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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 28 : 1.0A/pin AWG 30 : 0.9A/pin AWG 32 : 0.7A/pin	Applicable Contact	DF20%-****SCFA(##)

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	100 V DC.	500 MΩ MIN.	X	—
Voltage Proof	300 V AC for 1 min.	No flashover or breakdown.	X	—
Mechanical Characteristics				
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 μs. 2) No damage, crack or looseness of parts.	X	—
Shock △1	Acceleration 500 m/s^2 duration of pulse 11 ms at 3 times for 3 directions.	1) No electrical discontinuity of 1 μs. 2) No damage, crack or looseness of parts.	X	—
Environmental Characteristics				
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) Insulation resistance: 500 MΩ MIN. 3) 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) Insulation resistance: 500 MΩ MIN. 3) No damage, crack or looseness of parts.	X	—
Dry Heat	Exposed at +85±2°C, 96h	1) Contact resistance: 30 mΩ MAX. 2) Insulation resistance: 500 MΩ MIN. 3) No damage, crack or looseness of parts.	X	—
Cold	Exposed at -55±3°C, 96h	1) Contact resistance: 30 mΩ MAX. 2) Insulation resistance: 500 MΩ MIN. 3) 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 the condition of long term storage for unused products before mount on PCB,
After mounted on PCB, operating temperature and humidity range is applied for interim storage during transportation.

	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
△1	1	DIS-H-00005974	SN.MIWA	SZ.ONO	20200519

APPROVED	HS.OKAWA	20200213
CHECKED	SZ.ONO	20200213
DESIGNED	SN.MIWA	20200213
DRAWN	SN.MIWA	20200213

Unless otherwise specified, refer to IEC 60512.

Note QT:Qualification Test AT:Assurance Test X:Applicable Test

DRAWING NO. ELC-391811-52-00

HRS	SPECIFICATION SHEET	PART NO.	DF20EG-*DP-1V(52)
	HIROSE ELECTRIC CO., LTD.	CODE NO.	CL686- △1 1/2

FORM HD0011-2-1

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Specifications

Item	Test method	Requirements	QT	AT
Resistance To Soldering Heat	1) Reflow soldering ≪Reflow time≫ Number of reflow cycles : 2 cycles max. Duration above 220℃ : 60sec. max. Peak temperature : 250℃, 10sec. max. ≪Pre-heat time≫ Pre-heat temperature : 150℃ Pre-heat time (min) : 90 sec. Pre-heat time (max) : 120 sec. 2) Manual soldering Soldering iron temperature :300°C, Soldering time : 3s. No strength on contact.	No deformation of case of excessive looseness of the terminals.	X	—
Solderability	Soldering temperature : 245°C Duration of immersion : soldering, for 5 sec.	New uniform coating of solder shall cover minimum of 95 % of the surface being immersed.	X	—