

May.1.2023 Copyright 2023 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	-45°C TO 125°C (NOTES 1)	STORAGE TEMPERATURE RANGE	-10°C TO 60°C		
	VOLTAGE	50V AC	APPLICABLE CONNECTOR	DF12# (3.0)-10DS-0.5V (**)		
	CURRENT	0.3A				
<b>SPECIFICATIONS</b>						
ITEM		TEST METHOD		REQUIREMENTS	QT	AT
<b>CONSTRUCTION</b>						
GENERAL EXAMINATION		VISUALLY AND BY MEASURING INSTRUMENT.		ACCORDING TO DRAWING.	X	X
MARKING		CONFIRMED VISUALLY.			X	X
<b>ELECTRIC CHARACTERISTICS</b>						
CONTACT RESISTANCE		100m A (DC OR 1000 Hz).		50mΩ MAX.	X	—
INSULATION RESISTANCE		100V DC.		500MΩ MIN.	X	—
VOLTAGE PROOF		150V AC FOR 1 min.		NO FLASHOVER OR BREAKDOWN.	X	—
<b>MECHANICAL CHARACTERISTICS</b>						
INSERTION AND WITHDRAWAL FORCES		MEASURED BY APPLICABLE CONNECTOR.		INSERTION FORCE: 19.8N MAX. WITHDRAWAL FORCE: 1.5N MIN	X	—
MECHANICAL OPERATION		50TIMES INSERTIONS AND WITHDRAWALS.		① CONTACT RESISTANCE: 50mΩ MAX. ② NO DAMAGE, CRACK OR LOOSENESS OF PARTS.	X	—
VIBRATION		FREQUENCY 10 TO 55 Hz, SINGLE AMPLITUDE 0.75 mm, AT 2 h, FOR 3 DIRECTIONS.		① NO ELECTRICAL DISCONTINUITY OF 1μs. ② NO DAMAGE, CRACK OR LOOSENESS OF PARTS.	X	—
SHOCK		490 m/s <sup>2</sup> DURATION OF PULSE 11 ms AT 3 TIMES FOR 3 DIRECTIONS.		① NO ELECTRICAL DISCONTINUITY OF 1μs. ② NO DAMAGE, CRACK OR LOOSENESS OF PARTS.	X	—
<b>ENVIRONMENTAL CHARACTERISTICS</b>						
RAPID CHANGE OF TEMPERATURE		TEMPERATURE -65→15 TO 35→125→15 TO 35°C TIME 30→10 TO 15→ 30→10TO15min UNDER 5 CYCLES.		① CONTACT RESISTANCE: 50mΩ MAX. ② INSULATION RESISTANCE: 500 MΩ MIN. ③ NO DAMAGE, CRACK OR LOOSENESS OF PARTS.	X	—
DAMP HEAT (STEADY STATE)		EXPOSED AT 40 ± 2 °C, 90 TO 95 %, 96 h.		① CONTACT RESISTANCE: 50mΩ MAX. ② INSULATION RESISTANCE: 500 MΩ MIN. ③ NO DAMAGE, CRACK OR LOOSENESS OF PARTS.	X	—
CORROSION SALT MIST		EXPOSED IN 5% SALT WATER SPRAY FOR 48 h.		① CONTACT RESISTANCE: 50 mΩ MAX. ② NO HEAVY CORROSION.	X	—
SULPHUR DIOXIDE		EXPOSED IN 10 PPM FOR 96 h. (TEST STANDARD:JEIDA-39)		① CONTACT RESISTANCE: 50 mΩ MAX. ② NO HEAVY CORROSION.	X	—
HEAT RESISTANCE OF SOLDERING		【RECOMMENDED TEMPERATURE PROFILE】 《SOLDERING AREA》 MAX250°C, 220°C FOR 60 SECONDS MAX. 《PREHEATING AREA》 150 TO 180°C 90~120 SECONDS. MAXIMUM TWICE ACTION IS ALLOWED UNDER THE SAME CONDITION. 【RECOMMENDED MANUAL SOLDELING CONDITION】 SOLDERING IRON TEMPERATURE 350°C SOLDERING TIME : WITHIN 3 SECONDS.		NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINALS.	X	—
REMARKS						
NOTE1:INCLUDING THE TEMPERATURE RISE BY CURRENT.						
UNLESS OTHERWISE SPECIFIED , REFER TO JIS C 5402 .						
	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE	
△						
				APPROVED	KH. IKEDA	09.12.14
				CHECKED	AR. TAKAHASHI	09.12.14
				DESIGNED	TY. YAMASAKI	09.06.30
				DRAWN	TY. YAMASAKI	09.06.30
Note QT:Qualification Test AT:Assurance Test X:Applicable Test			DRAWING NO.		ELC4-324191-01	
<b>SPECIFICATION SHEET</b> HIROSE ELECTRIC CO., LTD.			PART NO.	DF12L (3.0)-10DP-0.5V (86)		
			CODE NO.	CL537-2003-7-86	△	1/1