

Miniature Power Relay

SRB-Series

Features



- Small size (20.5x7x15.1mm) for high density PCB mounting.
- 5A contact switching capability.
- High breakdown voltage: 4000V (between coil and contact)
- Satisfy IEC60335-1 product is available.
- Satisfy IEC60079-15 product is available.

Safety Approval

UL , C-UL File No : E190598
TUV File No : R50138320
VDE File No : 40033402
CQC File No : CQC02001002126

Contact Capacity

Model	SRB
Nominal switching capacity (res. load)	5A 277VAC 3A 277VAC
Max. switching current	5A
Max. switching voltage	277VAC
Max. switching power	1,385VA

Characteristic Data

Contact material	Silver alloy	
Initial contact resistance	50mΩ Max.(1A 6VDC)	
Operate time (at nominal volt.)	20msec. Max.(no diode)	
Release time (at nominal volt.)	10msec. Max.(no diode)	
Initial insulation resistance	1,000MΩ Min.(DC500V)	
Initial dielectric strength	Between open contacts : AC750V , 50/60Hz 1min.	
	Between coil and contact : AC4,000V , 50/60Hz 1min.	
Vibration resistance	Function	10 ~ 55Hz at double amplitude of 1.5 mm
	Destructive	10 ~ 55Hz at double amplitude of 1.5 mm
Shock resistance	Function	10G Min.
	Destructive	100G Min.
Endurance (operations)	Mechanical (at 10,800ops./h)	10,000,000(at room temperature)
	Electrical (at 360ops./h)	100,000(at room temperature)
Ambient temperature	-40°C ~ +105°C(no condensation)	
Unit weight	Approx. 3.9g	

Coil Data (at 20°C)

Nominal voltage (VDC)	Nominal operating current 10%(mA)	coil resistance ± 10% (Ω)	Max. allowable voltage	Pick-up voltage (Max.)	Drop-out voltage (Min.)	Nominal operating power
5	40.00	125	130 % of nominal voltage	75 % of nominal voltage	5 % of nominal voltage	Approx. 0.20W
6	33.33	180				
9	22.22	405				
12	16.67	720				
18	11.11	1,620				
24	8.57	2,800				

CoilData (at 20°C)

Nominal voltage (VDC)	Nominal operating current 10%(mA)	coil resistance $\pm 10\%$ (Ω)	Max. allowable voltage	Pick-up voltage (Max.)	Drop-out voltage (Min.)	Nominal operating power
5	72.00	69	130 % of nominal voltage	75 % of nominal voltage	5 % of nominal voltage	0.36W
6	60.00	100				
9	40.00	225				
12	30.00	400				
18	20.00	900				
24	15.00	1,600				

Safety Approval Ratings

(Note:More detail of approval ratings,please refer to the safety certification)

Approval	CQC	TUV	VDE	UL/CUL
File No.	CQC07001019820	R50138320	40033402	E190598
Approved Ratings	5A 277VAC 3A 277VAC	5A 277VAC 3A 277VAC	3A 277VAC 5A 277VAC	5A 277VAC , Resistive 3A 277VAC , Resistive 3A 30VDC , Resistive 5A 250VAC , Resistive 3A 250VAC , Resistive 5A 250VAC , General Use 3A 250VAC , General Use 1/ 8HP 240VAC TV-3, 120VAC

(1) The above-mentioned unspecified temperature ratings, means that the ambient temperature is room temperature.

(2) Only some typical ratings are listed above. Each rating's test condition is different, so the electrical endurance will be different. If more details are required, please contact us.

