





Applicable standard						
Rating	Operating Temperature range	-40 °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	DF65-7S-1.7C	UL, C-UL Rating 	Voltage	AC 50 V	
	Applicable contact	DF65-2428SCFA(**)		Current	24 AWG : 3.5 A 26 AWG : 2.5 A 28 AWG : 2 A	
	Voltage	50 V AC/DC				
	Current	24 AWG : 3.5 A 26 AWG : 2 A 28 AWG : 2 A				
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 millivolt level method		20mV MAX, 1mA(DC or 1000Hz).	10mΩ MAX.		X	—
Insulation resistance		100 V DC.	100 MΩ MIN.		X	—
Voltage proof		500 V AC for 1 min.	No flashover or breakdown.		X	—
Mechanical characteristics						
Mechanical operation		50 times insertion and extraction.	①Contact resistance: 20mΩ 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 1μs. 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.			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: 20mΩ MAX. ②Insulation resistance: 100 MΩ MIN. ③No 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 - 3 min) (After leaving the room temperature for 1 - 2h.)			X	—
Resistance to soldering heat		1) Reflow soldering «Reflow time» Number of reflow cycles : 2 cycles max. Duration above 220°C, 60sec. 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. 2) Manual soldering Soldering iron temperature: 350±10°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 immersion, duration, 5s.	A new uniform coating of solder shall cover minimum of 95% of the surface being immersed.		X	—
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 are applied for interim storage during transportation.						
	Count	Description of revisions	Designed	Checked	Date	
	1	DIS-H-00004782	SN. MIWA	SZ. ONO	20190416	
Remarks				Approved	HS. OKAWA	20180426
				Checked	TS. FUKUSHIMA	20180426
				Designed	TS. KUMAZAWA	20180426
				Drawn	SN. MIWA	20180426
Unless otherwise specified, refer to IEC 60512.						
Note QT:Qualification Test AT:Assurance Test X:Applicable Test			Drawing No.		ELC-354319-78-01	
	Specification sheet		Part No.	DF65-7P-1. 7V (78)		
	HIROSE ELECTRIC CO., LTD.		Code No.	CL666-6014-9-78		1/1