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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°C to +85°C(Note 1)		Storage temperature range	-10°C to +60°C(Note 3)
	Operating humidity range	-40% to + 80% (Note 2)		Storage humidity range	-40% to + 70% (Note 3)
	Voltage	AC/DC 500V		Applicable connector	DF33 (C) -※S/DS-3.3C
	Current		Single row	Double row	Applicable cable
AWG20		5A	5A		
AWG22	4A	4A			

### 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	1m A (DC or 1000 Hz).20mv MAX	10 mΩ MAX.	X	-

### MECHANICAL CHARACTERISTICS

Contact insertion and extraction forces	□0.5mm±0.002 by steel gauge	Insertion force : 4.5 N MAX Extraction force : 0.5 N MIN	X	-
Mechanical operation	30 times insertion and extraction.	① Contact resistance: 20 mΩ MAX. ② No damage, crack or looseness of parts.	X	-
Vibration	Frequency 10 to 55 Hz, single amplitude 0.75 mm, at 2 h, for 3 directions.	① No electrical discontinuity of 1μs. ② No damage, crack or looseness of parts.	X	-
Shock	490 m/s <sup>2</sup> duration of pulse 11 ms at 3 times for 3 directions.	① No electrical discontinuity of 1μs. ② No damage, crack or looseness of parts.	X	-

### Environmental characteristics

Damp heat (Steady state)	Exposed at 40 ± 2 °c, 90 to 95 %, 96 h.	① Contact resistance: 20 mΩ MAX. ② No damage, crack or looseness of parts.	X	-
Rapid change of temperature	Temperature -55→5 to 35→+85 →5 to 35 °c Time 30→2 to 3 → 30 →2 to 3 min Under 5 cycles.	① Contact resistance: 20 mΩ MAX. ② No damage, crack or looseness of parts.	X	-

Remarks

Note 1: Including the temperature rising by current.

Note 2: No condensing.

Note 3: Apply to the condition of long term storage for unused products before mounted on PCB.

After mounted on PCB, operation temperature and humidity range is applied for interim storage during transportation.

Count	Description of revisions	Designed	Checked	Date
△				
		Approved	HS. OKAWA	17. 08. 22
		Checked	TS. FUKUSHIMA	17. 08. 22
		Designed	MI. SAKIMURA	17. 08. 22
		Drawn	MI. SAKIMURA	17. 08. 22

Unless otherwise specifid , refer to IEC 60512.

Note QT:Qualification Test AT:Assurance Test X:Applicable Test	Drawing no.	ELC-315947-00-00
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<b>HRS</b>	Specification sheet	Part no.	DF33A-2022SC
	Hirose electric co., ltd.	Code no.	CL676-1094-8-00