

















APPLICABLE STANDARD					
Rating	Operating Temperature Range	-55 °C to 85 °C <sup>(1)</sup>		Storage Temperature Range	-10 °C to 60 °C <sup>(2)</sup>
	Voltage	 Signal Contact : 50 V AC Power Contact : 200 V AC	Storage Humidity Range	Relative humidity 85% max (Not dewed)	
	Current		Operating Humidity Range		
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 1000Hz)		Signal Contact : 70m Ω MAX. Power Contact : 20m Ω MAX. 	x	—
Insulation Resistance	Signal Contact : 100 V DC. Power Contact : 250 V DC 		Signal Contact : 100 MΩ MIN. Power Contact : 1000 MΩ MIN. 	x	—
Voltage Proof	Signal Contact : 150 V AC for 1 min.		No flashover or breakdown.	x	x
	Power Contact : 600 V AC for 1 min. 			x	—
MECHANICAL CHARACTERISTICS					
Insertion and Withdrawal Forces	Measured by applicable connector.		Insertion Force: 27 N MAX.  Withdrawal Force: 3 N MIN.	x	—
Mechanical Operation	100 times insertions and extractions.		① Contact Resistance: Signal Contact : 80m Ω MAX.  Power Contact : 30m Ω MAX. ② No damage, crack and looseness of parts.	x	—
Vibration	Frequency 10 to 55 to 10Hz, approx 5min Single amplitude : 0.75 mm, 10 cycles for 3 axial directions.		① No electrical discontinuity of 1 μs. ② No damage, crack and looseness of parts.	x	—
Shock	490 m/s <sup>2</sup> , duration of pulse 11 ms at 3 times for 3 both axial directions.			x	—
ENVIRONMENTAL CHARACTERISTICS					
Damp Heat (Steady state)	Exposed at 40±2 °C, 90 ~ 95 %, 96 h.		① Contact Resistance: Signal Contact : 80m Ω MAX.  Power Contact : 30m Ω MAX. ② Insulation Resistance: Signal Contact : 100 MΩ MIN.  Power Contact : 1000 MΩ MIN. ③ No damage, crack and looseness of parts.	x	—
Rapid Change of Temperature	Temperature -55 → +85 °C Time 30 → 30 min. under 5 cycles. (Relocation time to chamber : within 2~3 MIN)			x	—
Cold	Exposed at -55°C, 96 h		① Contact Resistance: Signal Contact : 80m Ω MAX.  Power Contact : 30m Ω MAX. ② No damage, crack and looseness of parts.	x	—
Dry Heat	Exposed at 85°C, 96 h			x	—
Sulfur Dioxide	Exposed at 25±2°C, 75±5%RH, 25 PPM for 96 h. (Test standard: IEC 68) 		① No defect such as corrosion which impairs the function of connector. ② Contact Resistance: Signal Contact : 80m Ω MAX.  Power Contact : 30m Ω MAX.	x	—
Resistance to Soldering Heat	1)Reflow soldering : Peak TMP : 260°C MAX Reflow TMP: 220°C MIN for 60sec 2) Soldering irons : 360°C MAX. for 5 sec.			x	—
Solderability	Soldered at solder temperature 240±3°C for immersion duration, 3 sec.		A new uniform coating of solder shall cover a minimum of 95 % of the surface being immersed.	x	—
COUNT	DESCRIPTION OF REVISIONS		DESIGNED	CHECKED	DATE
	13	DIS-F-00000643	TS. 00N0	KN. SHIBUYA	15. 09. 09
REMARKS <sup>(1)</sup> Include temperature rise caused by current-carrying. <sup>(2)</sup> "STORAGE" means a long-term storage state for the unused product before assembly to PCB.			APPROVED	HS. OKAWA	14. 09. 02
			CHECKED	KN. SHIBUYA	14. 09. 02
			DESIGNED	TS. 00N0	14. 09. 02
			DRAWN	TS. 00N0	14. 09. 02
Unless otherwise specified, refer to IEC 60512. 					
Note QT:Qualification Test AT:Assurance Test X:Applicable Test			DRAWING NO.		ELC-353567-00-00
	SPECIFICATION SHEET		PART NO.	FX23-60S-0. 5SH	
	HIROSE ELECTRIC CO., LTD.		CODE NO.	CL573-3403-4-00	 1/1

