

Applicable standard										
Rating	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)					
	Voltage	250 V AC/DC		UL • C-UL Rating	30 V AC/DC					
	Current	AWG 22 to 24 : 2.0A			2.0A					
		AWG 26 : 1.5A		Applicable Connector						
	AWG 28 : 1.0A		Applicable Contact		DF51-28DS-2C					
AWG 30 : 0.5A		DF11-****SC(F)A(##)								
<b>Specifications</b>										
Item	Test method			Requirements	QT AT					
<b>Construction</b>										
General Examination	Visually and by measuring instrument.			According to drawing.	X X					
Marking	Confirmed visually.				X X					
<b>Electric Characteristics</b>										
Contact Resistance Millivolt Level Method	20mV MAX, 1mA (DC or 1000Hz).			30 mΩ MAX.	X —					
Insulation Resistance	500 V DC.			1000 MΩ MIN.	X —					
Voltage Proof	650 V AC for 1 min.			No flashover or breakdown.	X —					
<b>Mechanical Characteristics</b>										
Mechanical Operation	50 times insertion and extraction.			1.Contact resistance: 30 mΩ MAX. 2.No damage, crack or looseness of parts.	X —					
Mating and unmating force	It takes out and inserts with a conformity connector.			1.Insertion Force :76.9 N MAX. 2.Extraction Force :7.0 N 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 μ s. 2.No damage, crack or looseness of parts.	X —					
Shock	Acceleration 490 m/s <sup>2</sup> duration of pulse 11 ms at 3 times for 3 directions.				X —					
<b>Environmental Characteristics</b>										
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: 30 mΩ MAX. 2.Insulation resistance: 500 MΩ MIN. 3.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.Contact resistance: 30 mΩ MAX. 2.Insulation resistance: 1000 MΩ MIN. 3.No damage, crack or looseness of parts.	X —					
Dry Heat	Exposed at 105±2°C, 96h			1.Contact resistance: 30 mΩ MAX. 2.Insulation resistance: 1000 MΩ MIN. 3.No damage, crack or looseness of parts.	X —					
Cold	Exposed at -55±3°C, 96h			1.Contact resistance: 30 mΩ MAX. 2.Insulation resistance: 1000 MΩ MIN. 3.No damage, crack or looseness of parts.	X —					
<b>Remarks</b>										
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.										
	COUNT	DESCRIPTION OF REVISIONS	DESIGNED		CHECKED	DATE				
△2	2	DIS-H-00005270	TS. MIYAKI		SZ. ONO	20190912				
Unless otherwise specified, refer to IEC 60512.					APPROVED	HS. OKAWA				
					CHECKED	ST. WADA				
					DESIGNED	TH. SATO				
					DRAWN	TH. SATO				
Note QT:Qualification Test AT:Assurance Test X:Applicable Test					DRAWING NO.		ELC-363515-01-00			
<b>HRS</b>	SPECIFICATION SHEET			PART NO.	DF51A-28DP-2DSA (01)					
	HIROSE ELECTRIC CO., LTD.			CODE NO.	CL543-5055-0-01					
						△1/2				

## Specifications

Item	Test method	Requirements	QT	AT
Resistance To Soldering Heat	1)Solder bath method  Soldered at solder temperature, 260°C for in immersion, duration, 5 s. 2)Manual soldering Soldering iron temperature :270°C, Soldering time :3s. No strength on contact.	Such as impaired function ,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	—

Note QT:Qualification Test AT:Assurance Test X:Applicable Test

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