

Miniature Power Relay

SLA-G

**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 μ S) between coil and contact available.
- Patent Number ZL 2008 20050972.1
- IEC60335-1 /IEC60079-15 compliance product is available.

Safety certificate

UL、cUL (File No.) : E190598

CQC (File No.) :

CQC02001002109、CQC10002050461、CQC21002306488

Contact Data

Type	SLA-G
Rated load (Resistive load)	40A 277VAC
Max. switching current	40A
Max. switching voltage	277VAC
Max. switching power	11080VA

Characteristics

Contact material	Silver alloy	
Contact resistance	100m Ω Max. (1A 6VDC)	
Operate time (at rated coil voltage)	15ms Max. (No diode)	
Release time	10ms Max. (No diode)	
Insulation resistance	Min. 1,000M Ω (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	Destructive	10 ~ 55Hz, at double amplitude of 1.5mm.
	Function	10 ~ 55Hz, at double amplitude of 1.5mm.
Shock resistance	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 ~ +70 $^{\circ}$ C (No condensation)	
Weight	Approx.24.0g	

Coil Data (at 20°C)

Nominal voltage (VDC)	Nominal operating current $\pm 10\%$ (mA)	Coil resistance $\pm 10\%$ (Ω)	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)

认证类型 Certificates	CQC	UL/CUL
认证号码 File No	CQC02001002109 CQC10002050461 CQC21002306488	E190598
认证负载 Approved ratings	Form A : 30A 250VAC 40A 277VAC Form C : 20A/10A 250VAC 40A 277VAC	Form A: 40A 277VAC, Resistive 30A 240VAC, Resistive/General Use Form C: N.O. 40A 277VAC, Resistive 30A 240/120VAC, Resistive 30A 240/120VAC, General Use 20A 240VAC, Resistive

(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.

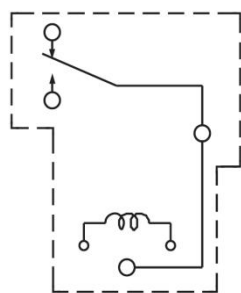
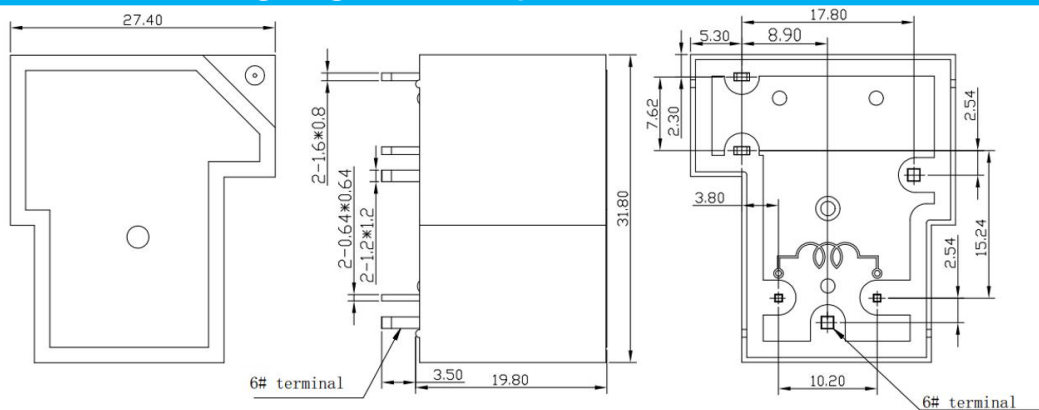
Ordering Information

Nomenclature

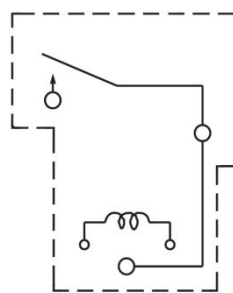
SLA	-S	-1	12	D	M	J		-G	-F	-XX	Special Parameter : Nil-Standard type, Letter or number- Special requirement
											Insulation System : Nil-Standard , B - Class B , F - Class F
											Parameter sign : G-High contact load(40A)
											Contact material : Nil-AgSnO ₂
											Terminal Type : Nil-Standard , J-Without 6# terminal
											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-proof SH- Sealed type washable
											Type : SLA

- (1) Flux-proof relays can not be used in the environment with pollutants like H₂S, SO₂,NO₂, dust, etc.
- (2) Water cleaning or surface process is not suggested after the flux-proof relays are assembled on PCB.
- (3) Customized special suffix is available after being evaluated by Sanyou

