SANYOU RELAYS
Relays for advanced technology

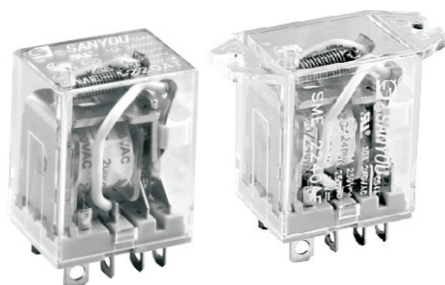## Miniature Power Relay

SME-1P Series

Features
- 1 pole types available with switching current 15A
- PCB terminal, socket and flange case types available for different mounting consideration.
- Low coil power consumption with high sensitive.
- Long service endurance, high reliability.

Safety Approval
UL , C-UL File No. : E179745

VDE File No. : 40009320

CQC File No. : CQC08001024423，CQC12002082737

Contact Capacity

Model	SME-1 pole
Nominal switching capacity (res. load)	15A 250VAC
Max. switching current	15A
Max. switching voltage	250VAC
Max. switching power	3,750VA

Charateristic Data

Contact material	Silver alloy	
Initial contact resistance (at 6VDC 1A)	100mΩ Max.(1A 6VDC)	
Operate time (at nominal volt.)	25msec. Max.(no diode)	
Release time (at nominal volt.)	25msec. Max.(no diode)	
Initial insulation resistance	1000MΩ Min.(DC500V)	
Initial dielectric strength	Between open contacts : AC1,000V , 50/60Hz 1min.	
	Between coil and contact : AC1,500V , 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 7,200 ops./h)	10,000,000(at room temperature)
	Electrical (at 360 ops./h)	100,000(at room temperature)
Ambient temperature	-25℃ ~ +70℃ (no condensation)	
Unit weight	Approx.37.0g	

Coil Data (at 20℃)

Nominal voltage	Nominal operating current ±10% (mA)		Coil resistance ±10% (Ω)	Max. allowable voltage	Pick-up voltage (Max.)	Drop-out voltage (Min.)	Nominal operating power
	50Hz	60Hz					
6 VAC	220.0	170.0	11.5	110 % of nominal voltage	80% of nominal voltage	30 % of nominal voltage	1.0 ~ 1.3VA
12 VAC	110.0	85.0	46				
* 24 VAC	60.0	45.0	165				
48 VAC	30.0	23.0	735				
* 100/110 VAC	11.7/12.9	10/11	3,200				
110/120 VAC	9.9/10.8	8.4/9.2	4,430				
* 200/220 VAC	6.2/6.8	5.3/5.8	12,950				
* 220/240 VAC	4.8/5.3	4.2/4.6	14,400				

Nominal voltage		Nominal operating current ±10% (mA)	Coil resistance ±10% (Ω)	Max. allowable voltage	Pick-up voltage (Max.)	Drop-out voltage (Min.)	Nominal operating power
*	6 VDC	150.0	40	110 % of nominal voltage	75% of nominal voltage	10 % of nominal voltage	Approx. 0.90W
*	12 VDC	75.0	160				
*	24 VDC	36.9	650				
*	48 VDC	18.5	2,600				
*	110 VDC	10.0	11,000				

Note:The above mentioned types have obtained CQC and UL certificates,while the types with * have gained VDE certificate.

Safety Approval Ratings

Approval	CQC	VDE	UL/CUL
File No.	CQC08001024423 CQC12002082737	40009320	E179745
Approved ratings	15A 250VAC	15A 250VAC 15A 30VDC	15A 240VAC , Resistive 15A 24VDC , Resistive 7A 250VAC , General use

(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.
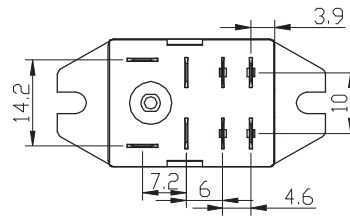
Ordering Information

Nomenclature

SME - 1 12 D M T 1 D- F - XX

Special Parameter : Nil-Standard type,
         Letter or number-Special requirement

Insulation System : Nil-Standard, B-Class B, F-Class F

Accessory Form : Nil-Without accessory, D-With diode,
         DC-With diode(see wiring diagram)

Contact Material : Nil-AgSnO$_2$, 1-AgCdO

Mounting Type : P-PCB, T-Socket, F-Flange case

Contact Form : Nil-Form C, M-Form A

Coil Power : D-DC, A-AC

Coil Voltage : DC-06, 12, 24, 48, 110;AC-06, 12, 24, 48,
         100(100/110) , 110(110/120) , 200(200/220) , 220(220/240)