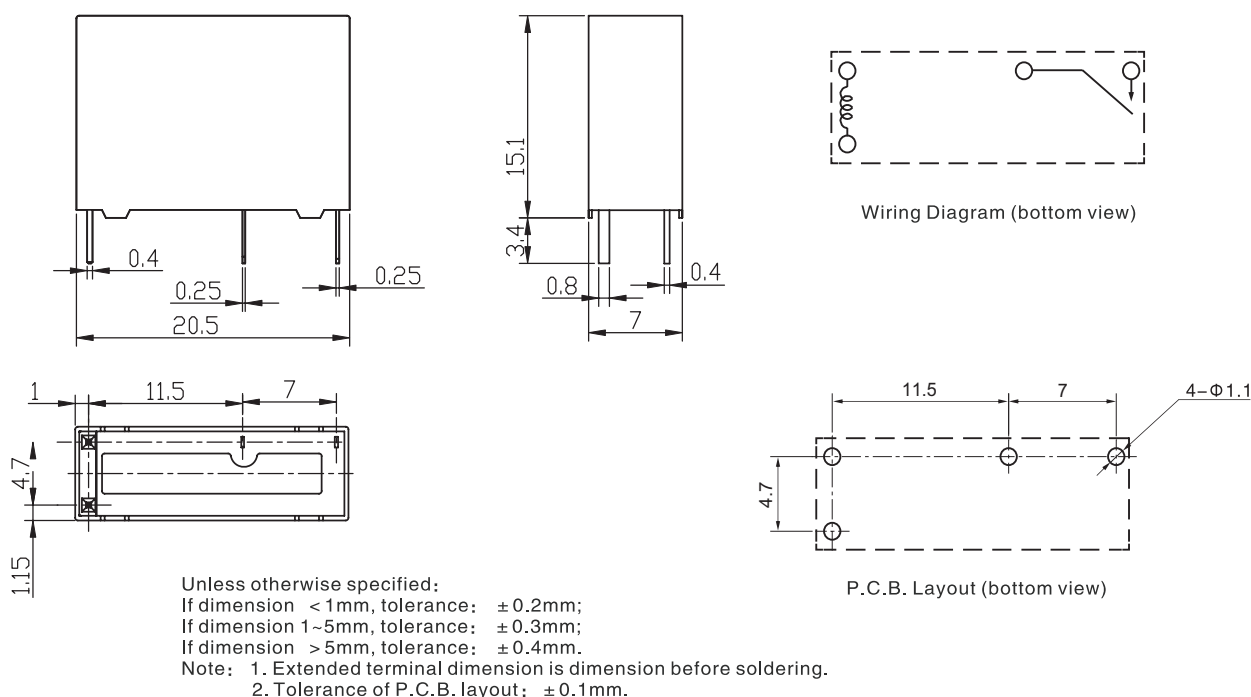
(3) For sealed type testing, please open the ventilation hole of case before test.

Ordering Information

nomenclature									
SRB	-	S	-	1	12	D	M	1	- F - XX
Special Parameter: Nil-Standard type, 10-3A product, Letter or number-Special requirement									
Insulation System: Nil-Standard, B-Class B, F-Class F									
Contact Material: Nil-AgSnO ₂ , 1-AgCdO, 2-AgNi-BT ⁽¹⁾									
Contact Form: M-Form A									
Coil Power: D-0.20W, H-0.36W									
Coil Voltage (VDC): 05, 06, 09, 12, 18, 24									
Number of Poles: 1-1 Pole									
Protective Construction: S-Flux proofed, SH-Sealed type washable									
Type Designation: SRB									

Note : (1)AgNi-BT is compound contact of silver and copper, so the head of the contact is AgNi, and the tail of the contact is Cu.

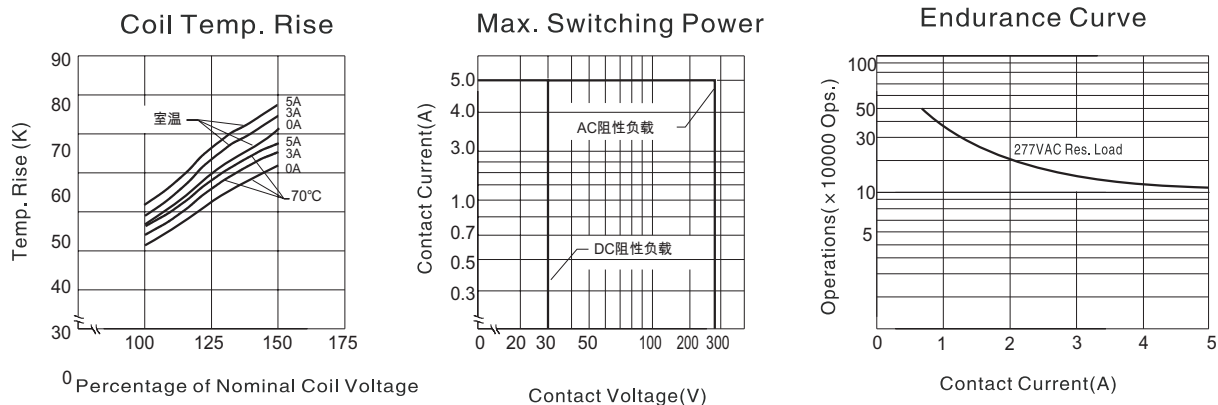
Outline Dimensions, Wiring Diagram, P.C.Board Layout(unit:mm)



Typical Applications

- Telecommunication equipment
- Safety equipment
- Office equipment
- Home appliances such as air conditioner, microwave oven

Characteristic Curves



Disclaimer:

This datasheet is the customers' reference. All the specification are subject to change without notice.

We could not evaluate all the performance and all the parameters for every possible application. Thus the user should in a right position to choose the suitable product for their own application. For sealed relays after installation and cleaning, please open the vent hole on the case before use. If there is any query, please contact Sanyou for the technical service. However it is the user's responsibility to determine which product should be used only.