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

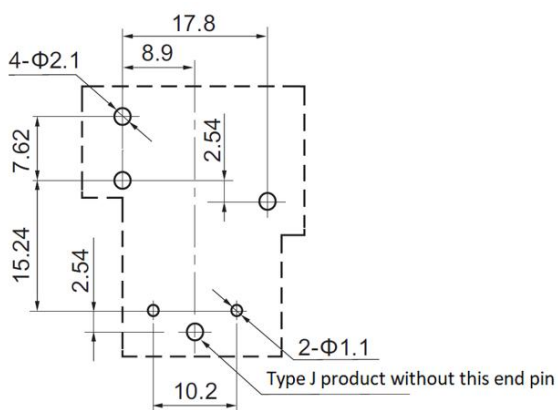


1c

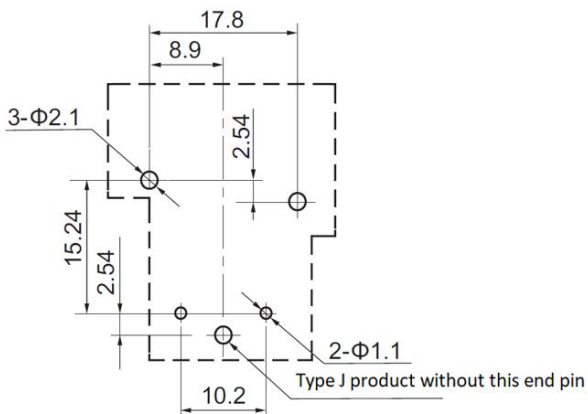


1a

Wiring Diagram



1c



1a

P.C.B Layout (bottom view)

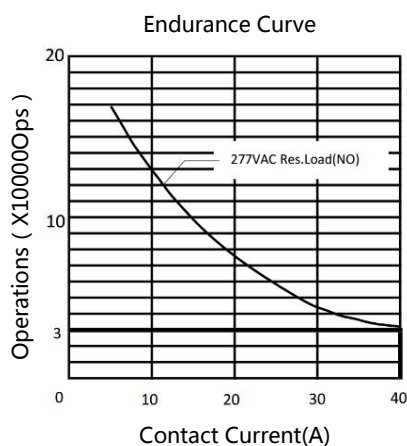
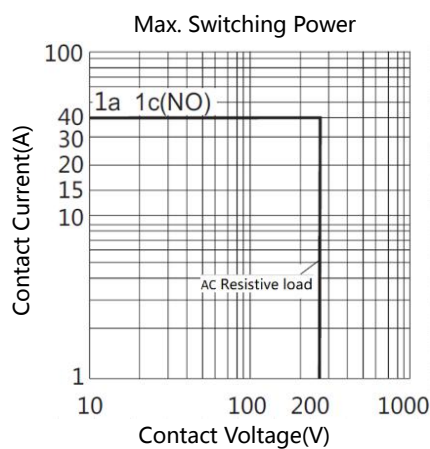
In case of no tolerance shown on outline dimension
 If dimension < 1 mm, tolerance : ±0.2mm
 If dimension 1~5mm, tolerance : ±0.3mm
 If dimension > 5mm, tolerance : ±0.4mm
 Note :
 1. The dimension of pin is the size before tinning
 2.Tolerance of PCB layout : ±0.1 mm.

Typical Applications

•Car

•UPS

Characteristic Curves

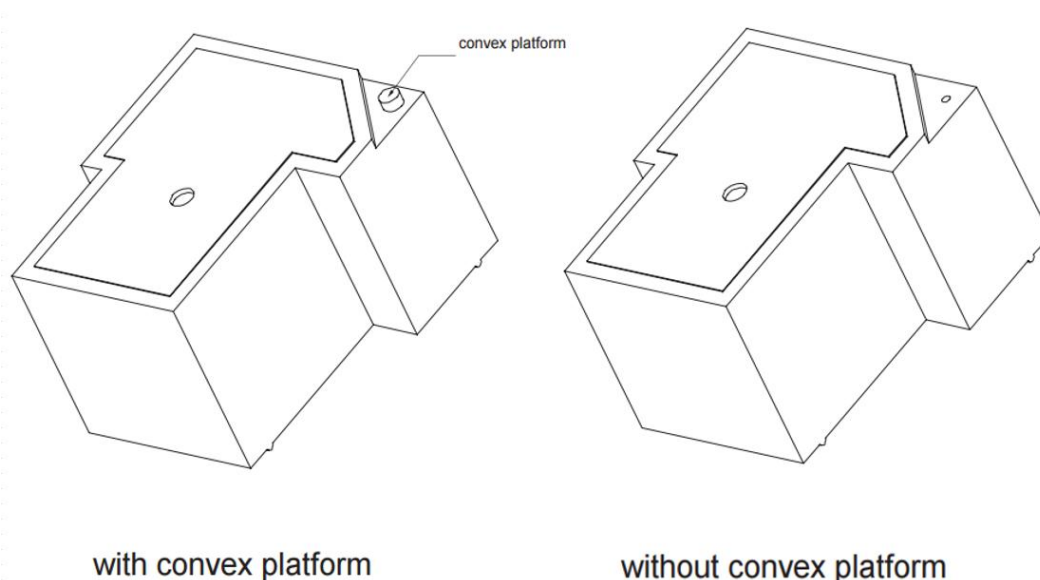


Note :

- (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.

Note :

If you choose the sealed type, before using, please remove the convex platform at the top of the case to ensure the normal performance of the relay after the completion of a PCB operations. they are as shown in the following diagram :



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.