



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-3S-3.96C		Voltage	630V AC/DC		
	Applicable contact	DF63SF-1618SCFA(##)		Current	AWG#16 : 15 A/pin AWG#18 : 13 A/pin		
		Rated Voltage	Rated Current	Overvoltage Category	IP-Degree		
UL,C-UL		600V AC/DC	See above	-	-		
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		2200 V AC for 1 min.		No flashover or breakdown.		X	-
Mechanical characteristics							
Mechanical operation		50 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 1 μs. 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 1 μs. 2) No damage, crack or looseness of parts.		X	-
Mating force		Measured by applicable connector.		Insertion force : 20.0 N MAX Extraction force : 1.0 N MIN		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→ +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.)		1) Contact resistance: 20 mΩ MAX. 2) Insulation resistance: 1000 MΩ Min. 3) No damage, crack or looseness of parts.		X	-
Dry heat		Exposed at +105°C,96h.		1) Contact resistance: 20 mΩ MAX. 2) Insulation resistance: 1000 MΩ Min. 3) No damage, crack or looseness of parts.		X	-
Cold		Exposed at -55°C,96h.		1) Contact resistance:20 mΩ MAX. 2) Insulation resistance: 1000 MΩ Min. 3) No damage, crack or looseness of parts.		X	-
Note 1: Include the temperature rising by current. Note 2: No condensing. Note 3: Apply to unused product on packaged condition.							
	Count	Description of revisions		Designed		Checked	Date
△ 0							
Remarks Unless otherwise specified, refer to IEC 60512.				Approved	SJ. OKAMURA	20210623	
				Checked	SZ. ONO	20210623	
				Designed	TS. KUMAZAWA	20210623	
				Drawn	TS. KUMAZAWA	20210623	
Note QT:Qualification Test AT:Assurance Test X:Applicable Test				Drawing No.		ELC-374749-51-00	
HRS	Specification sheet			Part No.	DF63SF-2P-7. 92TV (51)		
	HIROSE ELECTRIC CO., LTD.			Code No.	CL0680-0704-0-51	△	1/2

Specifications					
Item	Test method	Requirements	QT	AT	
Resistance To Soldering Heat	1) Reflow soldering 《Reflow time》 Number of reflow cycles : 2 cycles MAX. Duration above 220°C, 60 sec. MAX. Peak temperature: 250°C 10 sec. MAX. 《Pre-heat time》 Pre-heat temperature (MIN) :150°C Pre-heat temperature (MAX) :180°C Pre-heat time(MIN) : 90 sec. Pre-heat time(MAX) : 120 sec. Do not reflow upside down. 2) Manual soldering Soldering iron temperature :350±10°C Soldering time : 5s. No strength on contact.	No deformation of case of excessive looseness of the terminals.	X	—	
Solderability	Soldered at solder temperature 245°C for in immersion,duration,5s.	A new uniform coating of solder shall cover minimum of 95% of the surface being immersed.	X	—	
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