



### Features

- Isolated input and output terminal for more convenient PCB layout design.
- Dielectric strength of 2000V and an impulse withstand voltage of 5000V between coil and contact for greater safety.
- 8A high switching capability for a wide range of applications.

### Safety Approval

UL, C-UL File No.: E179745

TUV File No.: R50142423

CQC File No.: CQC02001002121

### Contact Capacity

Model	SH
Nominal switching capacity (res. load)	5A 250VAC
Max. switching current	8A
Max. switching voltage	250VAC
Max. switching power	1,250VA

### Charateristic Data

Contact material	Silver alloy	
Initial contact resistance (at 6VDC 1A)	50mΩ Max.	
Operate time (at nominal volt.)	10msec. Max.	
Release time (at nominal volt.)	10msec. Max.	
Initial insulation resistance	100MΩ Min.(DC500V)	
Initial dielectric strength	Between open contacts: AC1,000V, 50/60Hz 1Min.	
	Between coil and contact: AC2,000V, 50/60Hz 1Min.	
Vibration resistance	Functional	10 ~ 55Hz at double amplitude of 1.5 mm
	Destructive	10 ~ 55Hz at double amplitude of 1.5 mm
Shock resistance	Functional	10G Min.
	Destructive	100G Min.
Endurance (operations)	Mechanical (at 10,800 ops./h)	10,000,000
	Electrical (at 1,800 ops./h)	100,000
Ambient temperature	-40°C ~ +105°C (no condensation)	
Unit weight	Approx. 7.0 g	

### 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	72.00	70	130 % of nominal voltage	75 % of nominal voltage	5 % of nominal voltage	Approx. 0.36W
6	60.00	100				
9	40.00	225				
12	30.00	400				
18	20.00	900				
24	15.00	1,600				
48	7.50	6,400				

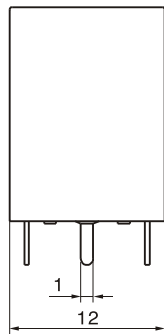
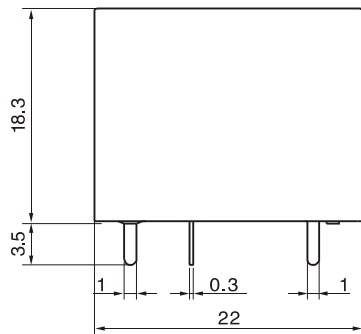
### Safety Approval Ratings

Approval	CQC	TUV	UL/CUL
File No.	CQC02001002121	R50142423	E179745
Approved ratings	5A 250VAC	5A 250VAC 5A 30VDC	8A 125VAC, Resistive 5A 250VAC, Resistive 4A 120VAC, General Use 5A 30VDC

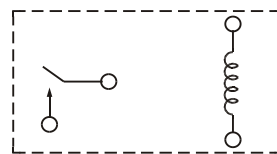
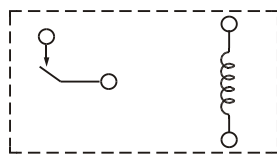
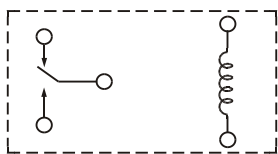
### Ordering Information

Nomenclature	
SH -S -1 12 D M 1 - F -XX	Special Parameter: Nil-Standard type, Letter or number-Special requirement
	Insulation System: Nil-Standard, B-Class B, F-Class F
	Contact Material: Nil-AgSnO <sub>2</sub> , 1-AgCdO
	Contact Form: Nil-Form C, B-Form B, M-Form A
	Coil Power: D-0.36W
	Coil Voltage (VDC): 05, 06, 09, 12, 18, 24, 48
	Number of Poles: 1-1 Pole
	Protective Construction: S-Flux proofed, SH-Sealed type washable
	Type Designation: SH

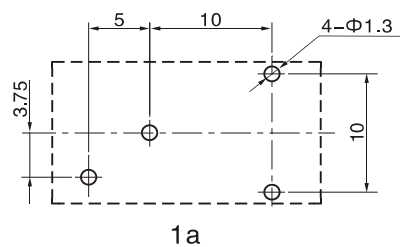
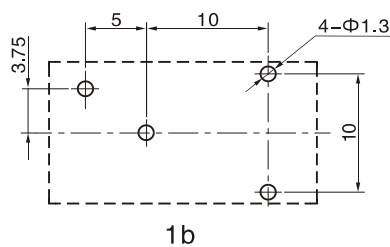
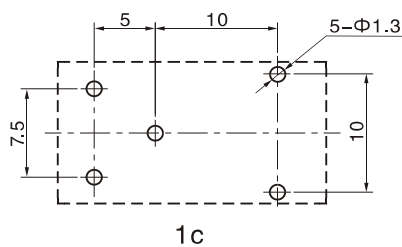
### Outline Dimensions, Wiring Diagram, P.C. Board Layout (unit: mm)



Unless otherwise specified:  
 If dimension < 1mm, tolerance: ±0.2mm;  
 If dimension 1~5mm, tolerance: ±0.3mm;  
 If dimension > 5mm, tolerance: ±0.4mm.  
 Note: 1. Extended terminal dimension is dimension before soldering.  
 2. Tolerance of P.C.B. layout: ±0.1mm.



Wiring Diagram (bottom view)



P.C.B. Layout (bottom view)

## Typical Applications

- Home appliances such as microwave oven, stove, heater, air conditioner, etc.
- Automation and instrument
- Automotive equipment

## Characteristic Curves

