






Applicable standard					
Rating	Operating Temperature Range	-55 to +105°C (Note1)	Storage Temperature Range	-10 °C to +60°C (Note3)	
	Operating Humidity Range	20% to 80% (Note2)	Storage Humidity Range	40% to 70% (Note3)	
	Applicable Connector	DF51%-7S-2C(##)	Current	AWG 30:0.5A AWG 28 : 1A AWG 22-26 : 2A	
	Voltage	250 V AC/DC	UL・C-UL Rating 	Voltage	30V AC/DC
			Current	2.0A	
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 Millivolt Level Method 	20mV MAX, 1mA (DC or 1000Hz).		30 mΩ MAX.		X —
Insulation Resistance	500 V DC.		1000 MΩ MIN.		X —
Voltage Proof	650 V AC for 1 min.		No flashover or breakdown.		X —
Mechanical Characteristics					
Mechanical Operation (An Plating)	50 times insertion and extraction.		1.No damage, crack or looseness of parts.		X —
Mating and unmating Force (Au Plating)	It takes out and inserts with a conformity connector.		1.Insertion Force : 33.7N MAX. 2.Extraction Force : 1.75N MIN.		X —
Vibration	Frequency 10 to 55 Hz, single amplitude 0.75 mm, at 10 cycles for 3 direction.		1.No electrical discontinuity of 1 μ s. 2.No damage, crack or looseness of parts.		X —
Shock	Acceleration 490 m/s ² duration of pulse 11 ms at 3 times for 3 directions.				X —
Environmental Characteristics					
Damp Heat (Steady State)	Exposed at 40 ± 2°C , humidity 90 to 95 %, 96 h. (After leaving the room temperature for 1 to 2h.)		1.Insulation resistance: 500 MΩ MIN. 2.No damage, crack or looseness of parts.		X —
Rapid Change Of Temperature	Temperature -55°C→ +105°C Time 30min→ 30min Under 5 Cycles. (The transferring time of the tank is 2 to 3 MIN) (After leaving the room temperature for 1 to 2h.)		1.Insulation resistance: 1000 MΩ MIN. 2.No damage, crack or looseness of parts.		X —
Dry Heat	Exposed at 105±2°C, 96h				X —
Cold	Exposed at -55±3°C, 96h				X —
Remarks Note 1: Include the temperature rising by current. Note 2:No condensing Note 3:Apply to the condition of long term storage for unused products before pcb on board, after pcb board , operating temperature and humidity range is applied for interim storage during transportation.					
	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
	2	DIS-H-00017930	KI. SUGAWARA	SZ. ONO	20230711
Unless otherwise specified, refer to IEC 60512.			APPROVED	SJ. OKAMURA	20221024
			CHECKED	TT. OHSAKO	20221024
			DESIGNED	KI. SUGAWARA	20221021
			DRAWN	KI. SUGAWARA	20221021
Note QT:Qualification Test AT:Assurance Test X:Applicable Test			DRAWING NO.		ELC-398779-00-00
	SPECIFICATION SHEET		PART NO.	DF51B-7EP-2A	
	HIROSE ELECTRIC CO., LTD.		CODE NO.	CL0543-5132-0-00	 2/1