Applicable standard					
Rating	Operating Temperature range	-40 °C to +105°C (Note1)	Storage Temperature range		-10 °C to +60°C (Note3)
	Operating Humidity range	20% to 80% (Note2)	Storage Humidity range		40% to 70% (Note3)
	Applicable Connector	DF65-4S-1.7C	UL Rating	Voltage	AC 50 V
	Applicable contact	DF65-2428SCF(**)	⚠2	Current	24 AWG : 4.5 A 26-28 AWG : 3.5 A
	Voltage	50 V AC/DC	C-UL Rating	Voltage	AC 50 V
	Current	24 AWG : 4 A 26 AWG : 2.5 A 28 AWG : 2.5 A	⚠2	Current	24 AWG : 4.5 A 26-28 AWG : 3 A

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).	10mΩ MAX.	X	–
Insulation resistance	100 V DC.	100 MΩ MIN.	X	–
Voltage proof	500 V AC for 1 min.	No flashover or breakdown.	X	–
Mechanical characteristics				
Mechanical operation	30 times insertion and extraction.	①Contact resistance: 20mΩ MAX. ②No damage, crack or looseness of parts.	X	–
Vibration	Frequency 10 to 55 Hz, single amplitude 0.75 mm, at 10 cycles for 3 direction.	①No electrical discontinuity of 1μs. ②No damage, crack or looseness of parts.	X	–
Shock	490 m/s^2 duration of pulse 11 ms at 3 times each for 3 both axial directions.		X	–
Environmental characteristics				
Damp heat (Steady state)	Exposed at 40 ± 2℃ , 90 to 95 %, 96 h. (After leaving the room temperature for 1 - 2h.)	①Contact resistance: 20mΩ MAX. ②Insulation resistance: 100 MΩ MIN. ③No damage, crack or looseness of parts.	X	–
Rapid change of temperature	Temperature -55℃→ +85℃ Time 30min→ 30min Under 5 cycles. (The transferring time of the tank is 2 - 3 min) (After leaving the room temperature for 1 - 2h.)		X	–
Resistance to soldering heat	1) Reflow soldering ≪Reflow time≫ Number of reflow cycles : 2 cycles max. Duration above 220℃, 60sec. max. Peak temperature : 250℃ 10 sec. max. ≪Pre-heat time≫ Pre-heat temperature(min) : 150℃ Pre-heat temperature(max) : 180℃ Pre-heat time(min) : 90 sec. Pre-heat time(max) : 120 sec. 2) Manual soldering Soldering iron tempreture: 350±10℃, Soldering time: 3s No strength on contact.	No deformation of case of excessive looseness of the terminals.	X	–
Solderability	Soldered at solder temperature, 245℃ for in immersion, duration, 5s.	A new uniform coating of solder shall cover minimum of 95% of the surface being immersed.	X	–

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 are applied for interim storage during transportation.

	Count	Description of revisions	Designed	Checked	Date
⚠2	2	DIS-H-00004782	SN.MIWA	SZ.ONO	20190416

Remarks

Unless otherwise specified, refer to IEC 60512.

Approved	KI.AKIYAMA	20140115
Checked	OM.MIYAMOTO	20140115
Designed	TT.OHSAKO	20140114
Drawn	TT.OHSAKO	20140114

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

Drawing No. ELC4-351454-01

HRS

Specification sheet

HIROSE ELECTRIC CO., LTD.

Part No. DF65-4P-1.7V(21)

Code No. CL666-6006-0-21 ⚠2 1/1

FORM HD0011-2-1