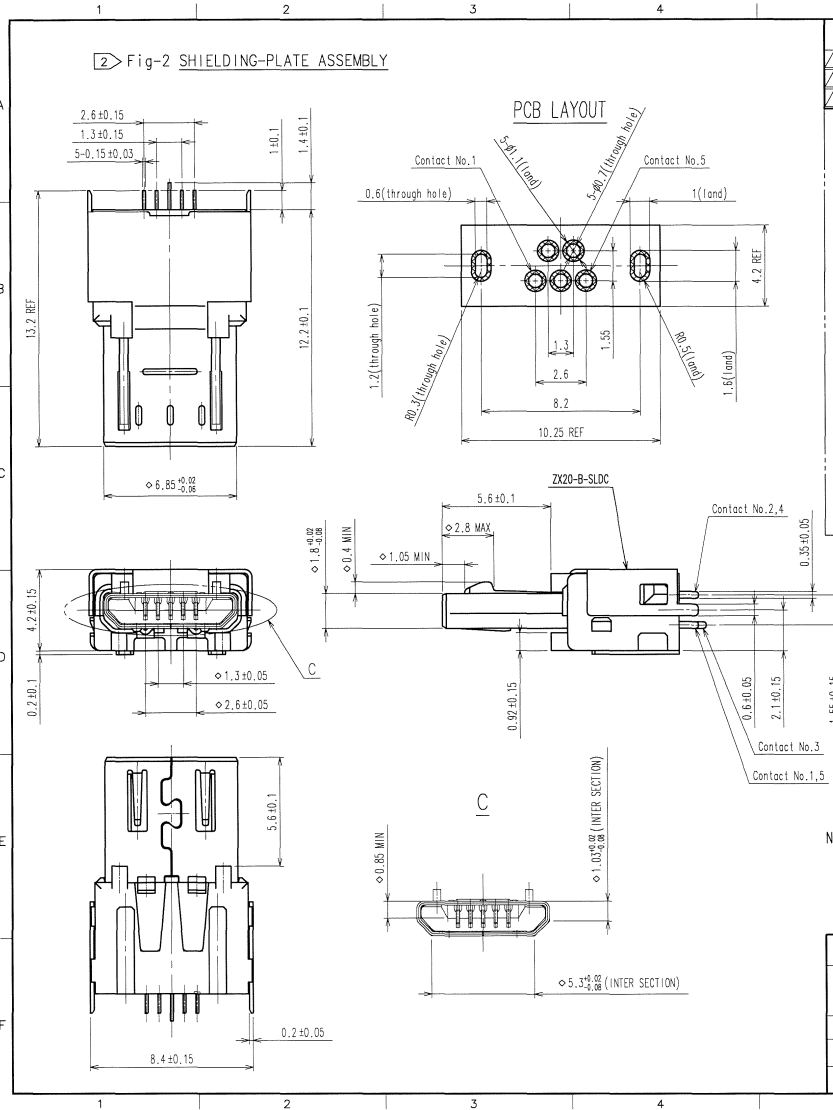
TO



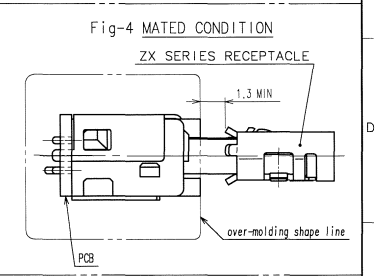
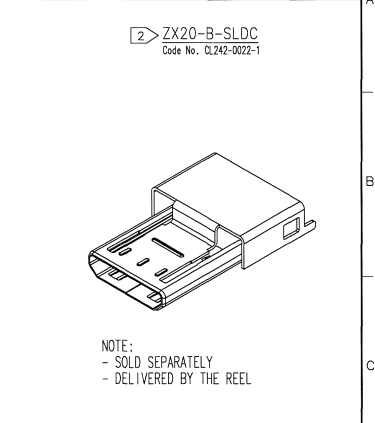
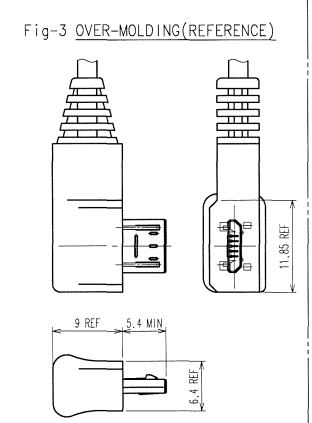
COUNT	DESCRIPTION OF REVISIONS	BY	CHKD	DATE	COUNT	DESCRIPTION OF REVISIONS	BY	CHKD	DATE



2	COPPER ALLOY	1	4	STAINLESS STEEL		
1	LCP	UL94V-0, BLACK	3	COPPER ALLOY		
NO.	MATERIAL	FINISH, REMARKS	NO.	MATERIAL	FINISH, REMARKS	
CODE NO. (OLD)	DRAWN		DESIGNED	CHECKED	APPROVED	RELEASED
	T. Sakagawa		T. Sakagawa	N. Tomoda		
	07.03.06		07.03.06	07.03.06	07.03.06	
SCALE	DRAWING NO.		PART NO.			
5 : 1	EDC3-126085		ZX20-B-5S-UNIT			
UNITS	HRS HIROSE ELECTRIC CO., LTD		CODE NO.		CL242-0012-8	
mm					1/2	



