





Applicable standard					
Rating	Operating Temperature Range	-55°C to +85°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	DF53#-*P-0.6C	
	Current	1.3A/pin	Applicable cable	AWG32	
Insulation diameter			φ0.4mm MAX		
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).	40 mΩ MAX.	X	—
Millivolt level method					
Mechanical Characteristics					
Mechanical operation		20 times insertion and extraction.	1. Contact resistance: 40 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		500 m/s2 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	—
Rance tensile strength		Measuring the strength of fixing the housing and pulling the wire.	3 N MIN.	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: 40 mΩ MAX. 2. 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: 40 mΩ MAX. 2. No damage, crack or looseness of parts.	X	—
Dry Heat		Exposed at 85±2°C, 96h		X	—
Cold		Exposed at -55±3°C, 96h		X	—
Remarks Note 1: Include the temperature rising by current. Note 2: No condensing. Note 3: Applicable to unused product packaging.					
	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
	1	DIS-H-00019500	JN. TONAI	SZ. ONO	20231120
Unless otherwise specified, refer to IEC 60512.			APPROVED	S.J. OKAMURA	20210114
			CHECKED	TT. OHSAKO	20210114
			DESIGNED	TH. SATO	20210113
			DRAWN	TH. SATO	20210113
Note QT:Qualification Test AT:Assurance Test X:Applicable Test			DRAWING NO.		ELC-380643-00-00
	SPECIFICATION SHEET		PART NO.	DF53-32PCF	
	HIROSE ELECTRIC CO., LTD.		CODE NO.	CL0668-1025-0-00	 1/1