

Aug.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 (NOTE2)	
	VOLTAGE	150V AC	APPLICABLE CONNECTOR	DF9#-51P-1V (69)	
	CURRENT	0.5A			
SPECIFICATIONS					
ITEM	TEST METHOD		REQUIREMENTS	QT	AT
CONSTRUCTION					
GENERAL EXAMINATION	VISUALLY AND BY MEASURING INSTRUMENT.		ACCORDING TO DRAWING.	X	X
MARKING	CONFIRMED VISUALLY.			X	X
ELECTRIC CHARACTERISTICS					
CONTACT RESISTANCE	100m A (DC OR 1000 Hz).		50mΩ MAX.	X	-
INSULATION RESISTANCE	100V DC.		500MΩ MIN.	X	-
VOLTAGE PROOF	250V AC FOR 1 min.		NO FLASHOVER OR BREAKDOWN.	X	-
MECHANICAL CHARACTERISTICS					
MECHANICAL OPERATION	⚠	100TIMES INSERTIONS AND EXTRACTIONS.	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 ² 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	-
ENVIRONMENTAL CHARACTERISTICS					
RAPID CHANGE OF TEMPERATURE		TEMPERATURE -65→ 5 TO 35→125→ 5 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 380°C SOLDERING TIME : WITHIN 3 SECONDS.	NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINALS.		
SOLDERABILITY		SOLDERING TEMPARATURE:245±5°C DURATION OF IMMERSION : SOLDERING FOR 3SECONDS	A NEW UNIFORM COATING OF SOLDER SHALL COVER MINIMUM OF 95% OF THE SURFACE BEING IMMersed.		
REMARKS					
NOTE1:INCLUDING THE TEMPERATURE RISE BY CURRENT.					
NOTE2:STORAGEIS DEFINED AS LONG-TERM STORAGE OF UNUSED PRODUCTS.					
APPLY OPERATION TEMPERATURE RANGE TO PRODUCTS MOUNTED ON PCB WITHOUT POWER SUPPLY.					
OPERATION TEMPERATURE FOR TAPE-AND-REAL PRODUCTS SHALL BE -10 TO 50°C.					
UNLESS OTHERWISE SPECIFIED , REFER TO JIS C 5402 .					
	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
⚠	1	DIS-H-00003087	YT. TAKAGI	TS. MIYAZAKI	17.09.28
			APPROVED	MO. NAKAMURA	05.08.31
			CHECKED	TS. MIYAZAKI	05.08.31
			DESIGNED	YH. MICHIDA	05.08.31
			DRAWN	YH. MICHIDA	05.08.31
Note QT:Qualification Test AT:Assurance Test X:Applicable Test			DRAWING NO.	ELC4-160985-09	
HRS	SPECIFICATION SHEET		PART NO.	DF9C-51S-1V (69)	
	HIROSE ELECTRIC CO., LTD.		CODE NO.	CL540-0246-0-69	⚠ 1/1