



**THE DATASHEET OF
BM10NB(0.8)-50DS-0.4V(51)**



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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	BM10*(0.8)-*DP-0.4V (**)																															
	CURRENT	0.3A																																	
SPECIFICATIONS																																			
ITEM		TEST METHOD		REQUIREMENTS																															
CONSTRUCTION																																			
GENERAL EXAMINATION		CONFIRMED VISUALLY AND BY MEASURING INSTRUMENT.		ACCORDING TO DRAWING.																															
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.			X	—																														
	<table border="1"> <thead> <tr> <th>PIN COUNTS</th> <th>INSERTION FORCE (N MAX)</th> <th>WITHDRAWAL FORCE (N MIN)</th> </tr> </thead> <tbody> <tr> <td>BM10*(0.8)-*DS/DP-0.4V</td> <td></td> <td></td> </tr> <tr> <td>10</td> <td>15.4</td> <td>2.6</td> </tr> <tr> <td>16</td> <td>20.7</td> <td>3.6</td> </tr> <tr> <td>20</td> <td>24.3</td> <td>4.4</td> </tr> <tr> <td>24</td> <td>27.8</td> <td>5.1</td> </tr> <tr> <td>30</td> <td>33.1</td> <td>6.2</td> </tr> <tr> <td>34</td> <td>36.6</td> <td>6.9</td> </tr> <tr> <td>40</td> <td>41.9</td> <td>8.0</td> </tr> <tr> <td>50</td> <td>50.7</td> <td>9.8</td> </tr> <tr> <td>60</td> <td>59.5</td> <td>11.7</td> </tr> </tbody> </table>					PIN COUNTS	INSERTION FORCE (N MAX)	WITHDRAWAL FORCE (N MIN)	BM10*(0.8)-*DS/DP-0.4V			10	15.4	2.6	16	20.7	3.6	20	24.3	4.4	24	27.8	5.1	30	33.1	6.2	34	36.6	6.9	40	41.9	8.0	50	50.7	9.8
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MECHANICAL OPERATION		10TIMES INSERTIONS AND WITHDRAWAL.		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 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 → +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 —																														
	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE																														
△	1	DIS-H-003833	NY. YAMASHIRO	TS. MIYAZAKI	09. 04. 15																														
REMARKS			APPROVED	KH. IKEDA	08. 04. 22																														
NOTE1: INCLUDE THE TEMPERATURE RISING BY CURRENT			CHECKED	KY. MIDORIKAWA	08. 04. 22																														
Unless otherwise specified, refer to JIS C 5402 and IEC 60512			DESIGNED	TH. ARAI	08. 04. 22																														
			DRAWN	SH. HOSODA	08. 04. 21																														
Note QT:Qualification Test AT:Assurance Test X:Applicable Test			DRAWING NO.		ELC4-318423-01																														
HRS	SPECIFICATION SHEET		PART NO.	BM10NB (0.8)-*DS-0.4V (51)																															
	HIROSE ELECTRIC CO., LTD.		CODE NO.	CL684-****-*-51	△ 1/1																														

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