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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	-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
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#### 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 <sup>2</sup> 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
		APPROVED	SJ. OKAMURA	20230324
		CHECKED	SJ. OKAMURA	20230324
		DESIGNED	SN. MIWA	20230324
		DRAWN	SN. MIWA	20230324

Unless otherwise specified, refer to IEC 60512.

Note QT:Qualification Test AT:Assurance Test X:Applicable Test	DRAWING NO.	ELC-401458-00-00
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	SPECIFICATION SHEET	PART NO.	DF51B-6EP-2A	
	HIROSE ELECTRIC CO., LTD.	CODE NO.	CL0543-5136-0-00	 1/1