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In case of consideration for using Automotive equipment / device which demand high reliability, kindly contact our sales window correspondents.

Applicable standard					
Rating	Operating temperature range	-55°C to + 105°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	250V AC/DC	Applicable connector		DF3-*S-2C
	Current	AWG 22 to 24 : 3A AWG 26 : 2A AWG 28 : 1A	UL・CSA rating	Voltage	30V AC/DC
				Current	AWG 24 : 3A AWG 26 : 2A AWG 28 : 1A (Note 4)

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, 1mA (DC or 1000Hz).	30mΩ MAX.	X	—
Insulation resistance	500V DC.	1000MΩ MIN.	X	—
Voltage proof	650V AC for 1 min.	No flashover or breakdown.	X	—
Mechanical characteristics				
Mechanical operation	30 times insertions and extractions.	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.	① No electrical discontinuity of 1μs. ② No damage, crack or looseness of parts.	X	—
Environmental characteristics				
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: 30mΩ MAX. ② Insulation resistance: 1000MΩ MIN. ③ No damage, crack or looseness of parts.	X	—
Damp heat (Steady state)	Exposed at 40 ± 2 °c, 90 to 95 %, 96 h.	① Contact resistance: 30mΩ MAX. ② Insulation resistance: 500MΩ MIN. ③ No damage, crack or looseness of parts.	X	—
Resistance to Soldering heat	1) Reflow soldering Number of reflow cycles : 2 cycles MAX. Duration above 230°C, 60 sec. MAX. Peak temperature: 250°C 10 sec. MAX. Pre-heat temperature :150 to 180°C Pre-heat time : 90 to 120 sec. 2) Manual soldering Soldering iron temperature :300°C, Soldering time : 3sec. No strength on contact.	No deformation of case of excessive looseness of the terminals.	X	—
Solderability	Soldering temperature :230 ℃ Soldering time :3s.	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 board, operating temperature and humidity range is applied for interim storage during transportation.
Note 4: Apply to crimping contact type.

	Count	Description of revisions	Designed	Checked	Date
△0					

Unless otherwise specified, refer to IEC 60512.			
	Approved	HS. OKAWA	18. 02. 16
	Checked	TS. FUKUSHIMA	18. 02. 16
	Designed	TS. KUMAZAWA	18. 02. 16
	Drawn	MK. INOUE	18. 02. 16

Note QT:Qualification Test AT:Assurance Test X:Applicable Test	Drawing no.	ELC-369406-24-00	
HRS Specification sheet	Part no.	DF3E-*P-2H(24)	
Hirose electric co., ltd.	Code no.	CL543	△0 1/1

FORM HD0011-2-1