





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)	
	Voltage	AC/DC 630V	Applicable connector	DF63-3S-3.96C	
	Current	AWG #16 : 12 A/pin AWG #18 : 11 A/pin AWG #20 : 9 A/pin AWG #22 : 8 A/pin	Applicable contact	DF63(A)-1618SC(F) DF63(A)-2022SC(F)	
UL,C-UL		Rated Voltage 600V AC/DC	Rated Current See above	Overvoltage Category -	IP-Degree -
TUV		300V AC/DC	See above	II	IP00
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.		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 10 cycles for 3 direction.		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 each for 3 both axial 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. (After leaving the room temperature for 1 to 2h.)		1) Contact resistance: 20 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 to 3 min) (After leaving the room temperature for 1 to 2h.)		1) Contact resistance: 20 mΩ MAX. 2) Insulation resistance: 1000 MΩ MIN. 3) No damage, crack or looseness of parts.	X -
Resistance to Soldering heat		1)Solder bath method Soldered at solder temperature, 260°C for in immersion , duration, 5 s. 2)Manual soldering Soldering iron temperature :300°C, Soldering time :3s. No strength on contact.		Such as impaired function ,no deformation of case of excessive looseness of the terminals.	X -
Solderability		Soldered at solder temperature, 245°C for in immersion , 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 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-00005943	TS. MIYAKI	SZ. ONO	20200512
Remarks Unless otherwise specified, refer to IEC 60512.			Approved	KI. AKIYAMA	20150901
			Checked	TS. FUKUSHIMA	20150901
			Designed	MI. SAKIMURA	20150901
			Drawn	MI. SAKIMURA	20150901
Note QT:Qualification Test AT:Assurance Test X:Applicable Test			Drawing no.		ELC-362112-00-00
	Specification sheet		Part no.	DF63-3P-7. 92DSA	
	Hirose electric co., ltd.		Code no.	CL680-0537-0-00	 1/1