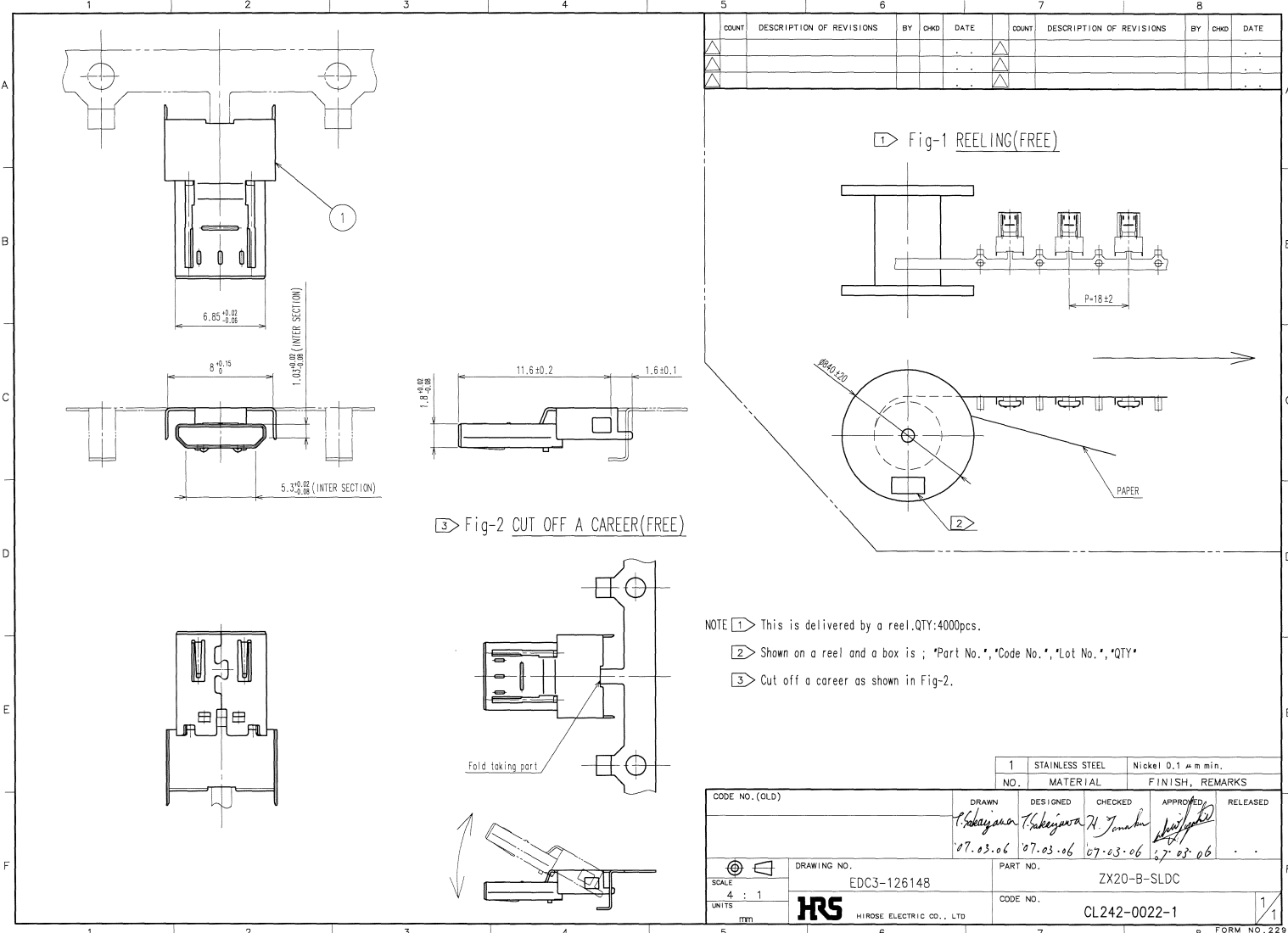
COUNT	DESCRIPTION OF REVISIONS	BY	CHKD	DATE	COUNT	DESCRIPTION OF REVISIONS	BY	CHKD	DATE



NOTES ② SHIELDING-PLATE, ZX20-B-SLDC, IS USED FOR ASSEMBLY.  
 3. \*◇SYMBOL ADDED TO EACH DIMENSION MEANS CRITICAL DIMENSION ON USB SPECIFICATION. PLEASE CHECK THEM AFTER OVER-MOLDING.

CODE NO. (OLD)	DRAWN	DESIGNED	CHECKED	APPROVED	RELEASED
	<i>Takayama</i>	<i>Takayama</i>	<i>N. Tomita</i>	<i>[Signature]</i>	
	07.03.06	07.03.06	07.03.06	07.03.06	
DRAWING NO.	PART NO.		ZX20-B-5S-UNIT		
EDC3-126085					
SCALE	CODE NO.		CL242-0012-8		
5 : 1					
UNITS	HRS				
mm	HIROSE ELECTRIC CO., LTD				

TO



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

1 Fig-1 REELING(FREE)

3 Fig-2 CUT OFF A CAREER(FREE)

- NOTE
- 1 This is delivered by a reel.QTY:4000pcs.
  - 2 Shown on a reel and a box is ; \*Part No.\*, \*Code No.\*, \*Lot No.\*, \*QTY\*
  - 3 Cut off a career as shown in Fig-2.

CODE NO. (OLD)	DRAWN	DESIGNED	CHECKED	APPROVED	RELEASED
	<i>P. Sakagawa</i>	<i>P. Sakagawa</i>	<i>H. Tanaka</i>	<i>[Signature]</i>	
	07.03.06	07.03.06	07.03.06	07.03.06	
SCALE	DRAWING NO.		PART NO.		
4 : 1	EDC3-126148		ZX20-B-SLDC		
UNITS	HRS HIROSE ELECTRIC CO., LTD		CODE NO.		
(MM)			CL242-0022-1		
					1/1