1 2 3 4 5 6 7 8

A

B

C

D

E

F

A

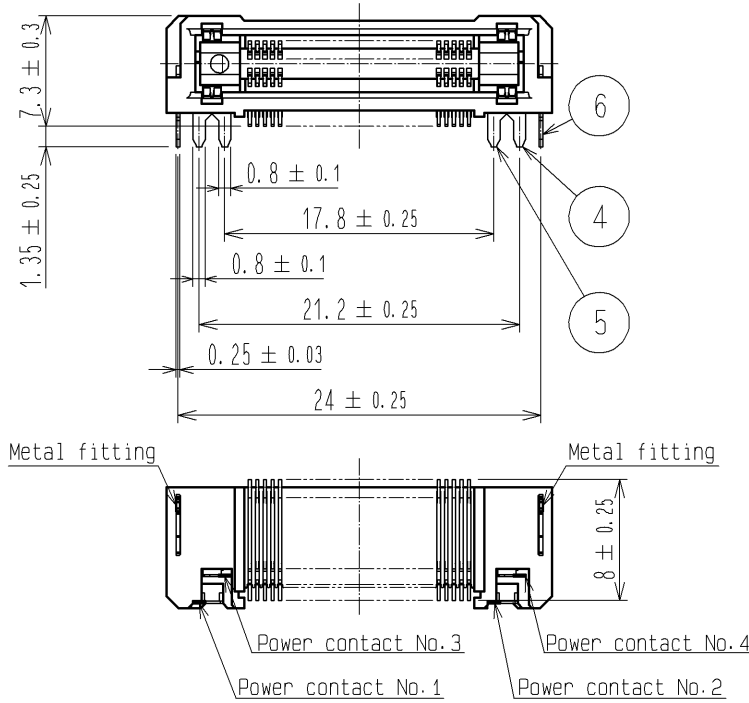
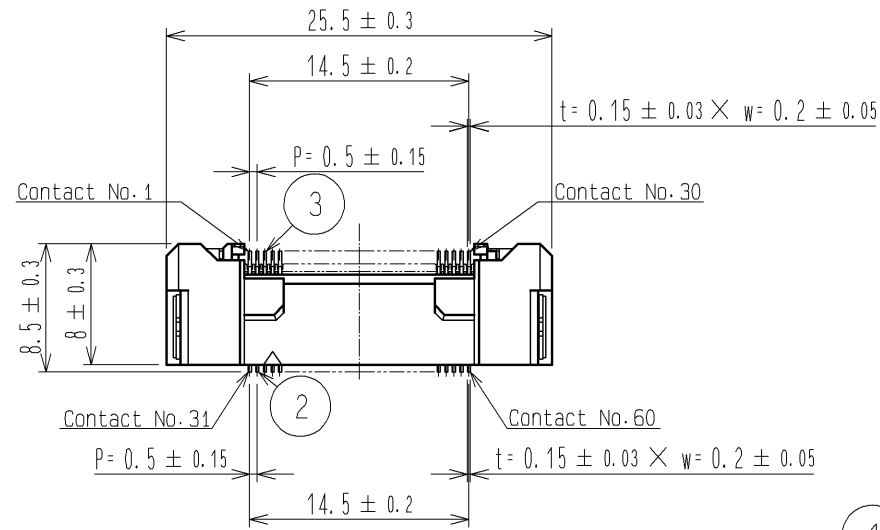
B

C

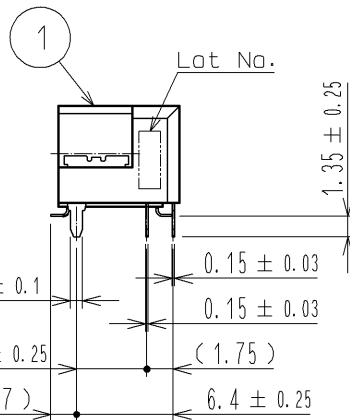
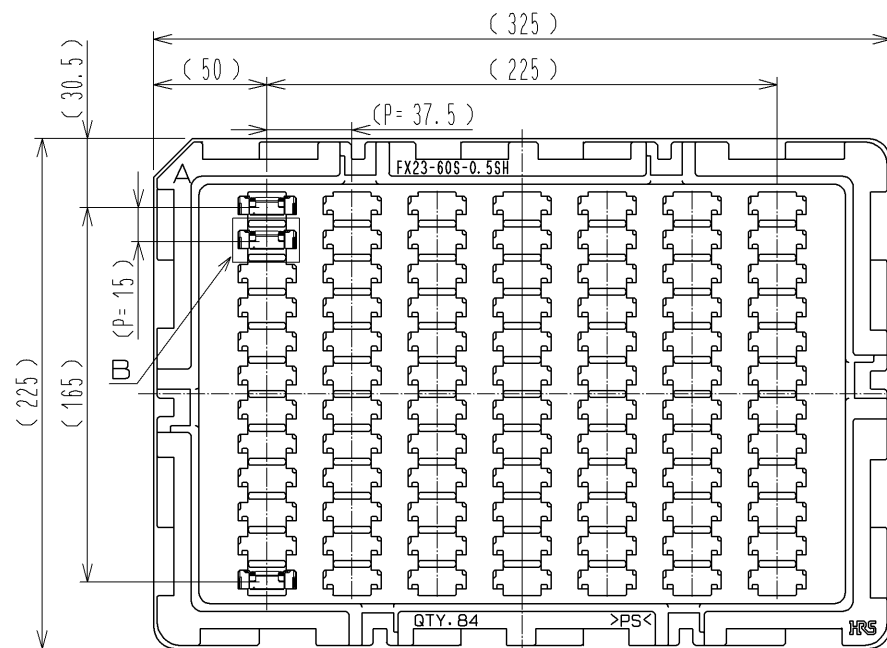
D

