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In case of consideration for using Automotive equipment / device which demand high reliability, kindly contact our sales window correspondents.

APPLICABLE STANDARD				
Rating	Operating Temperature Range △1	-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 : 70mΩ MAX. Power Contact : 20mΩ MAX.	×	—
Insulation Resistance	Signal Contact : 100 V DC. Power Contact : 250 V DC	Signal Contact : 100 MΩMIN. Power Contact : 1000 MΩMIN.	×	—
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: 36 N MAX. Withdrawal Force: 4 N MIN.	×	—
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.	×	—
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 : 80mΩ MAX. Power Contact : 30mΩ MAX. ② Insulation Resistance: Signal Contact : 100 MΩ MIN. Power Contact : 1000 MΩ MIN. ③ No damage, crack and looseness of parts.	×	—
Rapid Change of Temperature	Temperature -55 → +85 °C Time 30 → 30 min. under 5 cycles. (Relocation time to chamber : within 2～3 MIN)		×	—
Cold	Exposed at -55℃, 96 h	① Contact Resistance: Signal Contact : 80mΩ MAX. Power Contact : 30mΩ MAX. ② No damage, crack and looseness of parts.	×	—
Dry Heat △1	Exposed at 105℃, 96 h		×	—
Sulfur Dioxide	Exposed at 25±2℃, 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.	×	—
Resistance to Soldering Heat	1)Reflow soldering : Peak TMP : 260℃MAX Reflow TMP: 220℃MIN for 60sec 2) Soldering irons : 360℃ MAX. for 5 sec.	No deformation of case of excessive looseness of the terminal.	×	—
Solderability	Soldered at solder temperature 240±3℃ 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
△1	2	DIS-F-00002071	TS. OONO	HT. YAMAGUCHI	17.02.03

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.

Unless otherwise specified, refer to IEC 60512.

APPROVED	HS. OKAWA	15.07.15
CHECKED	KN. SHIBUYA	15.07.15
DESIGNED	TS. OONO	15.07.15
DRAWN	TS. OONO	15.07.15

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

DRAWING NO. ELC-358067-00-00

HRS	SPECIFICATION SHEET	PART NO.	FX23L-80S-0.5SV	
	HIROSE ELECTRIC CO., LTD.	CODE NO.	CL573-2304-7-00	△1 1/1

FORM HD0011-2-1