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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(Notes 1)	Storage Temperature Range	-10°C TO 60°C
	Voltage	30V AC/DC	Mating Connector	DF40TC-20DP-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, 1mA.	① 90mΩ MAX.	X	—
Insulation Resistance	100V DC.	① 50MΩ 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: 90mΩ MAX. ② No damage, crack or looseness of parts.	X	—
⚠1 Vibration	Frequency 10 to 500, acceleration 49 m/s^2, Sweep time 1 oct/min. 8h for 3 axial directions.	① No electrical discontinuity of 1 μs. ② No damage, crack or looseness of parts.	X	—
⚠1 Shock	Acceleration 980 m/s^2, duration of pulse 6 ms at 3 times for 3 directions.		X	—
ENVIRONMENTAL CHARACTERISTICS				
⚠1 Rapid Change of Temperature	Temperature -55 → 125 °C Time 30 → 30 min Under 1000 cycles.	① Contact resistance: 90mΩ MAX. ② No damage, crack or looseness of parts.	X	—
⚠1 Dry Heat	Exposed at 125 °C, 1,000 h.		X	—
⚠1 Damp Heat	Exposed at 60 ± 2 °C Relative humidity 90 to 95 %, 1000 h.	① Contact resistance: 90mΩ MAX. ② Insulation resistance: 25 MΩ MIN. ③ No damage, crack or looseness of parts.	X	—
⚠1 Damp Heat, Cyclic	Exposed at -10 to 65°C, Relative humidity 90 to 96%, 10cycles, total 240h.		X	—
⚠1 Sulphur Dioxide	Exposed in 25 PPM for 96h, 40℃, Relative humidity 80%.	① Contact resistance: 180mΩ 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: within 3 seconds.	① No deformation of case of excessive looseness of the terminals.	X	—
Solderability	Soldering temperature: 245 ± 5℃ Duration of immersion: soldering for 3±0.5 seconds.	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
⚠1	7	DIS-H-00009674	YK.SATAKE	TS.MIYAZAKI	20210623

REMARKS
Note1: Include the temperature rising by current

APPROVED	WR.FUKUCHI	20210402
CHECKED	TS.MIYAZAKI	20210402
DESIGNED	YK.SATAKE	20210402
DRAWN	YK.SATAKE	20210402

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

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

DRAWING NO. ELC-385555-58-00

HRS	SPECIFICATION SHEET	PART NO.	DF40TC(3.5)-20DS-0.4V(58)	
	HIROSE ELECTRIC CO., LTD.	CODE NO.	CL0684-4253-0-58	⚠1 1/1

FORM HD0011-2-1