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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	-35°C to +85°C(Notes 1)	Storage temperature range	-10°C to +60°C(Note3)
	Operating humidity range	20 % to 80 % (Notes 2)	Storage humidity range	40 % to 70 %(Note3)
	Voltage	150 V AC (DC)	Current	1 A
	Applicable Connector	DF13-*S-1.25C	Applicable Contact	DF13(G)-2630SCFA DF13-3032SCFA

**Specifications**

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	100 m A (DC or 1000 Hz).	30 mΩ MAX.	X	—
Insulation resistance	100 V DC.	500 MΩ MIN.	X	—
Voltage proof	500 V AC for 1 min.	No flashover or breakdown.	X	—
<b>Mechanical characteristics</b>				
Mechanical operation	50 times insertions and extractions.	① Contact resistance: 30 mΩ 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 <sup>2</sup> duration of pulse 11 ms at 3 times for 3 directions.		X	—
<b>Environmental characteristics</b>				
Rapid change of temperature	Temperature -55 → 15 to 35 → +85 → 15 to 35 °c Time 30 → 2 to 3 → 30 → 2 to 3 min. Under 5 cycles.	① Contact resistance: 30mΩ MAX. ② Insulation resistance: 500 MΩ 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	—
Resistance to soldering heat	1) Reflow soldering « Reflow area » 250°C MAX 10 sec MAX 230°C MIN 60 sec MAX « Preheating area » 170°C to 190°C 60 sec to 120 sec Put through in reflow furnace twice, leave in ambient temperature and humidity for 1 hour. 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	Soldered at solder temperature, 245°C for insertion duration, 3sec.	Solder shall cover a 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 pcb on board,  
 after pcb on board, operating temperature and humidity range is applied for interim storage during transportation.

Unless otherwise specifid , refer to IEC 60512.

Count	Description of revisions	Designed	Checked	Date
△				
		Approved	KI. AKIYAMA	16. 01. 21
		Checked	TS. FUKUSHIMA	16. 01. 21
		Designed	YK. YAMAGUCHI	16. 01. 21
		Drawn	MI. SAKIMURA	16. 01. 21

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

Drawing no. **ELC-367983-51-00**

<b>HRS</b>	Specification sheet	Part no.	DF13E-*DP-1. 25V (51)	
	Hirose electric co., ltd.	Code no.	CL536	△ 1/1