

### Features:

- Designed for thermostat, modem, computer peripherals, video recorder and security application.
- High sensitive:150mW.

### Typical applications:

- Automation.
- Modem, computer peripherals.
- Telecommunication facility.

### Approvals

UL, c-UL (File No.): E179745

TUV (File No.): R50674209

CQC (File No.): CQC09002030315

### Contact Data

Contact arrangement	1form C( CO)
Contact resistance	100mΩ Max.(at 1A 6VDC)
Rated voltage	125VAC
Max.switching voltage	125VAC
Rated current	1A
Min. recommended contact load	10mA, 5VDC <sup>(1)</sup>
Breaking capacity max.	125VA
Contact material	AgNi
Frequency of operation	1800 ops./h
Operate/release time max.	5ms/5ms
Electrical endurance	See electrical endurance graph

(1) This value may vary depending on the switching frequency and operating environment. Always double-check relay suitability under actual operating conditions.

### Contact ratings

Type	Contact	Load	Cycles
<b>UL 508</b>			
SYS	NO	1A,125VAC,resistive, 90℃	5X10 <sup>4</sup>
<b>GB/T 21711.1-2023</b>			
SYS	NO	1A,125VAC,90℃	2X10 <sup>4</sup>
Mechanical endurance			≥1x10 <sup>7</sup>

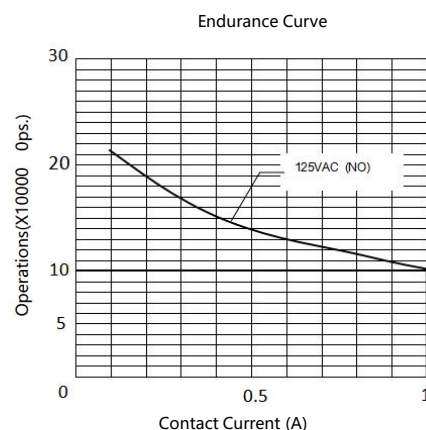
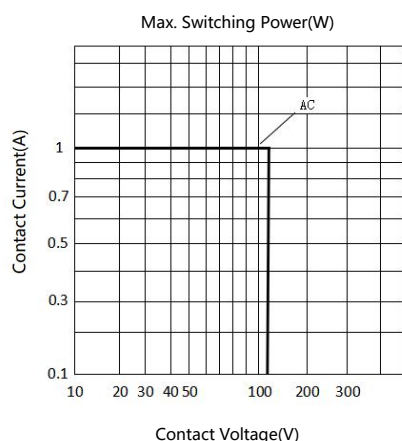
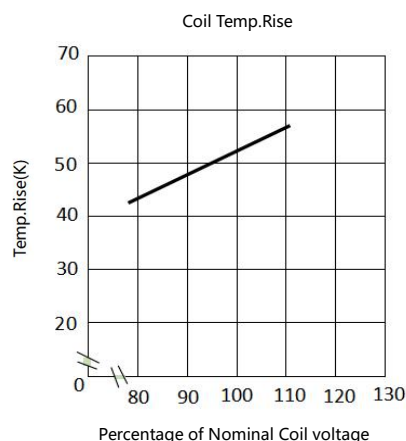
### Coil Data

Coil voltage range:	5 to 24 VDC
Operative range, IEC 61810	2
Coil insulation system according UL	Class F

#### Coil versions, DC coil

Rated voltage VDC	Operate voltage VDC	Release voltage VDC	Coil resistance Ω (1±10%)	Rated coil powers mW
3	≤2.25	≥0.15	60	150
5	≤3.75	≥0.6	167	150
6	≤4.5	≥0.9	240	150
9	≤6.75	≥1.2	540	150
12	≤9	≥1.5	960	150
24	≤18	≥1.8	3840	150

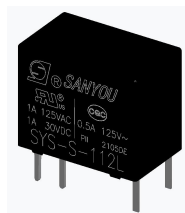
### Characteristic Curves



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.



### Coil Data(continued)

Rated voltage VDC	Operate voltage VDC	Release voltage VDC	Coil resistance Ω (1±10%)	Rated coil powers mW
5	≤3.75	≥0.6	125	200
6	≤4.5	≥0.9	180	200
9	≤6.75	≥1.2	405	200
12	≤9	≥1.5	720	200
24	≤18	≥1.8	2880	200

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

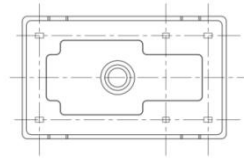
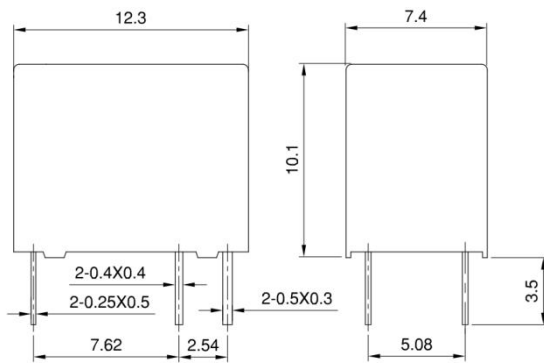
### Insulation Data

Initial dielectric strength	
between open contacts	500VAC
between contact and coil	1000VAC
Clearance/Creepage	
between contact and coil (Clearance)	/
between contact and coil (Creepage)	/
Material group of insulation parts	IIIa
Tracking index of relay base	PTI 175V

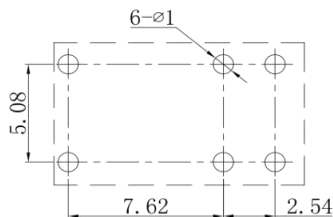
### Other Data

Material compliance: EU RoHS/ELV, China RoHS, REACH	
Ambient temperature	-40℃ to +90℃
Category of environmental protection	
IEC 61810	RTII - flux proof RTIII - Sealed type washable
Weight	Approx. 2.1g
Resistance to soldering heat THT (IEC 60068-2-20)	260℃/5s
Packaging/unit	tube

## Dimensions



## PCB Layouts (bottom view)



In case of no tolerance shown on outline dimension

If dimension < 1 mm, tolerance:  $\pm 0.2\text{mm}$

If dimension 1~5mm, tolerance:  $\pm 0.3\text{mm}$

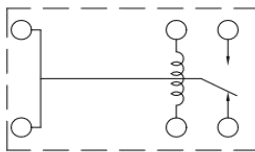
If dimension > 5mm, tolerance:  $\pm 0.4\text{mm}$

Notes:

1.The dimension of pin is the size before tinning

2.Tolerance of PCB layout:  $\pm 0.1\text{ mm}$ .

## Wiring Diagrams (bottom view)



## Product Code Structure

SYS -S -1 12 D -F -XX

Special Parameter :

Nil-Standard type Letters or Numbers - Special requirements

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

Coil Power : D-0.20W L-0.15W

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

Number of Poles : 1-1 Pole

Protective construction:

S- Flux-proof SH-Sealed type washable

Type: SYS

(1) Flux-proof relays can not be used in the environment with pollutants like  $\text{H}_2\text{S}$ ,  $\text{SO}_2$ ,  $\text{NO}_2$ , 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.

## Examples of Ordering Codes

SYS-S-112D relay SYS, Flux-proof , rated DC voltage 12V ,coil power 0.2W,1CO,and contact material AgNi.

## 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.