

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)
	Voltage	50 V AC/DC	Applicable Connector	DF65-7S-1.7C
	Current	AWG #24 : 3.0A AWG #26 : 2.0A AWG #28 : 2.0A		

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	30 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 to 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→ +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	—
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 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-00001619	YK. YAMAGUCHI	TS. FUKUSHIMA	16. 05. 13

Remarks	Approved	Checked	Date
		KI. AKIYAMA	14. 07. 16
		HK. UMEHARA	14. 07. 15
		TT. OHSAKO	14. 07. 15
Unless otherwise specified, refer to IEC 60512.	Designed	TT. OHSAKO	14. 07. 15
	Drawn	TT. OHSAKO	14. 07. 15

Note QT:Qualification Test AT:Assurance Test X:Applicable Test Drawing No. ELC-354319-21-01

HRS	Specification sheet	Part No.	DF65-7P-1. 7V (21)	
	HIROSE ELECTRIC CO., LTD.	Code No.	CL666-6014-9-21	△ 1/1