E

F

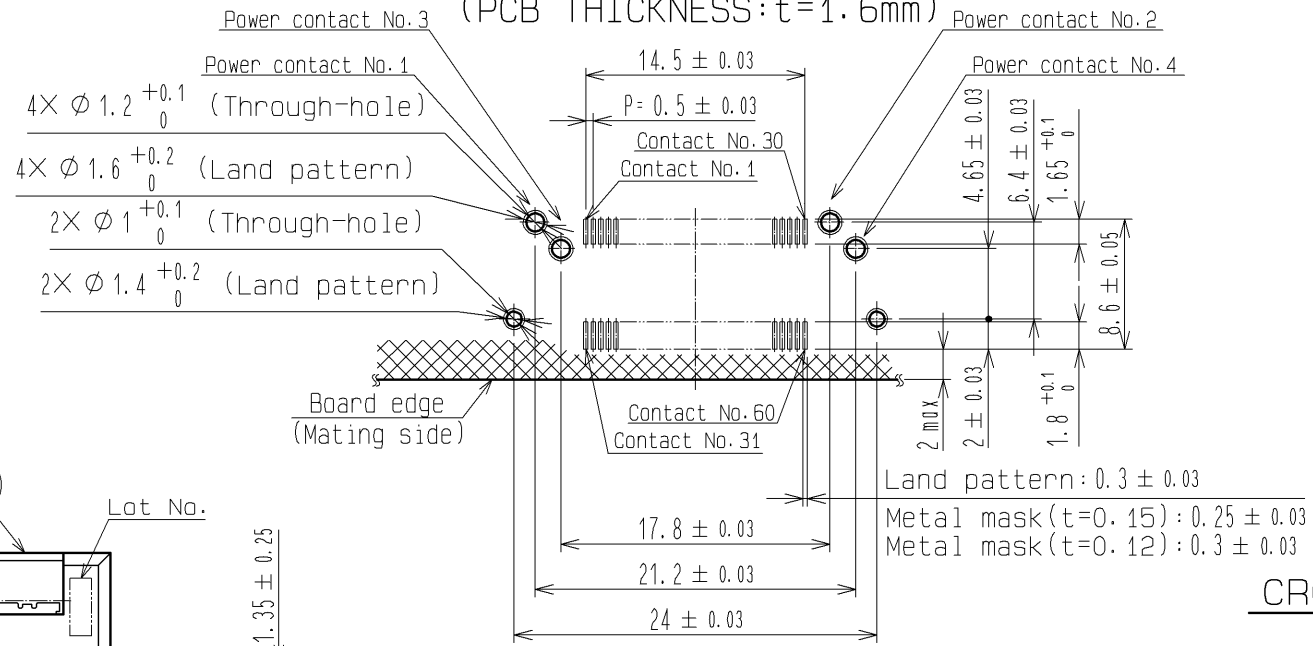


2> DRAWING FOR PACKING (No scale)

