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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			
	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°C 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°C, 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°C, 80%. (Refer to JIS C 60068)	① Contact resistance: 180 mΩ MAX.	X	—	
Heat resistance of Soldering	Recommended temperature profile soldering area MAX 250°C, 220°C for 60 seconds MAX. Preheating area 150 to 180°C 90 to 120 seconds. Maximum twice action is allowed under the same condition. Recommended manual soldering condition Soldering iron temperature 350°C. Soldering time: wihtin 3 seconds.	① No deformation of case of excessive looseness of the terminals.	X	—	
Solderability	Soldering temperature 245±5°C 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
REMARKS	Note1: Include the temperature rising by current		APPROVED	TY. 001	20231128
			CHECKED	RT. SHIMIZU	20231128
			DESIGNED	NK. TOYOSU	20231128
			DRAWN	NK. TOYOSU	20231128
Unless otherwise specified, refer to JIS C 5402 and IEC 60512.					
Note	QT:Qualification Test	AT:Assurance Test	X:Applicable Test	DRAWING NO. ELC-381717-51-00	
HRS	SPECIFICATION SHEET		PART NO.	DF40TC (2. 0) -20DS-0. 4V (51)	
	HIROSE ELECTRIC CO., LTD.		CODE NO.	CL0684-4241-0-51	△ 1/1