



**THE DATASHEET OF
DF9A-31P-1V(69)**



Jul.1.2024 Copyright 2024 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#-*S-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 TEMPERATURE: 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: STORAGE IS 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-001223	AR.TAKAHASHI	TS.MIYAZAKI	06.08.01
			APPROVED	MO.NAKAMURA	05.09.02
			CHECKED	TS.MIYAZAKI	05.09.02
			DESIGNED	YH.MICHIDA	05.08.31
			DRAWN	YH.MICHIDA	05.08.31
Note	QT:Qualification Test AT:Assurance Test X:Applicable Test		DRAWING NO.	ELC4-306115-09	
	SPECIFICATION SHEET		PART NO.	DF9A-*P-1V (69)	
	HIROSE ELECTRIC CO., LTD.		CODE NO.	CL540	△ 1/1

Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

- [View DF9A-31P-1V\(69\) on WIN SOURCE](#)
- [Hirose Electric Co Ltd Information](#)

Optimize Your Supply Chain with WIN SOURCE Solutions

- ✓ Global Sourcing Solution
- ✓ Obsolete Management
- ✓ Cost Control Management
- ✓ Shortage Management
- ✓ Alternative Solution
- ✓ Excess Inventory Management