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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 +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	DF63SF-*S-3.96C	Voltage	AC/DC 630V
	Applicable cable	AWG#16 to 18	Current	AWG#16 \triangle 15A(2PIN,P=7.92mm) 12A(3PIN,P=3.96mm)
	Insulation Diameter	Φ 2.1 to 2.7 mm		AWG#18 \triangle 13A(2PIN,P=7.92mm) 10A(3PIN,P=3.96mm)

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				
Contact resistance	20mV MAX, 1mA (DC or 1000Hz).	10 mΩ MAX.	X	-

Mechanical characteristics				
Contact insertion And extraction Forces	<input type="checkbox"/> 0.8±0.002 mm by steel gauge.	Insertion force 4.5 N MAX. Extraction force 0.3 N MIN.	X	-
Mechanical operation	50 times insertion and extraction.	①Contact resistance: 20 mΩ MAX. ②No damage, crack or looseness of parts.	X	-
Vibration	Frequency 10 to 55 Hz, single amplitude 0.75 mm, at 10 cycles for 3 direction.		X	-
Shock	490 m/s ² duration of pulse 11 ms at 3 times each for 3 both axial directions.		X	-

Environmental characteristics				
Damp heat (steady state)	Exposed at 40 ± 2°C , 90 to 95 %, 96 h. (After leaving the room temperature for 1 to 2h.)	①Contact resistance: 20 mΩ MAX. ②No 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.)		X	-

Note1: Include the temperature rising by current.
 Note2: No condensing
 Note3: Apply to the condition of long term storage for unused products before pcb on board, after pcb on board, operating temperature and humidity range is applied for interim storage during transportation.

Count	Description of revisions	Designed	Checked	Date
\triangle 2	DIS-H-00002571	SANGMUK. LIM	SZ. ONO	17.02.09
Remarks Unless otherwise specified, refer to IEC 60512.		Approved	HS. OKAWA	16.12.09
		Checked	YN. TAKASHITA	16.12.08
		Designed	SANGMUK. LIM	16.12.08
		Drawn	SANGMUK. LIM	16.12.08
Note QT:Qualification test AT:Assurance test X:applicable test		Drawing No.	ELC-367036-05-01	
HRS	Specification sheet	Part No.	DF63SF-1618SCFA (05)	
	Hirose electric co., Ltd.	Code No.	CL680-0703-0-05	\triangle 1/1