**Features**

- 2 Form C configuration .
- Small size and light weight for high density PCB mounting
- 150mW type available.

**Safety certificate**

UL, C-UL File No. : E179745

TUV File No. : R50253080

CQC File No. : CQC02001002119、CQC16002154153

**Contact Data**

Type	DSY2Y
Rated load (Resistive load)	1A 120VAC
Max. switching current	2A
Max. switching voltage	277VAC
Max. switching power	554VA
Min. switching load	6V 1A

**Characteristics**

Contact material	Silver alloy	
Initial contact resistance	100mΩ Max.(at 1A 6VDC)	
Operate time (at rated coil voltage)	7 ms Max. (No diode)	
Release time	4 ms Max. (No diode)	
Insulation resistance	Min. 1,000MΩ (at 500VDC)	
Dielectric strength	Between open contacts: 750VAC, 50/60Hz for 1min.	
	Between coil and contact: 1,000VAC, 50/60Hz for 1min.	
Vibration resistance	Function	10~55Hz at double amplitude of 1.5 mm
	Destructive	10~55Hz at double amplitude of 1.5 mm
Shock resistance	Function	10G Min.
	Destructive	100G Min.
Endurance	Mechanical endurance (at10,800ops./h)	10,000,000 cycles (at room temperature)
	Electrical endurance (at 1,800ops./h)	100,000 cycles (at room temperature)
Ambient temperature	-40°C ~ +85°C (no condensation)	
Unit weight	Approx.4.6g	

## Coil Data (at 20°C)

Nominal voltage (VDC)	Nominal operating current $\pm 10\%$ (mA)	Coil resistance $\pm 10\%$ ( $\Omega$ )	Max. allowable voltage	Operate voltage (Max.)	Release voltage (Min.)	Nominal operating power
3	50	60	7	75% of nominal voltage	5% of nominal voltage	Approx.0.15W
5	30	167	11.5			
6	25	240	13.8			
9	16.6	540	20.8			
12	12.5	960	27.7			
15	10	1,500	34.6			
18	8	2,160	41.8			
24	6.25	3,840	55.2			
48	3.1	15,360	110.4			
3	66.6	45	6			Approx.0.2W
5	40.0	125	10			
6	33.3	180	12			
9	22.2	405	18			
12	16.6	720	24			
15	13.3	1,125	30			
18	11	1,620	36			
24	8.3	2,880	48			
48	4.2	11,520	96			
3	120	25	4.5			Approx.0.36W
5	72	69	8			
6	60	100	10			
9	40	225	14.5			
12	30	400	18.5			
15	24	625	22			
18	20	900	26.8			
24	15	1,600	35.5			
48	12	3,972	56	Approx. 0.58W		

The data shown above are initial values. Do not apply maximum allowable voltage on coil for more than 10 minutes to avoid overheating of the coil.

## Safety Certificate ( More details of approved ratings, please refer to the safety certificates)

Certificates	CQC	TUV	UL/CUL
File No.	CQC02001002119 CQC16002154153	R50253080	E179745
Approved Ratings	1A 125VAC	0.5A 120VAC 1A 24VDC	1A 120VAC 2A 30VDC

- (1) All values unspecified are acquired at room temperature
- (2) Only typical ratings are listed above and the endurance differ in each load. Other specific load information are available upon request
- (3) For sealed type testing, please open the ventilation hole in the case before test

## Ordering Information

### Nomenclature

DSY2Y -S -2 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-0.36W, L-0.20W, H-0.15W, Nil-0.58W

