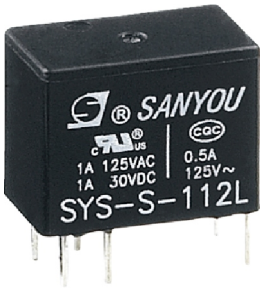
SANYOU RELAYS
Relays for advanced technology

Subminiature Signal Relay

SYS-Series



Features

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

Safety Approval

UL, C-UL File No.: E179745
CQC File No.: CQC09002030315

Contact Capacity

Model	SYS
Nominal switching capacity (res. load)	1A 125VAC
Max. switching current	1A
Max. switching voltage	125VAC
Max. switching power	125VA

Charateristic Data

Contact material	Silver alloy	
Initial contact resistance (at 6VDC 1A)	100mΩ Max.	
Operate time (at nominal volt.)	5msec. Max.	
Release time (at nominal volt.)	5msec. Max.	
Initial insulation resistance	100MΩ Min.(DC500V)	
Initial dielectric strength	Between open contacts: AC 500V, 50/60Hz 1Min.	
	Between coil and contact: AC1,000V, 50/60Hz 1Min.	
Vibration resistance	Functional	10 ~ 55Hz at double amplitude of 1.5 mm
	Destructive	10 ~ 55Hz at double amplitude of 1.5 mm
Shock resistance	Functional	10G Min.
	Destructive	50G Min.
Endurance (operations)	Mechanical (at 10,800 ops./h)	10,000,000
	Electrical (at 1,800 ops./h)	100,000
Ambient temperature	-30℃ ~ +70℃ (no condensation)	
Unit weight	Approx. 2.1 g	

Coil Data (at 20℃)

Nominal voltage (VDC)	Nominal operating current ±10% (mA)	Coil resistance ±10% (Ω)	Max. allowable voltage	Pick-up voltage (Max.)	Drop-out voltage (Min.)	Nominal operating power
2	75.19	26.6	140 % of nominal voltage	75 % of nominal voltage	5 % of nominal voltage	0.15W
3	50.00	60				
5	30.12	166				
6	25.00	240				
9	16.67	540				
12	12.50	960				
24	6.25	3,840				
2	100.00	20	115 % of nominal voltage	75 % of nominal voltage	5 % of nominal voltage	0.20W
3	66.67	45				
5	40.00	125				
6	33.33	180				
9	22.22	405				
12	16.67	720				
24	8.33	2,880				

Safety Approval Ratings

Approval	CQC	UL/CUL
File No.	CQC09002030315	E179745
Approved ratings	0.5 A 125VAC	1A 125VAC 1A 30VDC

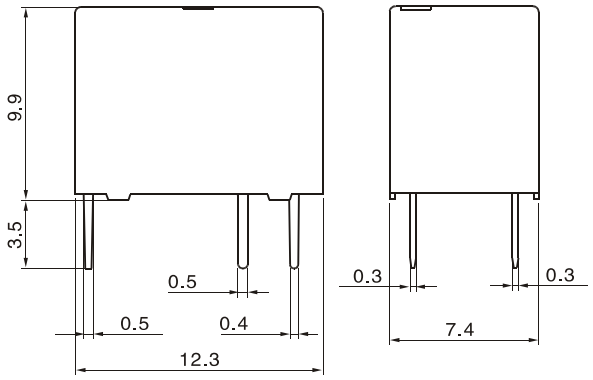
Ordering Information

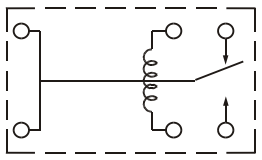
Nomenclature

SYS –S –1 12 D –F –XX

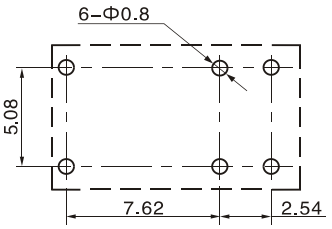
- Special Parameter: Nil–Standard type; Letter or number–Special requirement
- Insulation System: Nil–Standard, B–Class B, F–Class F
- Coil Power: D–0.20W, L–0.15W
- Coil Voltage (VDC): 02, 03, 05, 06, 09, 12, 24
- Number of Poles: 1–1 Pole
- Protective Construction: S–Flux proofed, SH–Sealed type washable
- Type Designation: SYS

Outline Dimensions, Wiring Diagram, P.C. Board Layout (unit: mm)





Wiring Diagram (bottom view)



P.C.B. Layout (bottom view)

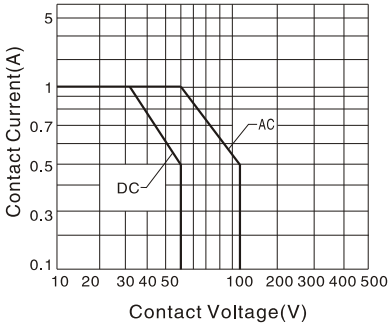
Unless otherwise specified:
If dimension < 1mm, tolerance: ±0.2mm;
If dimension 1~5mm, tolerance: ±0.3mm;
If dimension > 5mm, tolerance: ±0.4mm.
Note: 1. Extended terminal dimension is dimension before soldering.
2. Tolerance of P.C.B. layout: ±0.1mm.

Typical Applications

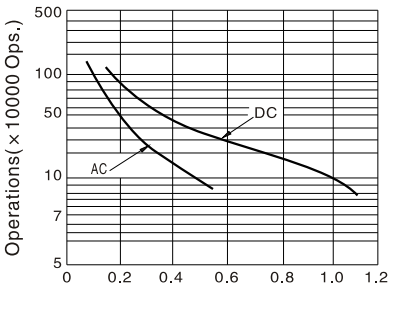
- Automation
- Modem, computer peripherals
- Telecommunication equipment

Characteristic Curves

Max. Switching Power



Endurance Curve



Max. Allowable Ambient Temperature Curve

