

Applicable standard								
Rating △3	Operating Temperature Range	-55 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	DF51%-20DS-2C(##)	Current		AWG 24 : 2.0A			
	Applicable Contact	DF11-EP2428PC(A)/PCF(A)			AWG 26 : 1.5A AWG 28 : 1.0A			
	Voltage	250 V AC/DC	UL • C-UL Rating	Voltage	30 V AC/DC			
			Current	AWG 24 to 28 : 1.0A				
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 △3								
Insulation Resistance		500 V DC.		1000 MΩ MIN.		X	—	
Voltage Proof		650 V AC for 1 min.		No flashover or breakdown.		X	—	
Mechanical Characteristics								
Mechanical Operation (Sn Plating)		30 times insertion and extraction.		No damage, crack or looseness of parts. △3		X	—	
Mechanical Operation (Au Plating)		50 times insertion and extraction.				X	—	
Mating and unmating Force (Sn Plating)		It takes out and inserts with a conformity connector.		1.Insertion Force : 88.2N MAX. 2.Extraction Force : 5.2N MIN.		X	—	
Mating and unmating Force (Au Plating)		It takes out and inserts with a conformity connector.		1.Insertion Force : 58.5N MAX. 2.Extraction Force : 5.0N MIN.		X	—	
Vibration		Frequency 10 to 55 Hz, single amplitude 0.75 mm, at 10 cycles for 3 direction.		No damage, crack or looseness of parts. △3		X	—	
Shock		Acceleration 490 m/s ² duration of pulse 11 ms at 3 times for 3 directions.				X	—	
Contact extraction force		Pull out the cable after housing fixation.		11.8N 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.Insulation resistance: 500 MΩ MIN. △3 2.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.Insulation resistance: 1000 MΩ MIN. △3 2.No damage, crack or looseness of parts.		X	—	
Dry Heat		Exposed at 105±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:Apply to the condition of long term storage for unused products before mount on pcb, After mounted on pcb, operating temperature and humidity range is applied for interim storage during transportation.								
△3	COUNT	DESCRIPTION OF REVISIONS		DESIGNED		CHECKED	DATE	
	6	DIS-H-00004571		TS. MIYAKI		SZ. ONO	20190110	
Unless otherwise specified, refer to IEC 60512.				APPROVED	HS. OKAWA	20160601		
				CHECKED	YN. TAKASHITA	20160601		
				DESIGNED	TT. OHSAKO	20160601		
				DRAWN	TT. OHSAKO	20160601		
Note QT:Qualification Test AT:Assurance Test X:Applicable Test				DRAWING NO.		ELC-366290-00-00		
HRS	SPECIFICATION SHEET			PART NO.		DF51-20DEP-2C		
	HIROSE ELECTRIC CO., LTD.			CODE NO.		CL543-5079-0-00	△3 1/1	