Coil Voltage (VDC): 03, 05, 06, 09, 12, 15, 18, 24, 48

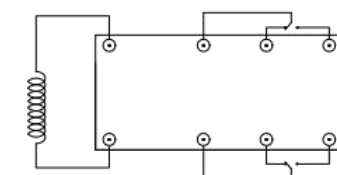
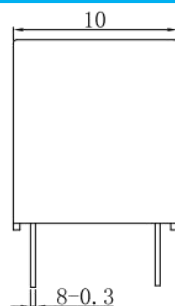
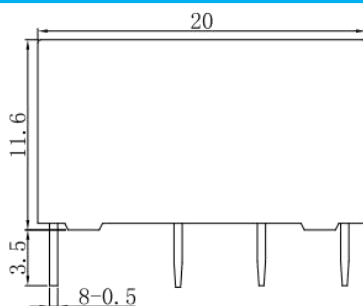
Number of Poles: 2-2 Pole

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

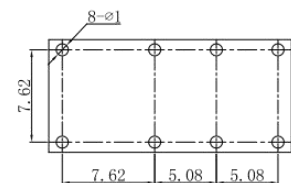
Type: DSY2Y

- (1) Flux-proof relays can not be used in the environment with pollutants like H<sub>2</sub>S, SO<sub>2</sub>, NO<sub>2</sub>, 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.

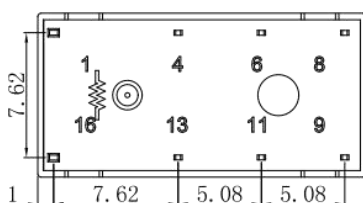
## Outline dimension, wiring diagram, PCB layout (Unit: mm)



Wiring Diagram bottom view



P.C.B Layout (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

Note:

1.The dimension of pin is the size before tinning

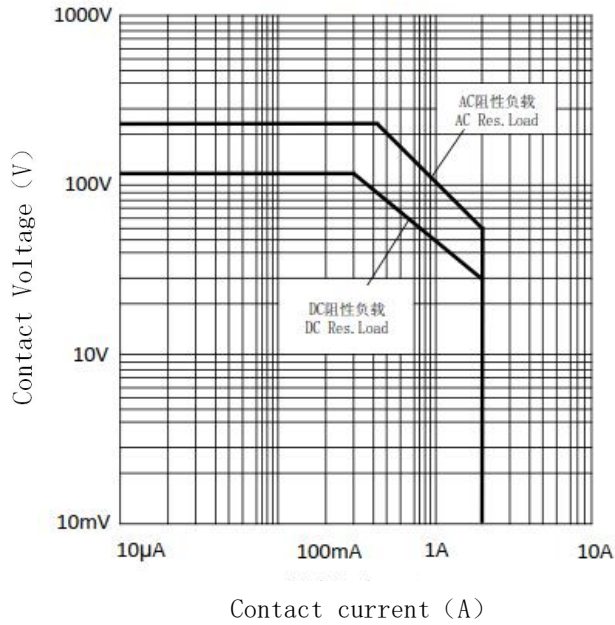
2. Tolerance of PCB layout: ±0.1 mm

## Typical Applications

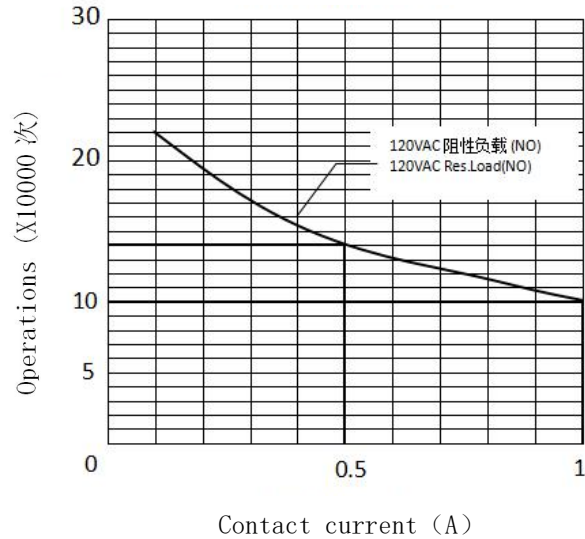
- Telecommunication equipment
- Computer peripherals
- Medical equipment
- Office facility
- Security alarm system

## Characteristic Curves

Max. Switching Power



Endurance Curve



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.

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.