Applicable standard								
Rating	Operating temperature range	-55°C to + 85°C(Note 1)			Storage temperature range	-10°C to + 60°C(Note2)		
	Operating humidity range	20% to 80% (Note3)			Storage humidity range	40% to 70%(Note2)		
	Voltage	1000V AC/DC			Applicable Connector	DF22L -*S-7.92C(28) DF22CL-*S-7.92C		
	Current(*1)	Contact	2,3	4,5	Current(*2)	Contact	2,3	4,5
		AWG10	38 A/pin	33 A/pin		AWG10	25 A/pin	22 A/pin
		AWG12	32 A/pin	26 A/pin		AWG12	20 A/pin	18 A/pin
		AWG14	23 A/pin	22 A/pin		AWG14	18 A/pin	15 A/pin
		AWG16	21 A/pin	19 A/pin		AWG16	15 A/pin	13 A/pin

	Rated voltage	Rated current	Overvoltage Category	IP-Protectio method
UL	AC 600V	See above(*1) (At ambient temp.25°C)(Note 4)	—	—
C-UL	AC 600V	See above(*2) (Temp. rise up 30°C MAX)	—	—
TÜV	AC 600V	See above(*2)	Ⅱ	IPOO

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 millivoltlevel method	20mV MAX, 1mA (DC OR 1000 Hz).	5 mΩ MAX.	X	—
Insulation resistance	1000V DC.	1000MΩ MIN.	X	—
Voltage proof	2500V AC for 1 min.	No flashover or breakdown.	X	—
Mechanical characteristics				
Mechanical operation	50times insertions and extractions.	1) Contact resistance: 10mΩ 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→ 5 to 35→+85→ 5 TO 35 °C Time 30→ 5 MAX → 30→ 5 MAX min Under 5 cycles.	1) Contact resistance: 10mΩ 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: 10mΩ MAX. 2) Insulation resistance: 500MΩ MIN. 3) No damage, crack or looseness of parts.	X	—
Resistance to soldering heat	1) Solder bath method Solder temperature : 260℃ for Immersion,duration : 10 sec . 2) Manual soldering Soldering iron temperature : 350℃ Soldering time : 3 sec. 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, 5sec.	Solder shall cover a minimum of 95 % of the surface being immersed.	X	—

Remarks
Note1: Including the temperature rising by current.
Note2: 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.
Note3: No condensing.
Note4: Indicates the current that corresponds to the RTI value (temperature at which performance is halved) of the resin when the ambient temperature is 25°C.

	Count	Description of revisions	Designed	Checked	Date
⚠0					

Unless otherwise specifid , refer to IEC 60512.

Approved	HS. OKAWA	20200310
Checked	SZ. ONO	20200310
Designed	SN. MIWA	20200310
Drawn	DS. HIROWATARI	20200306

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

Drawing no. ELC-164401-53-00

HRS	Specification sheet	Part no.	DF22L-*P-7.92DS(53)	
	HIROSE ELECTRIC CO., LTD.	Code no.	CL680	⚠0 1/1

FORM HD0011-2-1