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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 125°C (Note 1)	Storage Temperature Range	-10°C TO 60°C
	Voltage	30V AC/DC	Mating Connector	DF40TC-80DP-0.4V(**)
	Current	0.3A		

SPECIFICATIONS

ITEM	TEST METHOD	REQUIREMENTS	QT	AT
CONSTRUCTION				
General Examination	Visually and by measuring instrument.	① According to drawing.	X	X
Marking	Confirmed visually.		X	X
ELECTRIC CHARACTERISTICS				
Contact Resistance	20mV AC or less 1kHz,1m A .	① 90 mΩ MAX.	X	—
Insulation Resistance	100V DC.	① 50 MΩ MIN.	X	—
Voltage Proof	100V AC for 1 min.	① No flashover or breakdown.	X	—
MECHANICAL CHARACTERISTICS				
Mechanical Operation	10times insertions and extractions.	① Contact resistance: 90 mΩ MAX. ② No damage, crack or looseness of parts.	X	—
Vibration	Frequency 10 to 500 Hz , Acceleration 49 m/s^2. Sweep time 11min(1 oct/min). 8h for 3 axial directions.	① No electrical discontinuity of 1 μs. ② No damage, crack or looseness of parts.	X	—
Shock	Acceleration 980 m/s^2 duration of pulse 6 ms at 3 times for 3 directions.		X	—
ENVIRONMENTAL CHARACTERISTICS				
Rapid Change of Temperature	Temperature : -55 → +125℃ Time : 30 → 30 min Under 1000 cycles. (Relocation time to chanber : within 2-3 min)	① Contact resistance: 90 mΩ MAX. ② No damage, crack or looseness of parts.	X	—
Dry Heat	Exposed at 125℃, 1000h.		X	—
Damp Heat (Steady state)	Exposed at 60±2 °C Relative humidity 90 to 95 %, 1000 h.	① Contact resistance: 90 mΩ MAX. ② Insulation resistance: 25MΩ MIN. ③ No damage, crack or looseness of parts.	X	—
Damp Heat, Cyclic	Exposed at -10 to 65°C, Relative humidity 90 to 96%, 10cycles, total 240h.		X	—
Sulfur Dioxide	Exposed in 25 PPM for 96h, 40℃, 80%. (Refer to JIS C 60068)	① Contact resistance: 180 mΩ MAX.	X	—
Heat resistance of Soldering	**Recommended temperature profile soldering area** MAX 250℃, 220℃ for 60 seconds MAX. **Preheating area** 150 to 180℃ 90 to 120 seconds. Maximum twice action is allowed under the same condition. **Recommended manual soldering condition** Soldering iron temperature 350℃. Soldering time: wihtin 3 seconds.	① No deformation of case of excessive looseness of the terminals.	X	—
Solderability	Soldering temperature 245±5℃ for immersion duration , 3±0.5 seconds.	① A new uniform coating of solder shall cover a minimum of 95% of the surface being immersed.	X	—

	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
⚠0					

REMARKS
Note1: Include the temperature rising by current

Unless otherwise specified, refer to JIS C 5402 and IEC 60512.

APPROVED	TY.OOI	20240321
CHECKED	RT.SHIMIZU	20240321
DESIGNED	YK.SATAKE	20240321
DRAWN	NK.TOYOSU	20240321

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

DRAWING NO. ELC-405761-51-00

HRS

SPECIFICATION SHEET

HIROSE ELECTRIC CO., LTD.

PART NO. DF40TC(2.0)-80DS-0.4V(51)

CODE NO. CL0684-4310-0-51 ⚠0 1/1

FORM HD0011-2-1