Number of Poles : 1-1 Pole

Type Designation : SME

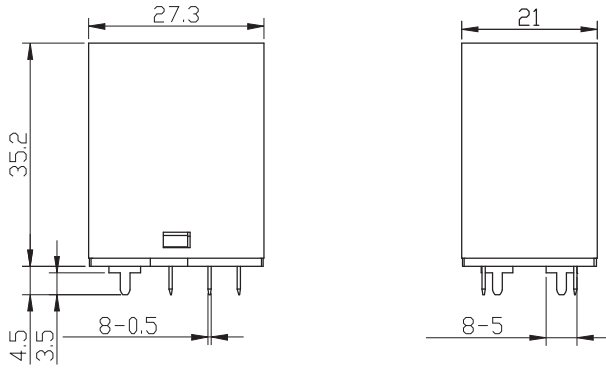## Outline Dimensions, Wiring Diagram,Mounting Holes (unit : mm)

Socket type

3.9

14.2

10

7.2
6

4.6
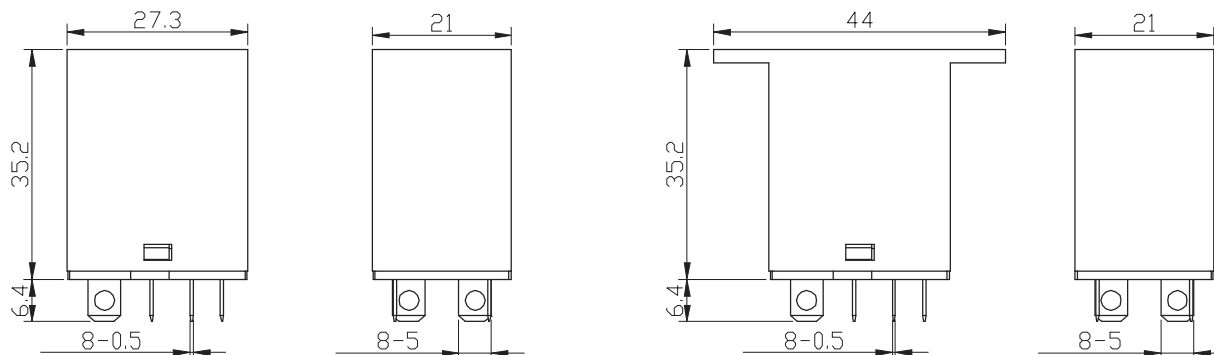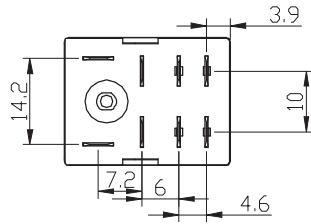
Socket type

Flange case type

3.9

14.2

10

7.2
6

4.6

Flange case type

27.3

35.2

4.5
3.5

8-0.5

21

8-5

3.9

14.2

10

7.2
6

4.6

PCB type

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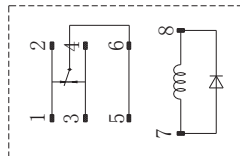If dimension < 1mm, tolerance : ±0.2mm;
If dimension 1~5mm, tolerance : ±0.3mm;
If dimension > 5mm, tolerance : ±0.4mm.
Note : 1. Extended terminal dimension is dimension
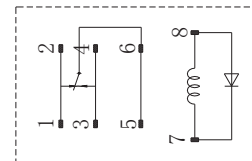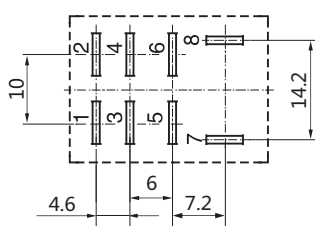   before soldering.
       2. Tolerance of m ounting holes : ±0.1mm.

1C
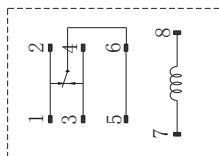
without accessory

with diode(D type)
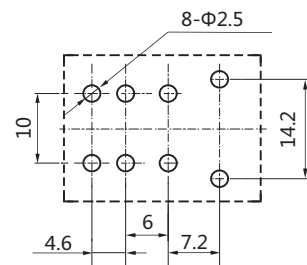
with diode (DC type)

Wiring Diagram (bottom view)

Socket type

10

14.2

4.6
6
7.2

Flange case type

38

10

3.5

14.2

4.6
6
7.2

PCB type

8-Φ2.5

10

14.2

4.6
6
7.2
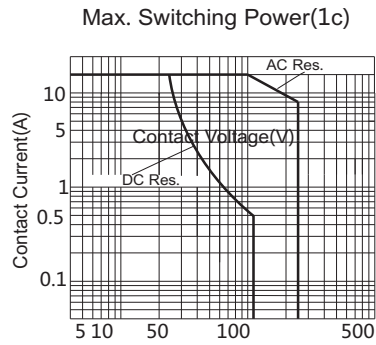
Mounting Holes (bottom view)

Typical Applications

● Automat, cooking appliance and office equipment

● Home appliances, control apparatus, ect.

Characteristic Curves

Max. Switching Power(1c)