

Applicable standard					
Rating	Operating temperature range	-35°C to +85°C (Note 1)	Storage temperature range	-10°C to +60°C (Note 3)	
	Operating humidity range	40% to 80% (Note 2)	Storage humidity range	40% to 70% (Note 3)	
	Voltage	100V AC	Applicable contact	—	
	Current	AWG28 : 1A AWG30 : 0.9A AWG32 : 0.7A	Applicable connector	DF20A-10DS-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 resistance	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》 250°C MAX within 10 sec. 220°C MIN 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. Connector temperature to be ambient for second reflow.		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	—
Count	Description of revisions		Designed	Checked	Date
△					
Remarks			Approved	KI. AKIYAMA	15. 07. 07
Note 1: Including the temperature rising by current.			Checked	TS. FUKUSHIMA	15. 07. 06
Note 2: No condensing			Designed	YK. YAMAGUCHI	15. 07. 06
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 interm storage during transportation.			Drawn	MI. SAKIMURA	15. 07. 06
Unless otherwise specified , refer to IEC 60512.					
Note QT: Qualification Test AT: Assurance Test X: Applicable Test			Drawing no.		ELC-164273-56-00
HRS	Specification sheet		Part no.	DF20G-10DP-1V (56)	
	Hirose electric co., ltd.		Code no.	CL686-0037-6-56	△ 1/1