

Applicable standard					
Rating	Operating Temperature Range	\triangle -40 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	DF65-4S-1.7C	Current	AWG 24 : 4.0A	
	Voltage	50 V AC/DC			
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).	10 mΩ 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.	1.Contact resistance: 20 mΩ MAX. 2.No damage, crack or looseness of parts.	X	—	
\triangle Contact Insertion and Extraction Forces	It takes out and inserts with a conformity connector.	1.Insertion Force : 22N MAX. 2.Extraction Force: 2.9N MIN.	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	Acceleration 490 m/s ² duration of pulse 11 ms at 3 times for 3 directions.		X	—	
Environmental Characteristics					
Damp Heat (Steady State)	Exposed at 40 ± 2°C , humidity 90 to 95 %, 96 h. (After leaving the room temperature for 1 to 2h.)	1.Contact resistance: 20 mΩ MAX. 2.Insulation resistance: 100 MΩ MIN. 3.No damage, crack or looseness of parts.	X	—	
Rapid Change Of Temperature	\triangle 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: 100 MΩ MIN. 3.No damage, crack or looseness of parts.	X	—	
Resistance To Soldering Heat	1) Reflow Soldering Number of reflow cycles : 2 cycles MAX. Duration above 220 °C, 60 sec. MAX. Peak temperature: 250°C 10 sec. MAX. Pre-heat temperature :150 to 180 °C Pre-heat time : 90 to 120 sec. 2) Manual soldering Soldering iron temperature :350±10°C, Soldering time : 3sec. No strength on contact.	No deformation of case of excessive looseness of the terminals.	X	—	
Solderability	Soldering temperature : 245°C Duration of immersion :soldering, for 5 sec.	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 board , operating temperature and humidity range is applied for interim storage during transportation.					
\triangle	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
\triangle	3	DIS-H-00000292	YK. YAMAGUCHI	HK. UMEHARA	15. 03. 27
Unless otherwise specified, refer to IEC 60512.			APPROVED	KI. AKIYAMA	14. 01. 15
			CHECKED	OM. MIYAMOTO	14. 01. 15
			DESIGNED	TT. OHSAKO	14. 01. 14
			DRAWN	TT. OHSAKO	14. 01. 14
Note QT:Qualification Test AT:Assurance Test X:Applicable Test			DRAWING NO.		ELC4-351454-01
HRS	SPECIFICATION SHEET		PART NO.	DF65-4P-1. 7V (21)	
	HIROSE ELECTRIC CO., LTD.		CODE NO.	CL666-6006-0-21	\triangle 1/1