

Jan. 1. 2025 Copyright 2025 HIROSE ELECTRIC CO., LTD. All Rights Reserved. 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	-	
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	-	
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.	① Contact resistance: 90mΩ MAX. ② No damage, crack or looseness of parts.	X	-	
Dry Heat	Exposed at 125 °C, 1,000 h.		X	-	
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	-	
Damp Heat, Cyclic	Exposed at -10 to 65°C, Relative humidity 90 to 96%, 10cycles, total 240h.		X	-	
Sulphur Dioxide	Exposed in 25 PPM for 96h, 40°C, Relative humidity 80%.	① Contact resistance: 180mΩ 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: within 3 seconds.	① No deformation of case of excessive looseness of the terminals.	X	-	
Solderability	Soldering temperature: 245 ± 5°C 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
△	7	DIS-H-00009674	YK. SATAKE	TS. MIYAZAKI	20210623
REMARKS			APPROVED	WR. FUKUCHI	20210402
Note1: Include the temperature rising by current			CHECKED	TS. MIYAZAKI	20210402
			DESIGNED	YK. SATAKE	20210402
Unless otherwise specified, refer to JIS C 5402. IEC 60512.			DRAWN	YK. SATAKE	20210402
Note QT:Qualification Test AT:Assurance Test X:Applicable Test			DRAWING NO.		ELC-388644-58-00
HRS	SPECIFICATION SHEET		PART NO.	DF40TC (3. 0) -20DS-0. 4V (58)	
	HIROSE ELECTRIC CO., LTD.		CODE NO.	CL0684-4275-0-58	△ 1/1