

## Miniature Power Relay

## SLG

**Features**

- Miniature relay with high switching capability: 40A.
- Contact form: Form A or Form C.
- Special type of 4000VAC dielectric strength and 6000V surge voltage (1.2/50 $\mu$ S) between coil and contact available.
- IEC60335-1 compliance product is available.

**Safety certificate**

UL、cUL ( File No.): E190598

TUV ( File No.) : R50143450

CQC ( File No.):

CQC02001002109、CQC10002050461、CQC21002306488

**Contact Data**

Type	SLG
Rated load (Resistive load)	40A 250VAC
Max. switching current	40A
Max. switching voltage	277VAC
Max. switching power	11080VA

**Characteristics**

Contact material	Silver alloy	
Contact resistance	100m $\Omega$ Max. (1A 24VDC)	
Operate time (at rated coil voltage)	15ms Max. ( No diode)	
Release time	10ms Max. ( No diode)	
Insulation resistance	Min. 1,000M $\Omega$ (at 500VDC)	
Dielectric strength	Between open contacts:	1,500VAC, 50/60Hz for 1min.
	Between coil and contact:	2,500VAC, 50/60Hz for 1min.(4KV available)
Vibration resistance (NO)	Destructive	10~55Hz, at double amplitude of 1.5mm.
	Function	10~55Hz, at double amplitude of 1.5mm.
Shock resistance (NO)	Destructive	100G Min.
	Function	10G Min.
Endurance	Mechanical endurance(at 10,800ops./h)	10,000,000 cycles(at room temperature)
	Electrical endurance(at 360 ops./h)	30,000 cycles(at room temperature)
Ambient temperature	-40 $^{\circ}$ C ~ +85 $^{\circ}$ C (No condensation)	
Weight	Approx.24.0g	

**Coil Data (at 20°C)**

Nominal voltage (VDC)	Nominal operating current $\pm 10\%$ (mA)	Coil resistance $\pm 10\%$ ( $\Omega$ )	Max. allowable voltage	Operate voltage (Max.)	Release voltage (Min.)	Nominal operating power
5	180.00	27	130% of nominal voltage	75% of nominal voltage	5% of nominal voltage	0.9W
6	150.00	40				
9	100.00	90				
12	75.00	160				
15	60.00	250				
18	50.00	360				
24	37.50	640				
48	18.75	2,560				
110	8.20	13,400				

The data shown above are initial values. Do not apply maximum allowable voltage on coil for more than 10 minutes to avoid overheating of the coil.

**Safety Certificate Ratings (More details of approved ratings, please refer to the safety certificates)**

Certificates	CQC	UL/cUL	TUV
File No	CQC02001002109 CQC10002050461 CQC21002306488	E190598	R50143450
Approved ratings	40A 125VAC/250VAC/277VAC	40A 125VAC/250VAC/277VAC Resistive & General Use	40A 125VAC/250VAC/277VAC

(1) All values unspecified are at room temperature

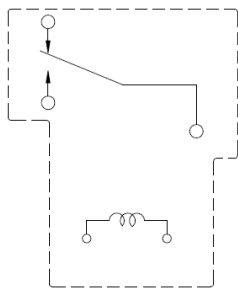
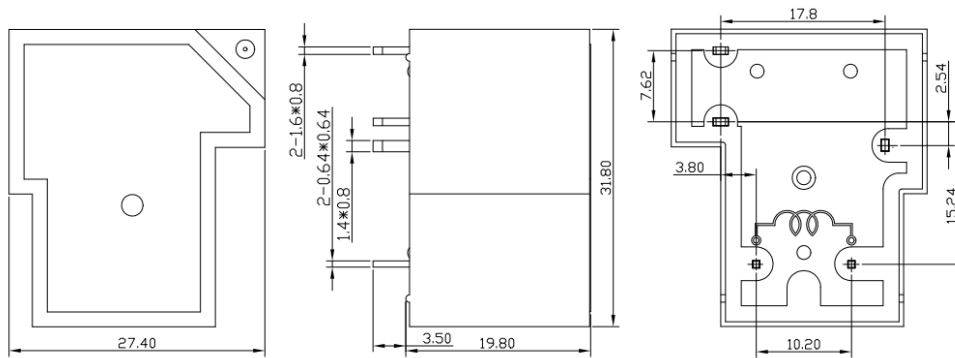
(2) Only typical ratings are listed above and the endurance differ in each load. Other specific load information are available upon request.

