

Aug.1.2025 Copyright 2025 HIROSE ELECTRIC CO., LTD. All Rights Reserved.  
In case of consideration for using Automotive equipment / device which demand high reliability, kindly contact our sales window correspondents.

APPLICABLE STANDARD					
	Operating Temperature Range	-55 °C to +105 °C <sup>(1)</sup>	Storage Temperature Range	-10 °C to +60 °C <sup>(2)</sup>	
Rating	Voltage	100 V AC	Storage Humidity Range	Relative humidity 85 % MAX (Not dewed)	
	Current	0.5 A	Operating Humidity Range		
SPECIFICATIONS					
ITEM	TEST METHOD		REQUIREMENTS	QT	AT
<b>CONSTRUCTION</b>					
General Examination	Visually and by measuring instrument.		According to drawing.	×	×
Marking	Confirmed visually.			×	×
<b>ELECTRIC CHARACTERISTICS</b>					
Contact Resistance	100 mA(DC or 1000 Hz)		30 mΩ MAX <sup>(3)</sup>	×	—
Insulation Resistance	250 V DC		1000 MΩ MIN	×	—
Voltage Proof	300 V AC for 1 min.		No flashover or breakdown.	×	—
<b>MECHANICAL CHARACTERISTICS</b>					
Insertion and Withdrawal Forces	Measured by applicable connector.		Insertion Force: 53.3 N MAX Withdrawal Force: 5.3 N MIN	×	—
Mechanical Operation	100 times insertions and extractions.		1)Contact Resistance : 40 mΩ MAX <sup>(3)</sup> 2)No damage, crack and looseness of parts.	×	—
Vibration	Frequency 10 to 55 to 10 Hz, approx 5 min. 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 <sup>2</sup> , duration of pulse 11 ms at 3 times for 3 both axial directions.			×	—
<b>ENVIRONMENTAL CHARACTERISTICS</b>					
Damp Heat (Steady state)	Exposed at 40 ± 2 °C, 90 to 95 %, 96 h.		1)Contact Resistance : 40 mΩ MAX <sup>(3)</sup> 2)Insulation Resistance: 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 to 3 MIN)			×	—
Dry Heat	Exposed at +105 °C, 96 h		1)Contact Resistance : 40 mΩ MAX <sup>(3)</sup> 2)No damage, crack and looseness of parts.	×	—
Cold	Exposed at -55 °C, 96 h			×	—
Resistance to Soldering Heat	1)Reflow soldering: Peak TMP: 260 °C MAX Reflow TMP: 220 °C MIN for 60 sec 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
△					
<b>REMARKS</b>			APPROVED	NH. NAKATA	18.06.20
(1) Include temperature rise caused by current-carrying.			CHECKED	HT. YAMAGUCHI	18.06.20
(2) "Storage" means a long-term storage state for the unpacked part before assembly to pcb.			DESIGNED	MT. ITANO	18.06.19
(3) Contact resistance of relay board is not included. It becomes contact resistance for 1 connector. Unless otherwise specified, refer to IEC 60512.			DRAWN	MT. ITANO	18.06.19
Note QT:Qualification Test AT:Assurance Test X:Applicable Test			DRAWING NO.	ELC-382477-00-00	
<b>HRS</b>	SPECIFICATION SHEET		PART NO.	FX27-80S-0.8SV	
	HIROSE ELECTRIC CO., LTD.		CODE NO.	CL577-1004-0-00	△ 1/1