2) Slim type

Contact arrangement	Nominal coil voltage	Plug-in type	PC board type
		Part No.	Part No.
2 Form C	3V DC	NC2EBD-DC3V	NC2EBD-P-DC3V
	5V DC	NC2EBD-DC5V	NC2EBD-P-DC5V
	6V DC	NC2EBD-DC6V	NC2EBD-P-DC6V
	12V DC	NC2EBD-DC12V	NC2EBD-P-DC12V
	24V DC	NC2EBD-DC24V	NC2EBD-P-DC24V
	48V DC	NC2EBD-DC48V	NC2EBD-P-DC48V
	100V DC	NC2EBD-DC100V	NC2EBD-P-DC100V
4 Form C	3V DC	NC4EBD-DC3V	NC4EBD-P-DC3V
	5V DC	NC4EBD-DC5V	NC4EBD-P-DC5V
	6V DC	NC4EBD-DC6V	NC4EBD-P-DC6V
	12V DC	NC4EBD-DC12V	NC4EBD-P-DC12V
	24V DC	NC4EBD-DC24V	NC4EBD-P-DC24V
	48V DC	NC4EBD-DC48V	NC4EBD-P-DC48V
	100V DC	NC4EBD-DC100V	NC4EBD-P-DC100V

Standard packing: Carton: 20 pcs.; Case: 200 pcs.

* Sockets and terminal sockets available.

RATING

1. Coil data

Single side stable

No. of poles	Nominal coil voltage	Pick-up voltage (at 20°C 68°F)	Drop-out voltage (at 20°C 68°F)	Nominal operating current [±10%] (at 20°C 68°F)	Coil resistance [±10%] (at 20°C 68°F)	Nominal operating power	Coil inductance		Max. applied voltage (at 50°C 122°F)*
							N.C. condition	N.O. condition	
2 Form C	3V DC	80%V or less of nominal voltage (Initial)	10%V or more of nominal voltage (Initial)	120mA	25Ω	360mW	24.2mH	30.0mH	135%V of nominal voltage
	5V DC			72mA	69.4Ω	360mW	69.5mH	86.0mH	
	6V DC			60mA	100Ω	360mW	99.4mH	123mH	
	12V DC			30mA	400Ω	360mW	388mH	480mH	
	24V DC			15mA	1,600Ω	360mW	1,590mH	1,970mH	
	48V DC			7.5mA	6,400Ω	360mW	6,270mH	7,680mH	
	100V DC			7.4mA	13,500Ω	740mW	9,470mH	11,700mH	110%V of nominal voltage
4 Form C	3V DC	80%V or less of nominal voltage (Initial)	10%V or more of nominal voltage (Initial)	240mA	12.5Ω	720mW	12.8mH	15.8mH	110%V of nominal voltage
	5V DC			144mA	34.7Ω	720mW	34.3mH	42.4mH	
	6V DC			120mA	50Ω	720mW	50.7mH	62.7mH	
	12V DC			60mA	200Ω	720mW	203mH	252mH	
	24V DC			30mA	800Ω	720mW	812mH	1,000mH	
	48V DC			15mA	3,200Ω	720mW	2,820mH	3,480mH	
	100V DC			7.4mA	13,500Ω	740mW	14,100mH	17,400mH	

* At 20°C 68°F (Sealed type)

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2. Specifications

Characteristics	Item		Specifications	
Contact	Arrangement		2 Form C	4 Form C
	Contact resistance (Initial)		Max. 50 mΩ (By voltage drop 6 V DC 1A)	Max. 50 mΩ (By voltage drop 6 V DC 1A)
	Contact material		Au-clad AgNi type	Au-clad AgNi type
Rating	Nominal switching capacity (resistive load)		Standard: 5A 250V AC, 5A 30V DC Sealed: 3A 250V AC, 5A 30V DC	Standard: 4A 250V AC, 5A 30V DC Sealed: 2A 250V AC, 5A 30V DC
	Max. switching power (resistive load)		Standard: 1,250VA, 150W Sealed: 750VA, 150W	Standard: 1,000VA, 150W Sealed: 500VA, 150W
	Max. switching voltage		250 V AC	
	Max. switching current		Standard: 5A Sealed: 3A (AC), 5A (DC)	Standard: 4A Sealed: 2A (AC), 5A (DC)
	Nominal operating power		360mW (740mW: 100V DC)	720mW*2
	Min. switching capacity (Reference value)*1		100μA 1V DC	100μA 1VDC
Electrical characteristics	Insulation resistance (Initial)		Min. 100MΩ (at 500V DC) Measurement at same location as “Breakdown voltage” section.	
	Breakdown voltage (Initial)	Between open contacts	1,000 Vrms for 1min. (Detection current: 10mA.)	
		Between contact sets	1,000 Vrms for 1min. (Detection current: 10mA.)	
		Between contact and coil	2,000 Vrms for 1min. (Detection current: 10mA.)	
	Temperature rise (coil)		Max. 65°C [Max. 85°C (100V AC)] (By resistive method, nominal coil voltage)	
	Operate time (at 20°C 68°F)		Max. 20ms	Max. 20ms
	Release time (at 20°C 68°F)		Max. 10ms	Max. 10ms
Mechanical characteristics	Shock resistance	Functional	Min. 98 m/s² (Half-wave pulse of sine wave: 11 ms; detection time: 10μs.)	
		Destructive	Min. 980 m/s² (Half-wave pulse of sine wave: 6 ms.)	
	Vibration resistance	Functional	10 to 55 Hz at double amplitude of 1 mm (Detection time: 10μs.)	
		Destructive	10 to 55 Hz at double amplitude of 2 mm	
Expected life	Mechanical		Min. 5×10^7	Min. 5×10^7
	Electrical (resistive load)		Standard: Min. 10^5 (5A 250V AC), Min. 5×10^5 (5A 30V DC) Sealed: Min. 10^5 (3A 250V AC), Min. 5×10^5 (5A 30V DC)	Standard: Min. 10^5 (4A 250V AC), Min. 5×10^5 (5A 30V DC) Sealed: Min. 10^5 (2A 250V AC), Min. 5×10^5 (5A 30V DC)
Conditions	Conditions for operation, transport and storage*3 (Not freezing and condensing at low temperature)		–40°C to +70°C –40°F to +158°F (Max.48V DC), –40°C to +55°C –40°F to +131°F (100V DC)	–40°C to +55°C –40°F to +131°F
	Max. Operating speed		50 cps	
Unit weight			16 g .56 oz	18 g .63 oz

Notes: *1 This value can change due to the switching frequency, environmental conditions, and desired reliability level, therefore it is recommended to check this with the actual load.
*2. 100V DC: 740mW
*3. The upper limit of the ambient temperature is the maximum temperature that can satisfy the coil temperature rise value. Refer to Usage, transport and storage conditions in NOTES.

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