

APPLICABLE STANDARD								
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				
SPECIFICATIONS								
ITEM		TEST METHOD		REQUIREMENTS		QT	AT	
CONSTRUCTION								
General Examination		Visually and by measuring instrument.		According to drawing.		×	×	
Marking		Confirmed visually.				×	×	
ELECTRIC CHARACTERISTICS								
Contact Resistance		100 mA(DC or 1000Hz)		Signal Contact : 70m Ω MAX. Power Contact : 20m Ω MAX.		×	—	
Insulation Resistance		Signal Contact : 100 V DC. Power Contact : 250 V DC		Signal Contact : 100 MΩ MIN. Power Contact : 1000 MΩ MIN.		×	—	
Voltage Proof		Signal Contact : 150 V AC for 1 min.		No flashover or breakdown.		×	×	
		Power Contact : 600 V AC for 1 min.				×	—	
MECHANICAL CHARACTERISTICS								
Insertion and Withdrawal Forces		Measured by applicable connector.		Insertion Force: 54 N MAX. Withdrawal Force: 6 N MIN.		×	—	
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.		×	—	
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.		×	—	
Shock		490 m/s ² , duration of pulse 11 ms at 3 times for 3 both axial directions.				×	—	
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.		×	—	
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.		×	—	
Cold		Exposed at -55°C, 96 h		① Contact Resistance: Signal Contact : 80m Ω MAX. Power Contact : 30m Ω MAX.		×	—	
Dry Heat		Exposed at 105°C, 96 h		② No damage, crack and looseness of parts.		×	—	
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.		×	—	
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.		×	—	
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.		×	—	
	COUNT	DESCRIPTION OF REVISIONS		DESIGNED		CHECKED		DATE
△								
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	NH. NAKATA		18. 04. 12	
				CHECKED	MK. NAGATA		18. 04. 12	
				DESIGNED	TS. OONO		18. 04. 12	
				DRAWN	TS. OONO		18. 04. 12	
Unless otherwise specified, refer to IEC 60512.								
Note QT:Qualification Test AT:Assurance Test X:Applicable Test				DRAWING NO.		ELC-353549-20-00		
HRS	SPECIFICATION SHEET			PART NO.		FX23-120P-0. 5SV20 (20)		
	HIROSE ELECTRIC CO., LTD.			CODE NO.		CL573-3106-9-20		△ 1/1