🗲 SANYOU RELAYS

General Power Relay

Features:

- Low coil power consumption.
 Micro-miniature relay, standard PCB terminals.
 IEC60335-1 compliant product is available.
- **Typical applications:**
- Home appliances: air conditioner, heater, etc. Vending machine.
 Office equipment: computer, fax machine, etc.

Approvals

Contact Data Contact arrangement

Max.switching voltage Rated current

Breaking capacity max.

Frequency of operation

Contact ratings

Contact

A/C(NO)

A/C(NO)

A/C(NO)

A/C(NO)

Load

10A,250VAC,cos φ=1,85℃

10A,250VAC,cos φ=1,85℃

15A,125VAC,cos φ=1,85℃

10A,250VAC,85℃

Electrical endurance

Type

SRDA

<u>SRDA</u>

SRDA

IEC 61810 SRDA

UL 60947-4-1

Coil Data

Coil voltage range: Operative range, IEC 61810 Coil insulation system according UL

GB/T 21711.1-2023

Mechanical endurance

Operate/release time max

Contact material

Min. recommended contact load

Rated voltage

UL, c-UL (File No.): E190598 TUV (File No.): R50142424 CQC (File No.): CQC02001002126,

• Electric controlled window, car antenna, door lock, etc.

CQC10002050459, CQC21002306489

1form C(CO)or 1form A(NO)

250VAC 277VAC

10A

1A, 6VDC

2500VA

AgNi, AgSn02

360 ops./h

8ms/5ms

See electrical endurance graph

Cycles

5X10⁴

5X104

5X104

2X104 ≥1x10³

5 to 60VDC

Class F



Coil Data(continued)

| Coil versions, DC coil | | | | | | | |
|------------------------|---------|---------|------------------|------------|--|--|--|
| Rated | Operate | Release | Coil | Rated coil | | | |
| voltage | voltage | voltage | resistance | powers | | | |
| VDC | VDC | VDC | Ω (1±10%) | mW | | | |
| 5 | ≤3.75 | ≥0.5 | 70 | 360 | | | |
| 6 | ≤4.5 | ≥0.6 | 100 | 360 | | | |
| 9 | ≤6.75 | ≥0.9 | 225 | 360 | | | |
| 12 | ≤9 | ≥1.2 | 400 | 360 | | | |
| 15 | ≤11.25 | ≥1.5 | 625 | 360 | | | |
| 18 | ≤13.5 | ≥1.8 | 900 | 360 | | | |
| 24 | ≤18 | ≥2.4 | 1600 | 360 | | | |
| 48 | ≤36 | ≥4.8 | 6400 | 360 | | | |
| 60 | ≤45 | ≥6 | 10000 | 360 | | | |

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

Insulation Data

| Initial dielectric strength | | | | |
|--------------------------------------|-------------------|--|--|--|
| between open contacts | 750VAC | | | |
| between contact and coil | 2500VAC | | | |
| Clearance/Creepage | | | | |
| between contact and coil (Clearance) | ≥1.5mm(actual) | | | |
| between contact and coil (Creepage) | ≥3.0mm(actual) | | | |
| Material group of insulation parts | Illa | | | |
| Tracking index of relay base | PTI 175V/PTI 250V | | | |

Other Data

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

| Ambient temperature | -40℃ to +85℃ | | |
|---|------------------------------|--|--|
| Category of environmental protection | | | |
| IEC 61810 | RTII - flux proof | | |
| | RTIII - Sealed type washable | | |
| Weight | Approx. 8.0g | | |
| Resistance to soldering heat THT (IEC 60068-2-20) | 260°C/5s | | |
| Packaging/unit | tube, tray | | |









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.



General Power Relay

SRDA V2.1

Dimensions







(bottom view)

Wiring Diagrams (bottom view)



PCB Layouts (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

Notes:

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



General Power Relay

Product Code Structure

| SRDA | -S | -1 | 12 | D | м | 6 | -F | -XX | |
|------|----|----|----|---|---|---|----|-----|---|
| | | | | | | | | | Special Parameter: Nil-Standard type Letter or number-Special requirement |
| | | | | | | | | | Insulation System : Ni-Standard B - Class B F - Class F |
| | | | | | | | | | Contact Material : Nil -AgSnO ₂ 6 - AgNi |
| | | | | | | | | | Contact Arrangement : Nil-Form C M-Form A |
| | | | | | | | | | Coil Power: D-0.36W |
| | | | | | | | | | Rated Coil Voltage(VDC): 05, 06, 09, 12, 15, 18, 24, 48, 60 |
| | | | | | | | | | Number of Poles: 1-1Pole |
| | | | | | | | | | Protective Construction: S-Flux-proof SH-Sealed type washable |
| | | | | | | | ., | | Type: SRDA H ₂ S, SO ₂ ,NO ₂ , 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.

(4) C1 suffix stands for product Compliant with IEC60335-1&CTI250V

Examples of Ordering Codes

SRDA-S-112DM relay SRDA , Flux-proof , rated DC voltage 12V ,coil power 0.36W,1NO,and contact material AgSnO₂.

SRDA-S-112D relay SRDA , Flux-proof , rated DC voltage 12V ,coil power 0.36W,1CO,and contact material AgSnO₂.

Disclaimer

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.