

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	DF51-6S-2C(##)	Current		AWG 30 : 0.5A AWG 28 : 1.0A AWG 22-26 : 2.0A	
	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 : 29.7N MAX. 2.Extraction Force : 1.5N 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 unused and packaged condition.						
	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE	
	1	DIS-H-00018757	KT. NUMATA	TT. OHSAKO	20230803	
Unless otherwise specified, refer to IEC 60512.				APPROVED	S.J. OKAMURA	20230324
				CHECKED	S.J. OKAMURA	20230324
				DESIGNED	SN. MIWA	20230324
				DRAWN	SN. MIWA	20230324
Note QT:Qualification Test AT:Assurance Test X:Applicable Test			DRAWING NO.		ELC-401458-00-00	
	SPECIFICATION SHEET		PART NO.	DF51B-6EP-2A		
	HIROSE ELECTRIC CO., LTD.		CODE NO.	CL0543-5136-0-00		1/1