

INDUSTRIAL RELAYS

The SB series has a high sensitive and standard type relay available. This small lightweight relay has a high mounting density on a PC Board.

UL & CUL File #E223388

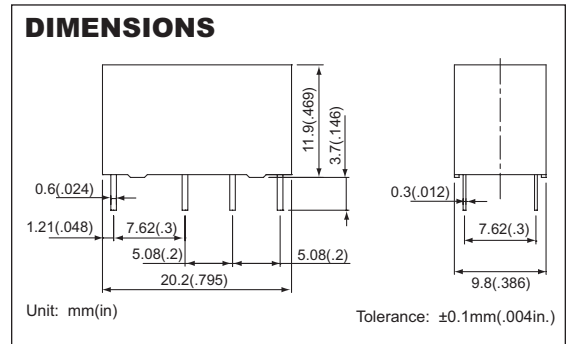
FEATURES

1. Standard and High sensitive type available.
2. High reliability-twin contact.
3. Silver palladium overlaid gold crossbar type suitable for lower level switching application.
4. DIL pitch terminal.
5. High mounting density on PCB due to small size and light weight.
6. Sealed or unsealed types available.
7. Nominal Power 150mW~570mW.
8. Operating Power 100mW ~ 300mW.

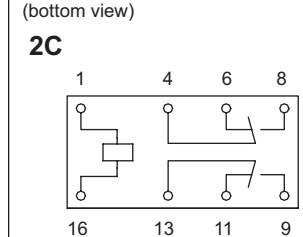
ORDERING INFORMATION

SB 2C - 5 H S P
(1) (2) (3) (4) (5) (6)

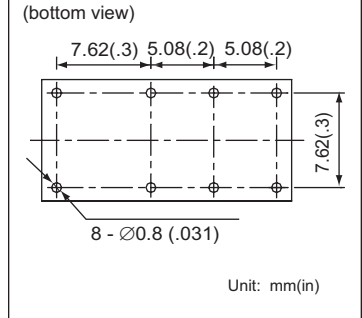
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| <p>(1) Basic Designation
SB = SB Series</p> <p>(2) Contact Arrangement
2C = 2 Form C</p> <p>(3) Coil Voltage
4.5~48V</p> | <p>(4) Enclosure
Nil = Unsealed type
S = Sealed type</p> <p>(5) Coil Sensitivity
Nil = Standard
H = High Sensitivity</p> <p>(6) RoHS Compliance
P = RoHS
Nil = Standard</p> |
|---|--|



SCHEMATICS



PCB LAYOUT



COIL RATINGS (AT 20°C)

Nominal Operating Power/ Coil Sensitivity	Coil Nominal Voltage (V)	Coil Resistance (Ω ± 10%)	Pick-up Voltage (VDC) ≤	Drop-Out Voltage (VDC) ≥	Nominal Current (mA)
DC Standard Coil Sensitivity	4.5	36	3.375	0.225	125
	5	45	3.75	0.25	111
	6	70	4.5	0.3	85.7
	12	280	9	0.6	42.9
	24	1070	18	1.2	22.4
	48	4300	36	2.4	11.2
DC High Sensitivity Coils	4.5	135	3.6	0.225	33.3
	5	167	4	0.25	29.9
	6	240	4.8	0.3	25
	9	540	7.2	0.45	16.7
	12	960	9.6	0.6	12.5
	24	3840	19.2	1.2	6.3

CONTACT RATINGS

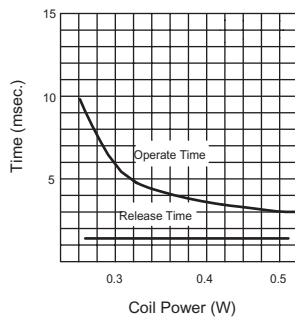
Contact Arrangement	2C
Max. Switching Power	125VA, 37.5W
Max. Switching Voltage	125VAC, 30VDC
Max. Switching Current	2A
Contact Resistance	≤100mΩ
Rating Load	1A / 125VAC 1.25A / 30VDC
Contact Material	gold overlay silver-palladium

CHARACTERISTICS

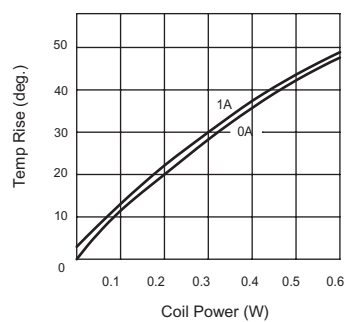
Electrical Life	2 x 10 ⁵ min.
Mechanical Life	2 x 10 ⁷ min.
Initial Insulation Resistance	Min. 1000MΩ 500VDC
Operate Time	≤6ms
Release Time	≤3ms
Initial Dielectric Strength	50/60Hz 500VAC 1 min. (between open contacts) 50/60Hz 1000VAC 1 min. (between all conductors)
Vibration Resistance	Malfunction: 10 to 55Hz at double Amplitude of 1.5mm Destructive: 10 to 55Hz at double Amplitude of 1.5mm
Shock Resistance	Malfunction: 10G (11ms) Destructive: 100G (6ms)
Ambient Temperature	-30°C ~ +70°C
Relative Humidity	85% at 40°C
Unit Weight	Approx. 5g

REFERENCE DATA

Timing



Coil Temperature Rise



Life Curves

