

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	-35°C TO +85°C (NOTES 1)	STORAGE TEMPERATURE RANGE	-10°C TO +60°C	
	VOLTAGE	30V AC	APPLICABLE CONNECTOR	DF37*-50DP-0.4V (**)	
	CURRENT	0.3A			
SPECIFICATIONS					
ITEM	TEST METHOD		REQUIREMENTS	QT	AT
CONSTRUCTION					
GENERAL EXAMINATION	CONFIRMED VISUALLY AND BY MEASURING INSTRUMENT.		ACCORDING TO DRAWING.	X	X
MARKING	CONFIRMED VISUALLY.			X	X
ELECTRIC CHARACTERISTICS					
CONTACT RESISTANCE	20mV AC OR LESS 1kHz, 1mA .		100mΩ MAX.	X	—
INSULATION RESISTANCE	100V DC.		50MΩ MIN.	X	—
VOLTAGE PROOF	100V AC FOR 1 min.		NO FLASHOVER OR BREAKDOWN.	X	—
MECHANICAL CHARACTERISTICS					
INSERTION AND WITHDRAWAL FORCES	MEASURED BY APPLICABLE CONNECTOR.		INSERTION FORCE 50.7 N MAX.	X	—
			EXTRACTION FORCE 9.8 N MIN.	X	—
MECHANICAL OPERATION	10TIMES INSERTIONS AND EXTRACTIONS.		① CONTACT RESISTANCE: 100mΩ MAX. ② NO DAMAGE, CRACK OR LOOSENESS OF PARTS.	X	—
VIBRATION	FREQUENCY 10 TO 55 TO 10 Hz, APPROX 5min, SINGLE AMPLITUDE 0.75 mm, 10CYCLES, FOR 3 DIRECTIONS.		① NO ELECTRICAL DISCONTINUITY OF 1 μs. 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 1 μs. ② NO DAMAGE, CRACK OR LOOSENESS OF PARTS.	X	—
ENVIRONMENTAL CHARACTERISTICS					
RAPID CHANGE OF TEMPERATURE	TEMPERATURE -55 → +85 °C TIME 30 → 30 min UNDER 5 CYCLES. (RELOCATION TIME TO CHAMBER : WITHIN 2~3 MIN)		① CONTACT RESISTANCE: 100mΩ MAX. ② INSULATION RESISTANCE: 50MΩ 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: 100mΩ MAX. ② INSULATION RESISTANCE: 25MΩ MIN. ③ NO DAMAGE, CRACK OR LOOSENESS OF PARTS.	X	—
SULPHUR DIOXIDE	EXPOSED IN 25 PPM FOR 96h, 25°C, 75%. (REFER TO JIS C 60068)		① CONTACT RESISTANCE: 100mΩ MAX. ② NO DAMAGE, CRACK OR LOOSENESS OF PARTS.	X	—
SALT MIST	EXPOSED IN 5% SALT MIST FOR 48h.		① CONTACT RESISTANCE: 100mΩ MAX. ② NO DAMAGE, CRACK OR LOOSENESS OF PARTS.	X	—
	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
REMARKS NOTE1: INCLUDE THE TEMPERATURE RISING BY CURRENT  Unless otherwise specified, refer to JIS C 5402 and IEC 60512			APPROVED	KH. IKEDA	10.10.01
			CHECKED	TS. MIYAZAKI	10.09.30
			DESIGNED	RT. SHIMIZU	10.09.30
			DRAWN	YN. SAKAMOTO	10.09.30
Note	QT:Qualification Test AT:Assurance Test X:Applicable Test		DRAWING NO.	ELC4-319640-01	
<b>HRS</b>	SPECIFICATION SHEET		PART NO.	DF37NB-50DS-0.4V (51)	
	HIROSE ELECTRIC CO., LTD.		CODE NO.	CL684-3307-2-51	1/1