

Miniature Signal Relay

SYS

Features

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

Safety certificate

UL , C-UL File No : E179745

CQC File No : CQC09002030315、CQC16002154155

Contact Capacity

Type	SYS
Rated load (Resistive load)	1A 125VAC
Max. switching current	1A
Max. switching voltage	125VAC
Max. switching power	125VA
Min. switching load	6V 1A

Characteristics

Contact material	Silver alloy	
Initial contact resistance	100mΩ Max.(at 1A 6VDC)	
Operate time(at rated coil voltage)	5 ms Max. (No diode)	
Release time	5 ms Max. (No diode)	
Initial insulation resistance	Min. 1,000MΩ (at 500VDC)	
Initial dielectric strength	Between open contacts : 500VAC, 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	50G Min.
Endurance	Mechanical endurance (at 10,800ops./h)	10,000,000 cycles (at room temperature)
	Electrical endurance (at 1,800ops./h)	100,000 cycles (at room temperature)
Ambient temperature	-30°C ~ +55°C (no condensation)	
Unit weight	Approx. 2.1g	



Coil Data (at 20°C)

Nominal voltage (VDC)	Nominal operating current $\pm 10\%$ (mA)	coil resistance $\pm 10\%$ (Ω)	Max. allowable voltage	Operate voltage (Max.)	Release voltage (Min.)	Nominal operating power
3	50	60	130% of nominal voltage	75% of nominal voltage	5% of nominal voltage	Approx. 0.15W
5	30	167				
6	25	240				
9	16.67	540				
12	12.5	960				
24	6.25	3,840				
3	66.67	45				Approx. 0.20W
5	40	125				
6	33.33	180				
9	22.22	405				
12	16.67	720				
24	8.33	2,880				

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 Ratings (More details of approved ratings, please refer to the safety certificates)

Certificates	CQC	UL/CUL
File No.	CQC09002030315 CQC16002154155	E179745
Approved Ratings	0.5A 125VAC	1A 125VAC 1A 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.

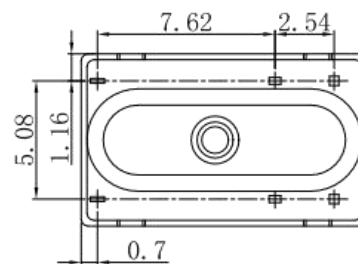
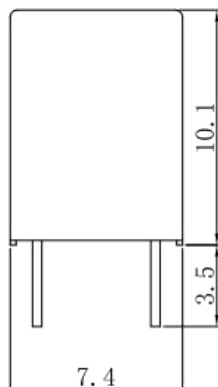
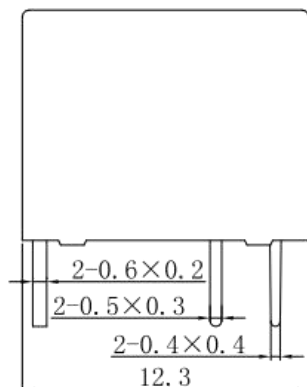
Ordering Information**Nomenclature**

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) : 03 , 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 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.



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



In case of no tolerance shown on outline dimension

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

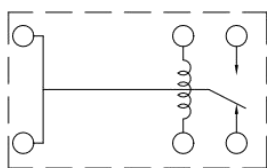
If dimension 1~5mm, tolerance : $\pm 0.3\text{mm}$

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

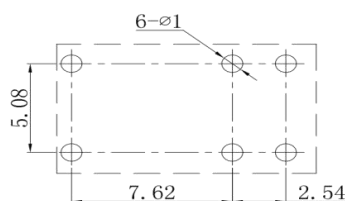
Note :

1.The dimension of pin is the size before tinning

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



Wiring Diagram bottom view

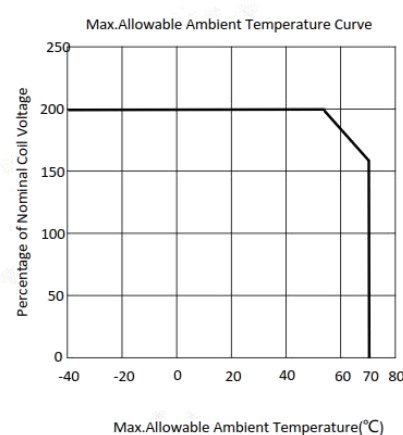
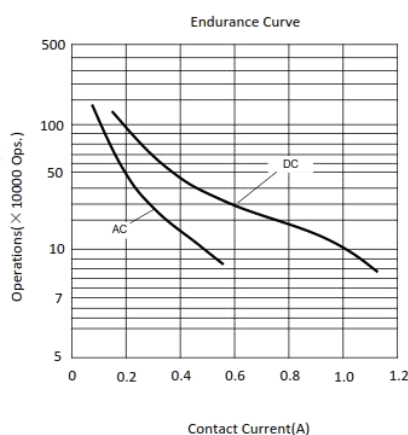
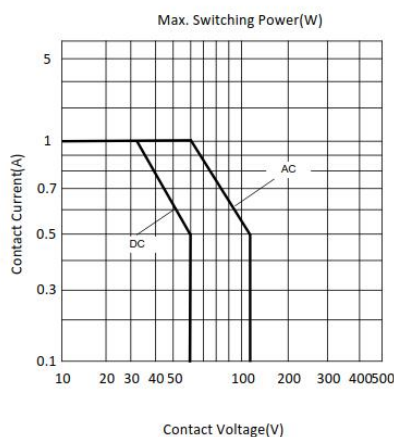


P. C. B. Layout (bottom view)

Typical Applications

- Automation
- Modem, computer peripherals
- Telecommunication facility

Characteristic Curves



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.

