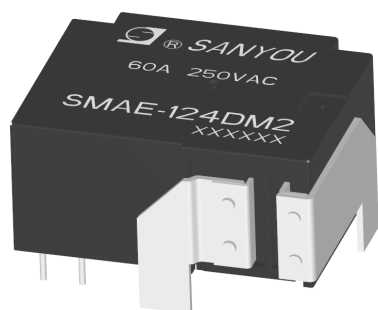


Magnetic Latching Relay

SMAE



Features:

- 60A contact switching capability
- Low coil power consumption, impulse drive
- Excellent anti-shock ability and high reliability
- Dielectric strength between coil and contact :2.5KV
- Single and dual coil relays available
- Environmental friendly product (RoHS Compliant)

Typical Application

- Intelligent electric meters, Electric remote control
Composite power switch, Electrical Equipment

Contact capacity

Nominal switching capacity (res. load)	60A 250VAC
Max.switching current	60A
Max.switching voltage	250VAC
Max.switching power	15,000 VA

Characteristic Data

Contact material	Silver alloy	
Initial contact resistance	2mΩ Max.	
Operate time(at nominal volt.)	15msec.Max.	
Release time(at nominal volt.)	15msec.Max.	
Insulation Resistance	1,000MΩ Min.(500VDC)	
Initial dielectric strength	Between open contacts	1,500VAC , 50/60Hz 1min
	Between coil and contact	2,500VAC , 50/60Hz 1min
Shock resistance	Function	100 G Min.
	Destructive	10 G Min.
Vibration resistance	Function	10 ~ 55Hz at double amplitude of 1.5 mm
	Destructive	10 ~ 55Hz at double amplitude of 1.5 mm
Endurance (operate)	Mechanical(at 3,600ops./h)	1×10 ⁵ cycles
	Electrical(at 600ops./h)	1×10 ⁴ cycles
Ambient temperature	-30°C ~ +55°C(no condensation)	

Coil Data (at 20°C)

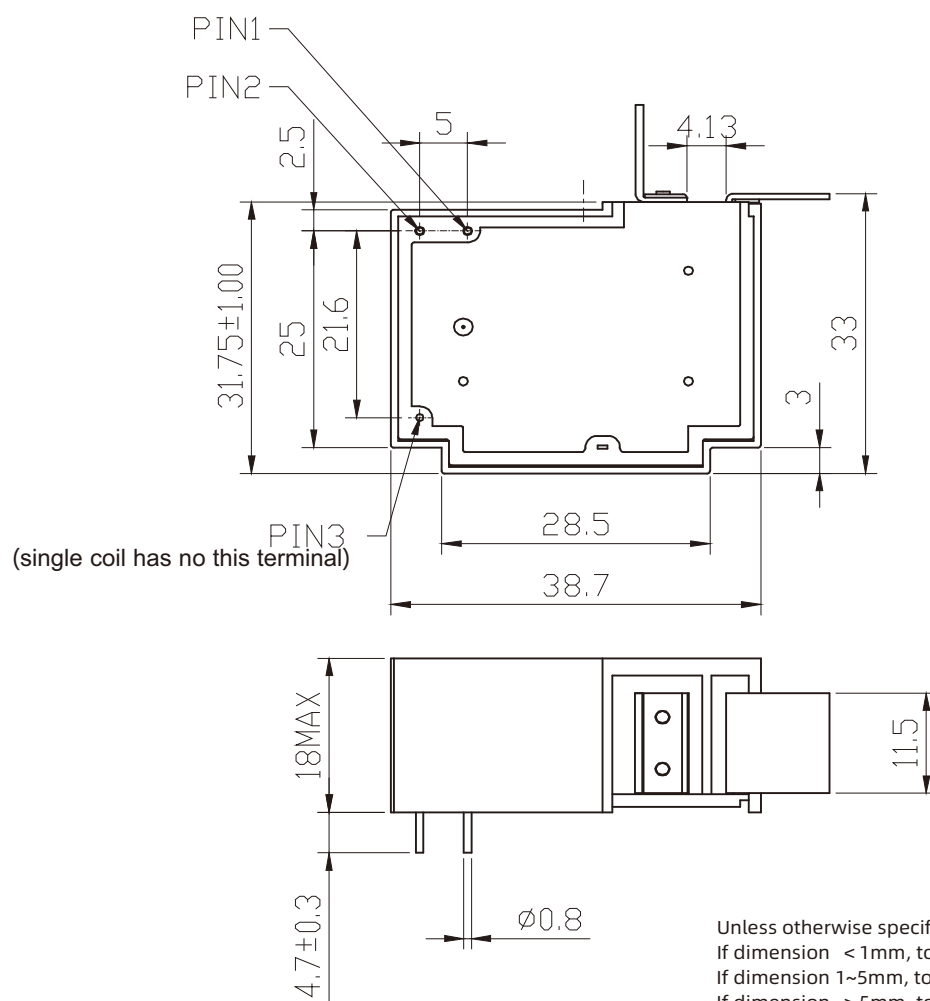
Nominal voltage (VDC)	Single coil-Res. ±10%(Ω)	Duoble coil-Res. ±10%(Ω)		Release voltage (Max).	Operate voltage (Max.)	Pulse duration (ms)	Nominal operating
5	25	12.5	12.5	80% of Nominal voltage	80% of Nominal voltage	100Min.	Single/Dual: 1.0W/2.0W
6	36	18	18				
9	81	40.5	40.5				
12	144	72	72				
24	576	288	288				
48	2,340	1,152	1,152				



