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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°C to +85°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)
	Voltage	50 V AC/DC	Applicable Connector	DF53-3S-0.6H(##)
Current	All pin	AWG 32 : 0.7A	Applicable Contact	DF53-32SCF
	Any of 2 pins as a power	AWG 32 : 1.3A(power), 0.5A(signal)		

### 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	100 V DC.	100 MΩ MIN.	X	—
Voltage Proof	200 V AC for 1 min.	No flashover or breakdown.	X	—

#### Mechanical Characteristics

Mechanical Operation	20 times insertion and extraction.	No damage, crack or looseness of parts.	X	—
Mating and unmating Force	It takes out and inserts with a conformity connector.	1.Insertion Force : 13.2N MAX. 2.Extraction Force : 1.4N MIN.	X	—
Vibration	Frequency 10 to 55 Hz, single amplitude 0.75 mm, at 10 cycles for 3 direction.	No damage, crack or looseness of parts.	X	—
Shock	Acceleration 500 m/s <sup>2</sup> duration of pulse 11 ms at 3 times for 3 directions.		X	—
Contact extraction force	Pull out the cable after housing fixation.	3N 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: 100 MΩ MIN. 2.No damage, crack or looseness of parts.	X	—
Rapid Change Of Temperature	Temperature -55°C → +85°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: 100 MΩ MIN. 2. No damage, crack or looseness of parts.	X	—
Dry Heat	Exposed at 85 ± 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. Apply to the condition of long term storage for unused products before harness assembly.  
Note 3: Applicable to unused product packaging.

	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
	1	DIS-H-00019500	JN. TONAI	SZ. ONO	20231120

Unless otherwise specified, refer to IEC 60512.	APPROVED	SJ. OKAMURA	20230728
	CHECKED	SZ. ONO	20230728
	DESIGNED	JN. TONAI	20230728
	DRAWN	JN. TONAI	20230728

Note QT:Qualification Test AT:Assurance Test X:Applicable Test	DRAWING NO.	ELC-380632-00-00
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<b>HRS</b>	SPECIFICATION SHEET	PART NO.	DF53-3P-0.6C
	HIROSE ELECTRIC CO., LTD.	CODE NO.	CL0668-1014-0-00  1/1