

APPLICABLE STANDARD					
RATING	OPERATING TEMPERATURE RANGE	-45 °C TO 125 °C (NOTES 1)	STORAGE TEMPERATURE RANGE	-10 °C TO 60 °C (NOTES 2)	
	VOLTAGE	50 V AC			
	CURRENT	0.3 A			
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		20 mV AC OR LESS 1 kHz, 1 mA.	50 mΩ MAX.	X	—
INSULATION RESISTANCE		100 V DC	500 MΩ MAX	X	—
VOLTAGE PROOF		150 V AC FOR 1 min.	NO FLASHOVER OR BREAKDOWN.	X	—
MECHANICAL CHARACTERISTICS					
MECHANICAL OPERATION		50 TIMES INSERTIONS AND WITHDRAWALS.	① CONTACT RESISTANCE: 50 mΩ MAX. ② NO DAMAGE, CRACK AND 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 1 μs. ② NO DAMAGE, CRACK AND 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 AND LOOSENESS OF PARTS.	X	—
ENVIRONMENTAL CHARACTERISTICS					
RAPID CHANGE OF TEMPERATURE		TEMPERATURE -65 →15 TO 35 →125 →15 TO 35 °C TIME 30 → 10 TO 15 → 30 →10 TO 15 min UNDER 5 CYCLES.	① CONTACT RESISTANCE: 50 mΩ MAX. ② INSULATION RESISTANCE: 500 MΩ MIN. ③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	X	—
DAMP HEAT (STEADY STATE)		EXPOSED AT 40 ± 2 °C, 90 TO 95 %, 96 h.	① CONTACT RESISTANCE: 50 mΩ MAX. ② INSULATION RESISTANCE: 500 MΩ MIN. ③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	X	—
SULPHUR DIOXIDE		EXPOSED IN 25 PPM RH 75 % FOR 96 h. (TEST STANDARD: JIS C 60068)	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					
NOTES1: INCLUDING THE TEMPERATURE RISE BY CURRENT.					
NOTES2: STORAGE IS DEFINED AS LONG-TERM STORAGE OF UNUSED PRODUCTS.					
APPLY OPERATION TEMPERATURE RANGE TO PRODUCTS MOUNTED ON PCB WITHOUT POWER SUPPLY.					
UNLESS OTHERWISE SPECIFIED, REFER TO JIS C 5402.					
	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
△					
			APPROVED	WR. FUKUCHI	20200512
			CHECKED	TS. MIYAZAKI	20200512
			DESIGNED	KT. KUSAKA	20200512
			DRAWN	KT. KUSAKA	20200512
Note QT: Qualification Test AT: Assurance Test X: Applicable Test			DRAWING NO.	ELC-389267-51-01	
SPECIFICATION SHEET			PART NO.	DF12NB-50DS-0.5V (51)	
HIROSE ELECTRIC CO., LTD.			CODE NO.	CL537-0291-0-51	△ 1/1