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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	-55to +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	DF51B-4/10EP-2A-4PRT(##)	Current	AWG 30 : 0.5A/pin AWG 28 : 1A/pin AWG 22-26 : 2A/pin (Note4) 
	Applicable Contact	DF11-22SC(F)A(##) DF11-2428SC(F)A(##) DF11-30SC(F)A(##)	UL · C-UL Rating	Voltage 30V AC/DC Current AWG22 : 2.0A AWG24 to 28 : 1.0A AWG30 : 0.5A
Voltage		250 V AC/DC		

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


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	50 times insertion and extraction.	1.No damage, crack or looseness of parts.	X	—
Mating and Unmating Force	It takes out and inserts with a conformity connector.	1.Insertion Force : 35.5N MAX. 2.Extraction Force : 2.5N MIN.	X	—
Mating Retention Force	Pull out the cable after mated.	30N 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	—
Contact extraction force	Pull out the cable after housing fixation.	11.8N MIN	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.
 Note 4: When AWG22 is used on both the 1PORT and 4PORT sides, and contact No.1, 2, 3, 4, 7, 8, 9, and 10 on the 1PORT side are used at 0.5 A/pin or less, the rated current of contact No.5 and 6 on the 1PORT side shall be 6A/pin. At this time, the rated current of contact No.1 and 4 on the 4PORT side shall be 1.5 A/pin. 

	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
	2	DIS-H-00021482	SN. MIWA	TT. OHSAKO	20240926
Unless otherwise specified, refer to IEC 60512.			APPROVED	S.J. OKAMURA	20240725
			CHECKED	TT. OHSAKO	20240725
			DESIGNED	SN. MIWA	20240725
			DRAWN	SN. MIWA	20240725

Note QT:Qualification Test AT:Assurance Test X:Applicable Test DRAWING NO. ELC-405053-00-00

	SPECIFICATION SHEET		PART NO.	DF51B-10S-2C	
	HIROSE ELECTRIC CO., LTD.		CODE NO.	CL0543-5138-0-00	 1/1