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 △1	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 △1	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 μs. 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
△1	2	DIS-H-00017930	KI. SUGAWARA	SZ. ONO	20230711

APPROVED	SJ. OKAMURA	20221024
CHECKED	TT. OHSAKO	20221024
DESIGNED	KI. SUGAWARA	20221021
DRAWN	KI. SUGAWARA	20221021

Unless otherwise specified, refer to IEC 60512.

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

DRAWING NO.			ELC-398779-00-00	
HRS	SPECIFICATION SHEET	PART NO.	DF51B-7EP-2A	
	HIROSE ELECTRIC CO., LTD.	CODE NO.	CL0543-5132-0-00 △1	2/1