

Applicable standard					
Rating	Operating temperature range 	-55°C to +85°C(Note1)	Storage temperature range	-10°C to +60°C(Note3)	
	Operating humidity range	40 % to 80 % (Note2)	Storage humidity range	40 % to 70 %(Note3)	
	Voltage	100V AC	Applicable contact	—	
	Current	AWG28 : 1A AWG30 : 0.9A AWG32 : 0.7A	Applicable connector	DF20A-*DS-1C	
			Applicable cable	—	
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, 1 mA (DC or 1000 Hz).	30mΩ MAX.	X	—
Insulation		100V DC.	500MΩ MIN.	X	—
Voltage proof		300V AC for 1 min.	No flashover or breakdown.	X	—
Mechanical characteristics					
Mechanical operation		50 times insertion and extraction.	① Contact resistance: 30mΩ MAX. ② No damage, crack or looseness of parts.	X	—
Vibration		Frequency 10 to 55 Hz, single amplitude 0.75 mm, at 2 h, for 3 directions.	① No electrical discontinuity of 1μs. ② No damage, crack or looseness of parts.	X	—
Shock		490 m/s ² duration of pulse 11 ms at 3 times for 3 directions.		X	—
Environmental characteristics					
Rapid change of temperature		Temperature -55→ 5 to 35→+85→ 5 to 35 °C Time 30→ 2 to 3→ 30→ 2 to 3 min Under 5 cycles.	① Contact resistance: 30mΩ MAX. ② Insulation resistance: 500MΩ MIN. ③ No damage, crack or looseness of parts.	X	—
Damp heat(Steady state)		Exposed at 40 ± 2 °C, 90 to 95 %, 96 h.		X	—
Corrosion,salt mist		Exposed in 5% salt water spray for 48 h.	No heavy corrosion.	X	—
Sulphur dioxide		Exposed in 10 PPM for 96 h.(Test standard:JEIDA-39)	No heavy corrosion.	X	—
Resistance to soldering heat (Reflow)		《Reflow area》 MAX 250°C WITHIN 10 sec. MIN 220°C WITHIN 60sec. 《Preheating area》 150 °C 60 TO 120 sec. Put through in reflow furnace twice, Leave in ambient temperature and Humidity for 1 hour.	No deformation of case of excessive looseness of the terminals.	X	—
Resistance to soldering heat (Manual)		Soldering iron temperature :300°C, Soldering time :3sec. No strength on contact.			
Solderability		Soldered at solder temperature, 245°C for in immersion , duration, 5 s.	A 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 mounted on PCB.					
After mounted on PCB, operation temperature and humidity range is applied for interim storage during transportation.					
	Count	Description of revisions	Designed	Checked	Date
	1	DIS-H-00003037	HK. HAYASHI	TS. FUKUSHIMA	17. 08. 08
Unless otherwise specified, refer to IEC60512.			Approved	TY. OMA	06. 06. 13
			Checked	HK. UMEHARA	06. 06. 13
			Designed	AH. MIYAZAKI	06. 06. 05
			Drawn	AH. MIYAZAKI	06. 06. 05
Note QT:Qualification Test AT:Assurance Test X:Applicable Test			Drawing no.		ELC4-164529-04
	Specification sheet		Part no.	DF20F-*DP-1V (56)	
	Hirose electric co., Ltd.		Code no.	CL686	 1/1