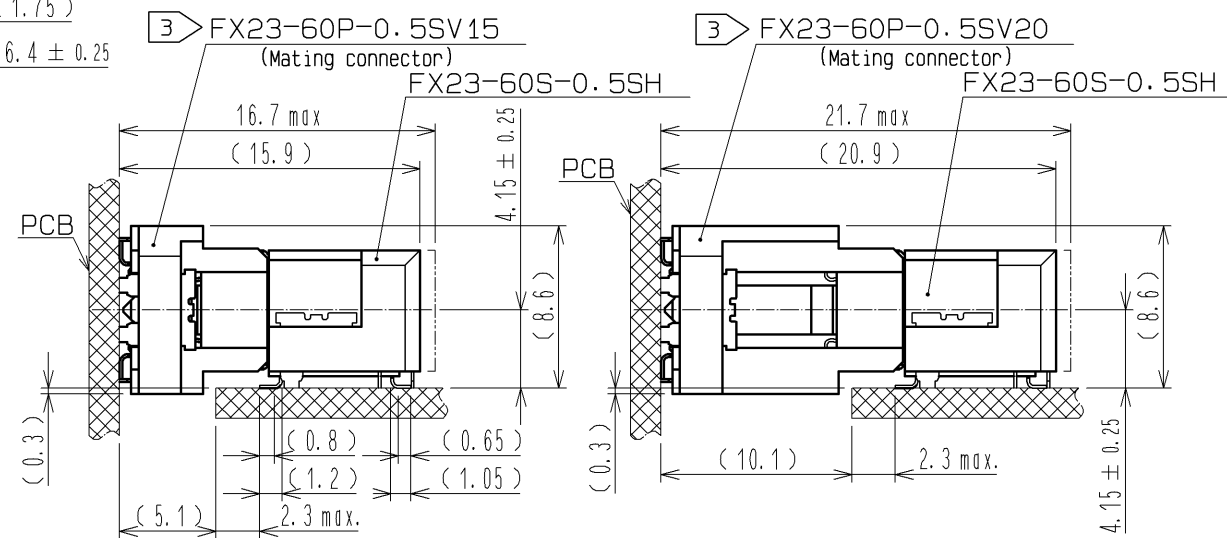


RECOMMENDED LAND PATTERN DIMENSION OF PCB

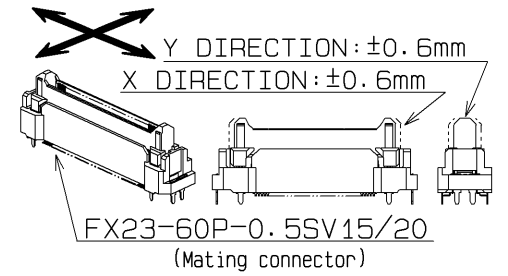
(PCB THICKNESS:  $t = 1.6\text{mm}$ )



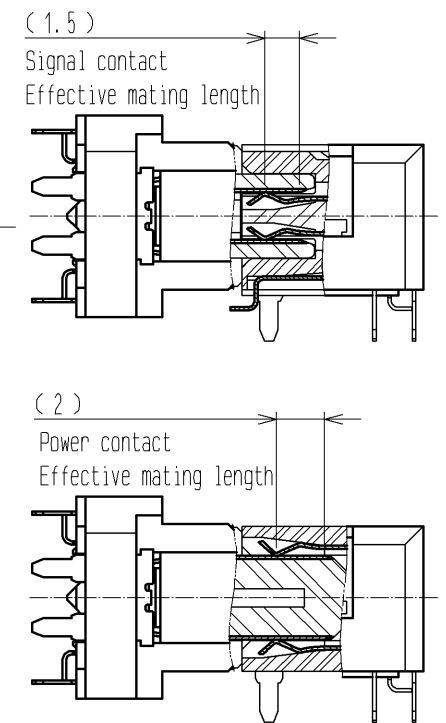
PCB DISTANCE (No scale)



3> FLOATING RANGE



CROSS SECTION OF MATING (No scale)



- Lead CO-Planarity is 0.1mm MAX.
- This is packaged in tray. (84pcs/tray)
- Floating range of this connector is  $\pm 0.6\text{mm}$  MAX.
- It shows the vacuum pickup area.
- Blemish and hit mark can be occurred through out the manufacturing process which doesn't affect quality level.
- The dimensions in parentheses are for references.

2, 3	COPPER ALLOY	CONTACT AREA: GOLD $0.1\mu\text{m}$	7	POLYSTYRENE	(TRAY)
		LEAD AREA: GOLD $0.03\mu\text{m}$	6	BRASS	LEAD AREA: TIN-PLATING $3\mu\text{m}$
		UNDER PLATING: NICKEL $1.3\mu\text{m}$	4, 5	COPPER ALLOY	UNDER PLATING: NICKEL $1\mu\text{m}$
1	LCP	BLACK UL94V-0			CONTACT AREA: GOLD $0.1\mu\text{m}$
NO. MATERIAL		FINISH, REMARKS	NO. MATERIAL		FINISH, REMARKS
UNITS mm		SCALE 2 : 1	COUNT		DESCRIPTION OF REVISIONS
HRS		APPROVED : HS. OKAWA	14.12.12		DESIGNED
HIROSE ELECTRIC CO., LTD.		CHECKED : KN. SHIBUYA	14.12.12		CHECKED
		DESIGNED : TS. OONO	14.12.12		DATE
		DRAWN : TS. OONO	14.12.12		
			DRAWING NO.		EDC3-353567-00
			PART NO.		FX23-60S-0.5SH
			CODE NO.		CL573-3403-4-00

1 2 3 4 5 6 7 8