Ordering Information

SMAE	-60	-1	12	D	M	2	R	-XX	
									Special Parameter: Nil-Standard type,XX-Customized Requirement
									Polarity: Nil-Positive polarity, R-Reverse polarity
									Coil Type:1-Single coil,2-Dual coils
									Contact Form: M-Form A,B-FormB
									Coil Power: D:Standard type -Single/Dual:1.0W/2.0W
									Coil Voltage (VDC): 05, 06, 09, 12, 15, 18, 24, 48
									Number of Poles: 1-1 Pole
									Switching Capacity: 60:60A
									Type Designation:SMAE

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;

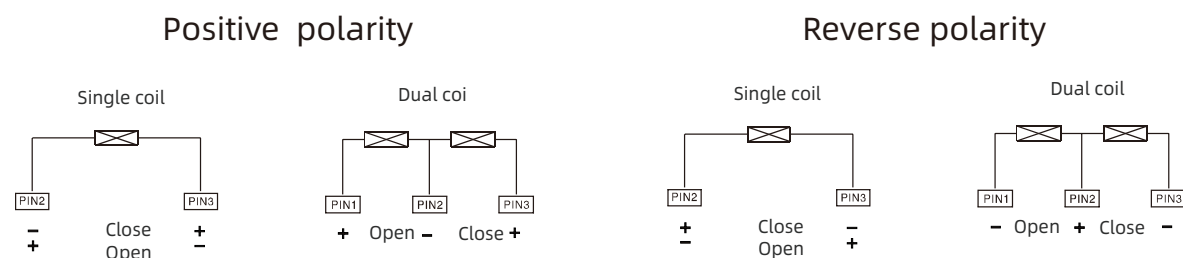
If dimension > 5mm, tolerance: ±0.4mm.

Note: 1. Extended terminal dimension is dimension before soldering.

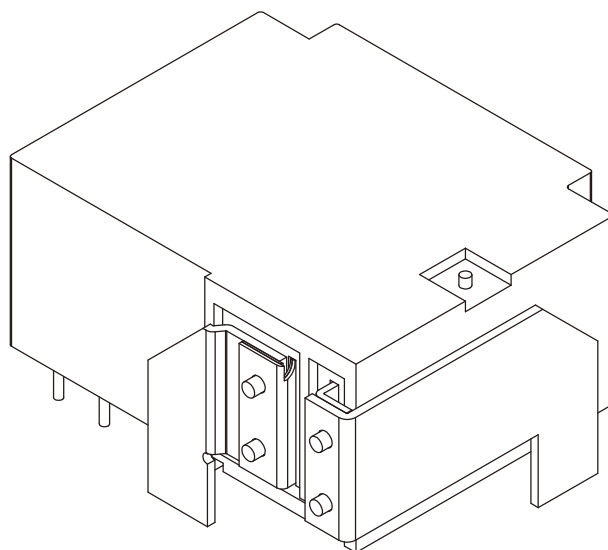
2. Tolerance of P.C.B. layout: ±0.5mm.



Wiring diagram



Typical drawing



Note: Typical drawing is just for reference, customized terminals with metering components are acceptable,
Please contact us for any special requirements.

Announcements:

1.The magnetic latching relay is to be supplied with contacts close(Operate) or contacts open(Release),but the contact status may got changed due to unexpected shock or vibration during delivering or mounting.

You can reset the contact statusaccording to your requirement.

2.n order to make sure the contacts are completely closed or opened,energized voltage to Operate or Release coil should be the nominal operate/release voltage,impulse width should be 5 times more than specified operate/release time in the specification but less than 1 minute.Do not apply power to Operate and Release coils at the same time.

Statement:

This product specification is for reference only, subject to change without prior notice.We could not evaluate all test conditions for every possible application, thus customers should be in a right position to choose suitable products for their own application. If in doubt, please contact Sanyou for more technical support. However,it's the customer's responsibility to determine which product should be used.

