





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	20% to + 80%(Note 2)	Storage humidity range	40% to + 70%(Note 3)	
	Voltage	100V AC/DC	Applicable connector	DF50#-*DS-1C(##)、DF50A-*S-1C(##)	
	Current 	AWG#28 : 2.0A AWG#30 : 0.9A	Applicable cable	AWG#28-30	
			Insulation diameter	φ 0.8-0.9mm	
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		AC 20 mV MAX 1mA (DC or 1000 Hz).	30mΩ MAX.	X	—
Mechanical characteristics					
Contact insertion and extraction forces		T=0.15±0.002 mm by steel gauge.	Insertion force 1 N MAX. Extraction force 0.08 N MIN.	X	—
Mechanical Operation		30 times insertion and extraction.	① Contact resistance: 50 mΩ MAX. ② No damage, crack or looseness of parts.	X	—
Vibration		Frequency 10 to 55 Hz, single amplitude 0.75 mm, at 10 cycles for each, for 3 directions.	① No electrical discontinuity of 1μs. ② No damage, crack or looseness of parts.	X	—
Shock		490 m/s ² duration of pulse 11 ms at 3 times for 3 directions.		X	—
Environmental characteristics					
Damp heat (Steady state)		Exposed at 40 ± 2 °C, 90 to 95 %, 96 h.	① Contact resistance: 50mΩ 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 to 3 min) (After leaving the room temperature for 1 to 2h.)		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 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
	1	DIS-H-00004883	HT. SATO	SZ. ONO	20190522
Unless otherwise specifid , refer to IEC 60512.			Approved	HS. OKAWA	20170325
			Checked	TS. FUKUSHIMA	20170325
			Designed	TS. MIYAKI	20170325
			Drawn	MI. SAKIMURA	20170325
Note QT:Qualification Test AT:Assurance Test X:Applicable Test			Drawing No.		ELC-320119-76-00
	Specification sheet		Part no.	DF50-2830SCFA (76)	
	Hirose electric co., ltd.		Code no.	CL665-0002-0-76	 1/1