

APPLICABLE STANDARD		SPECIFICATIONS			
Rating	Operating Temperature Range 	-55 °C to 105 °C ⁽¹⁾	Storage Temperature Range	-10 °C to 60 °C ⁽²⁾	
	Voltage	Signal Contact : 50 V AC Power Contact : 200 V AC	Storage Humidity Range	Relative humidity 85% max (Not dewed)	
	Current	Signal Contact : 0.5 A Power Contact : 3.0A	Operating Humidity Range		
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 : 70mΩ MAX. Power Contact : 20mΩ 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. Power Contact : 600 V AC for 1 min.	No flashover or breakdown.		x	x
MECHANICAL CHARACTERISTICS					
Insertion and Withdrawal Forces	Measured by applicable connector.	Insertion Force: 54 N MAX. Withdrawal Force: 6 N MIN.		x	—
Mechanical Operation	100 times insertions and extractions.	① Contact Resistance: Signal Contact : 80mΩ MAX. Power Contact : 30mΩ 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 ² , 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 : 80mΩ MAX. Power Contact : 30mΩ MAX.		x	—
Rapid Change of Temperature	Temperature -55 → +85 °C Time 30 → 30 min. under 5 cycles. (Relocation time to chamber : within 2~3 MIN)	② Insulation Resistance: Signal Contact : 100 MΩ MIN. Power Contact : 1000 MΩ MIN. ③ No damage, crack and looseness of parts.		x	—
Cold	Exposed at -55°C, 96 h	① Contact Resistance: Signal Contact : 80mΩ MAX. Power Contact : 30mΩ MAX.		x	—
Dry Heat 	Exposed at 105°C, 96 h	② No damage, crack and looseness of parts.		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 : 80mΩ MAX. Power Contact : 30mΩ 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.	No deformation of case of excessive looseness of the terminal.		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	
 2	DIS-F-00002057	TS. 00NO	HT. YAMAGUCHI	17.02.01	
REMARKS ⁽¹⁾ Include temperature rise caused by current-carrying. ⁽²⁾ "STORAGE" means a long-term storage state for the unused product before assembly to PCB.				APPROVED	HS. OKAWA
				CHECKED	KN. SHIBUYA
				DESIGNED	TS. 00NO
				DRAWN	TS. 00NO
Unless otherwise specified, refer to IEC 60512.					
Note QT:Qualification Test AT:Assurance Test X:Applicable Test			DRAWING NO.	ELC-353542-00-00	
	SPECIFICATION SHEET		PART NO.	FX23-120P-0.5SV15	
	HIROSE ELECTRIC CO., LTD.		CODE NO.	CL573-3006-4-00	 1/1