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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	-35 to +85°C (Note1)	Storage Temperature Range	-10 °C to +60°C (Note3)
	Operating Humidity Range	40% to 80% (Note2)	Storage Humidity Range	40% to 70% (Note3)
	Voltage	100 V AC/DC	Applicable Connector	DF20%-*DS-1C
	Current	AWG 30 : 0.9A AWG 32 : 0.7A		

### Specifications

Item	Test method	Requirements	QT	AT
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<b>Construction</b>				
General Examination	Visually and by measuring instrument.	According to drawing.	X	X
Marking	Confirmed visually.		X	X

<b>Electric Characteristics</b>				
Contact Resistance Millivolt Level Method	20mV max, 1mA (DC or 1000Hz).	30 mΩ MAX.	X	—

<b>Mechanical Characteristics</b>				
Mechanical Operation	50 times insertion and extraction.	1) Contact resistance: 30 mΩ MAX. 2) No damage, crack or looseness of parts.	X	—
Vibration	Frequency 10-55 Hz, single amplitude 0.75 mm, at 10 cycles for 3 directions.	1) No electrical discontinuity of 1 μ s. 2) 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.	1) No electrical discontinuity of 1 μ s. 2) No damage, crack or looseness of parts.	X	—
Crimp Contact Tensile Strength	Fix the contact and pull the wire in vertical direction.	30 AWG (7/0.102mm) : 8 N MIN. 32 AWG (7/0.08mm) : 5 N MIN.	X	—

<b>Environmental Characteristics</b>				
Damp Heat (Steady State)	Exposed at 40 ± 2°C, humidity 90-95 %, 96 h. (After leaving the room temperature for 1-2h.)	1) Contact resistance: 30 mΩ MAX. 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 2-3 min) (After leaving the room temperature for 1-2h.)	1) Contact resistance: 30 mΩ MAX. 2) No damage, crack or looseness of parts.	X	—
Dry Heat	Exposed at +85 ± 2°C, 96h	1) Contact resistance: 30 mΩ MAX. 2) No damage, crack or looseness of parts.	X	—
Cold	Exposed at -55 ± 3°C, 96h	1) Contact resistance: 30 mΩ MAX. 2) No damage, crack or looseness of parts.	X	—

**Remarks**  
 Note 1 : Include the temperature rising by current.  
 Note 2 : No condensing.  
 Note 3 : Apply to packed condition.

	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
	4	DIS-H-00005881	SN. MIWA	SZ. ONO	20200616

Unless otherwise specified, refer to IEC 60512.	APPROVED	KI. AKIYAMA	20110908
	CHECKED	HK. UMEHARA	20110908
	DESIGNED	TH. YOSHIZAWA	20110908
	DRAWN	KY. SHIMAKURA	20110908

Note QT:Qualification Test AT:Assurance Test X:Applicable Test	DRAWING NO.	ELC4-164279-01
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<b>HRS</b>	SPECIFICATION SHEET	PART NO.	DF20F-3032SCFA (44)	
	HIROSE ELECTRIC CO., LTD.	CODE NO.	CL686-0043-9-44	1/1