

Features:

- Max. Switching Capability: 35A, Low Power 0.6W/0.8W
- Microminiature, Standard PCB Type
- High Vibration and Shock Resistance

Typical applications:

- Auto door lock motor control, home appliances, office equipments, anti-theft system, etc.


Approvals

UL, c-UL (File No.): /
 TUV (File No.): /
 CQC (File No.): /
 VDE (File No.): /

Contact Data

Contact arrangement	1form C (CO) or 1form A (NO)
Contact resistance	100m Ω Max.(at 1A 6VDC)
Rated voltage	14VDC
Max.switching voltage	16VDC
Rated current	20A
Min. recommended contact load	1A, 6VDC
Breaking capacity max.	280W
Contact material	AgSnO ₂
Frequency of operation	360 ops./h
Operate/release time max.	10ms/5ms
Electrical endurance	NO: 20A 14VDC, Resistive load, 25°C, 1s on 9s off, 1×10^5 ops. NC: 10A 14VDC, Resistive load, 25°C, 1s on 9s off, 1×10^5 ops.

Coil Data

Coil voltage range:	5 to 24VDC
Coil insulation system according UL	Class F
Coil versions, DC coil	
Rated voltage VDC	Operate voltage VDC
5	≤ 3.0
6	≤ 3.6
9	≤ 5.4
12	≤ 7.2
24	≤ 14.4
	Release voltage VDC
	≥ 0.5
	41.7
	60.0
	135.0
	240.0
	≥ 2.4
	960.0
	Coil resistance Ω (1±10%)
	600
	600
	600
	600
	600
	Rated coil powers mW
	600

Coil Data (continued)
Coil versions, DC coil

Rated voltage VDC	Operate voltage VDC	Release voltage VDC	Coil resistance Ω (1±10%)	Rated coil powers mW
5	≤ 2.875	≥ 0.5	31.3	800
6	≤ 3.45	≥ 0.6	45.0	800
9	≤ 5.175	≥ 0.9	102.0	800
12	≤ 6.9	≥ 1.2	180.0	800
24	≤ 13.8	≥ 2.4	720.0	800

All figures are given for coil without pre-energization, at ambient temperature 20°C

Insulation Data

Initial dielectric strength between open contacts	500VAC
between contact and coil	500VAC

Clearance/Creepage between contact and coil (Clearance)	/ mm
between contact and coil (Creepage)	/ mm

Material group of insulation parts	IIIa
Tracking index of relay base	PTI 175V

Other Data

Material compliance: EU RoHS/ELV, China RoHS, REACH

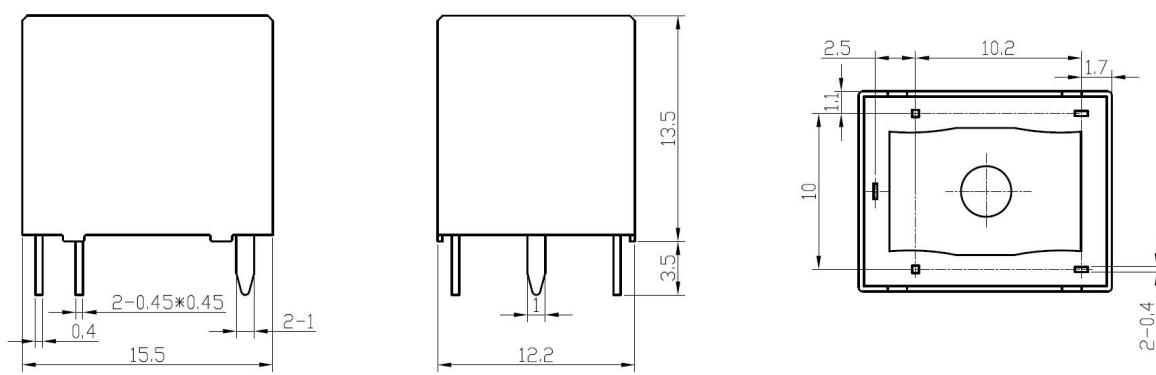
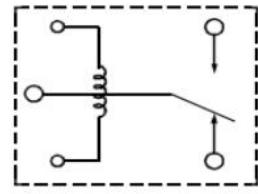
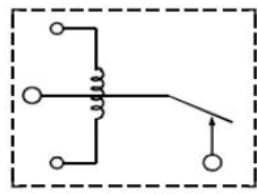
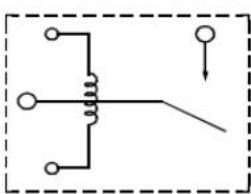
Ambient temperature -40°C to $+85^{\circ}\text{C}$

Category of environmental protection IEC 61810 RTII - flux proof
 RTIII - Sealed type washable

Weight Approx. 6.0g

Resistance to soldering heat THT (IEC 60068-2-20) 260°C/5s

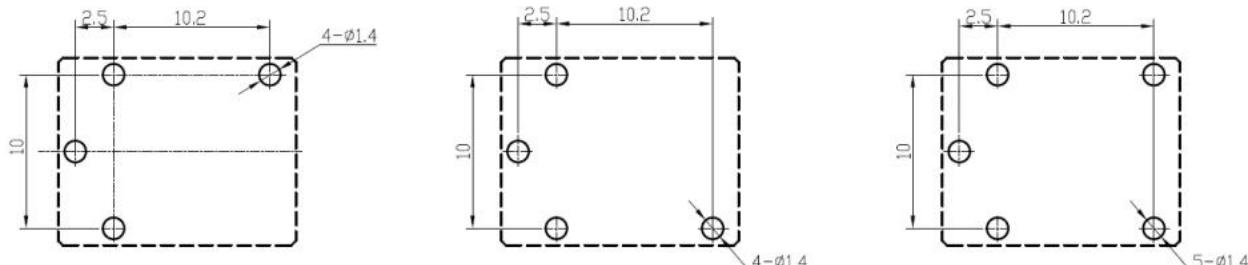
Packaging/unit tray

Dimensions

Wiring Diagrams (bottom view)


1A

1B

1C

PCB Layouts (bottom view)

1A
1B
1C

In case of no tolerance shown on outline dimension

If dimension < 1 mm, tolerance: ± 0.2 mm

If dimension 1~5mm, tolerance: ± 0.3 mm

If dimension > 5mm, tolerance: ± 0.4 mm

Notes:

1.The dimension of pin is the size before tinning

2.Tolerance of PCB layout: ± 0.1 mm.

Product Code Structure

SARD -S -1 12 D M -XX

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

Contact Material : Nil -AgSnO₂

Contact Arrangement: Nil-Form C B-Form B M-Form A

Coil Power: D-0.6W H-0.8W

Rated Coil Voltage(VDC): 05, 06, 09, 12, 24

Number of Poles: 1-1Pole

Protective Construction: S - Flux-proof SH- Sealed type washable

Type: SARD

(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.

Examples of Ordering Codes

SARD-S-112DM relay SARD , Flux-proof , rated DC voltage 12V ,coil power 0.6W,1NO, and contact material AgSnO₂.

SARD-S-112H relay SARD , Flux-proof , rated DC voltage 12V ,coil power 0.8W,1CO, and contact material AgSnO₂.

Product Code Structure

The specification is for reference only. Specifications are subject to change without prior notice.

We could not evaluate all the performance and all the parameters for every possible applications. Thus the users should in a right position to choose suitable product for their own application. For sealed relays, after installation and cleaning, please open the ventilation hole in the case before use. If there is any query, please contact Sanyou for technical services. However it is the user's responsibility to determine which product should be used.