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

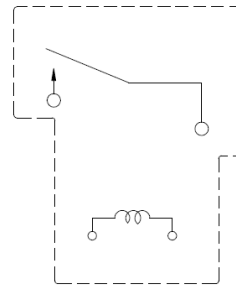
**Ordering Information****Nomenclature**

SLG	-S	-1	12	D	M	-F	-XX	Special Parameter: Nil-Standard type, Letter or number-Special requirement
								Insulation System: Nil-Class F, F - Class F
								Contact material: Nil-AgSnO <sub>2</sub>
								Contact Form : Nil-Form C, M-Form A
								Coil power: D-0.9W
								Rated coil voltage(VDC): 05, 06, 09, 12, 15, 18, 24, 48, 110
								Number of poles: 1-1 Pole
								Protective Construction: S-Flux proofed SH-Sealed type washable SS-Sealed type unwashable
								Type : SLG

## Outline dimension, wiring diagram, PCB layout (Unit: mm)

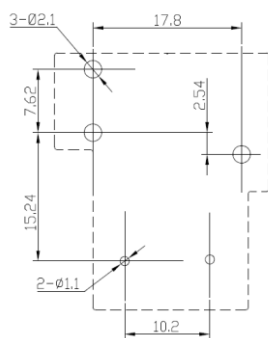


1c

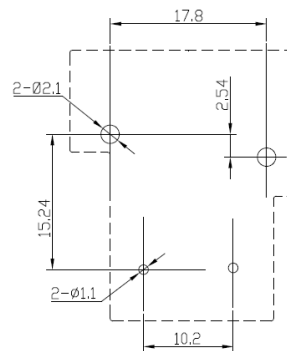


1a

### Wiring Diagram



1c



1a

### PC.B Layout (bottom view)

In case of no tolerance shown on outline dimension  
 If dimension < 1 mm, tolerance:  $\pm 0.2$ mm  
 If dimension 1~5mm, tolerance:  $\pm 0.3$ mm  
 If dimension > 5mm, tolerance:  $\pm 0.4$ mm

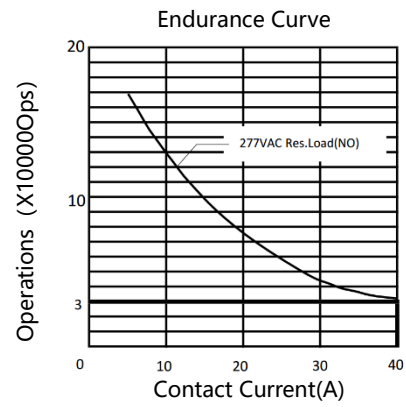
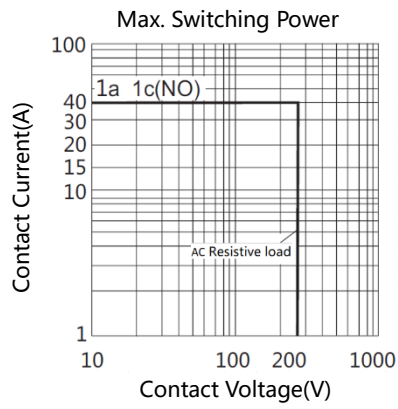
Note:

1. The dimension of pin is the size before tinning
2. Tolerance of PCB layout:  $\pm 0.1$  mm.

## Typical Applications

- Car
- UPS
- Charging Pile

## Characteristic Curves



**Note:**

- (1) Test conditions: room temperature, flux-proof product, resistive load, 1s on, 9s off.
- (2) The above curves are for reference only, and the final result is subject to the experiment.