





Applicable standard						
Rating	Operating temperature range 	-55 °C to +105°C (Note1)	Current	Contact	AWG 16	AWG 18
	Operating humidity range	20% to 80% (Note2)		1	15A	13A
	Storage temperature range	-10 °C to +60°C (Note3)		2	14A	12A
	Storage humidity range	40% to 70% (Note3)		3	12A	10A
	Applicable connector	DF63-*S-3.96C		4	10A	8A
	Voltage	AC/DC 630V		5	10A	8A
				6	10A	8A
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		20mV MAX, 1mA (DC or 1000Hz).	10 mΩ MAX.		X	—
Insulation resistance		500 V DC.	1000 MΩ MIN.		X	—
Voltage proof		1500 V AC for 1 min.	No flashover or breakdown.		X	—
Mechanical characteristics						
Mechanical operation		30 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.	①No electrical discontinuity of 1 μ s. ②No damage, crack or looseness of parts.		X	—
Shock		490 m/s ² duration of pulse 11 ms at 3 times each for 3 both axial directions.	①No electrical discontinuity of 1 μ s. ②No damage, crack or looseness of parts.		X	—
Environmental characteristics						
Damp heat (Steady state)		Exposed at 40 ± 2°C , 90 to 95 %, 96 h. (After leaving the room temperature for 1-2h.)	①Contact resistance: 20 mΩ MAX. ②Insulation resistance: 500 MΩ MIN. ③No 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.)	①Contact resistance: 20 mΩ MAX. ②Insulation resistance: 1000 MΩ MIN. ③No damage, crack or looseness of parts.		X	—
Resistance to soldering heat		1) Automatic soldering (flow) Soldered at solder temperature 260°C for in immersing duration 10s. 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		Soldered at solder temperature 245°C for in immersing duration 5 s.	A new uniform coating of solder shall cover minimum of 95 % of the surface being immersed.		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 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	
	1	DIS-H-00002332	MI. SAKIMURA	TS. FUKUSHIMA	16. 11. 29	
Unless otherwise specified, refer to IEC 60512.				Approved	KI. AKIYAMA	15. 07. 13
				Checked	TS. FUKUSHIMA	15. 07. 10
				Designed	YK. YAMAGUCHI	15. 07. 10
				Drawn	YK. YAMAGUCHI	15. 07. 10
Note QT:Qualification Test AT:Assurance Test X:Applicable Test			Drawing no.		ELC-359864-00-00	
	Specification sheet		Part no.	DF63-*P-3. 96DS		
	Hirose electric co., ltd.		Code no.	CL680-		1/1