

Feb.1.2021 Copyright 2021 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 (NOTE 1)	STORAGE TEMPERATURE RANGE	-10°C TO 60°C
	VOLTAGE	30V AC	APPLICABLE CONNECTOR	DF40*-12DP-0.4V (**)
	CURRENT	0.3A		
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	20mV AC OR LESS 1kHz,1mA .	90mΩ MAX.	X	-
INSULATION RESISTANCE	100V DC.	50MΩ MIN.	X	-
VOLTAGE PROOF	100V AC FOR 1 min.	NO FLASHOVER OR BREAKDOWN.	X	-
MECHANICAL CHARACTERISTICS				
MECHANICAL OPERATION	30TIMES INSERTIONS AND EXTRACTIONS.	① CONTACT RESISTANCE: 90mΩ 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 ² 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→ 5 TO 35→85→ 5 TO 35 °C TIME 30→ 5 MAX → 30→ 5 MAX min UNDER 5 CYCLES.	① CONTACT RESISTANCE: 90mΩ 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: 90mΩ 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%.	① CONTACT RESISTANCE: 180mΩ MAX. ② NO DAMAGE, CRACK OR LOOSENESS OF PARTS.	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 120SECONDS. MAXIMUM TWICE ACTION IS ALLOWED UNDER THE SAME CONDITION. RECOMMENDED MANUAL SOLDERING CONDITION SOLDERING IRON TEMPERATURE 350°C. SOLDERING TIME: WITHIN 3 SECONDS.	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 MINIMUM OF 95% OF THE SURFACE BEING IMMersed.	X	-
COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
△				
REMARKS		APPROVED	MO. ISHIDA	16.10.05
NOTE1: INCLUDE THE TEMPERATURE RISING BY CURRENT		CHECKED	TS. MIYAZAKI	16.10.05
		DESIGNED	SH. HOSODA	16.10.05
Unless otherwise specified, refer to JIS C 5402, IEC 60512.		DRAWN	SN. NUMAZAKI	16.10.04
Note QT:Qualification Test AT:Assurance Test X:Applicable Test		DRAWING NO.	ELC-332417-58-01	
HRS	SPECIFICATION SHEET	PART NO.	DF40B (2.0)-12DS-0.4V (58)	
	HIROSE ELECTRIC CO., LTD.	CODE NO.	CL684-4150-8-58	△ 1/1