



Features

- Microminiature relay.
- High sensitive: 200mW.
- High reliability gilt contact.
- Sealed type construction.

Safety Approval

UL, C-UL File No.: E179745

CQC File No.: CQC02001002118

Contact Capacity

Model	SYS1K
Nominal switching capacity (res. load)	3A 120VAC
Max. switching current	3A
Max. switching voltage	125VAC
Max. switching power	360VA

Charateristic Data

Contact material	Silver alloy	
Initial contact resistance (at 6VDC 1A)	100mΩ Max.	
Operate time (at nominal volt.)	SYS1K-D: 8msec. Max.	SYS1K-L: 10msec. Max.
Release time (at nominal volt.)	4msec. Max.	
Initial insulation resistance	100MΩ Min.(DC500V)	
Initial dielectric strength	Between open contacts: AC500V, 50/60Hz 1Min.	
	Between coil and contact: AC750V, 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	100G Min.
Endurance (operations)	Mechanical (at 10,800 ops./h)	10,000,000
	Electrical (at 1,800 ops./h)	100,000
Ambient temperature	-30°C ~ +70°C (no condensation)	
Unit weight	Approx. 3.7 g	

Coil Data (at 20°C)

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
3	120.00	25	130 % of nominal voltage	75 % of nominal voltage	5 % of nominal voltage	0.36W
5	72.00	70				
6	60.00	100				
9	40.00	225				
12	30.00	400				
24	15.00	1,600				

Coil Data (at 20°C)

Nominal voltage (VDC)	Nominal operating current $\pm 10\%$ (mA)	Coil resistance $\pm 10\%$ (Ω)	Max. allowable voltage	Pick-up voltage (Max.)	Drop-out voltage (Min.)	Nominal operating power
3	66.67	45	130 % of nominal voltage	75 % of nominal voltage	5 % of nominal voltage	0.20W
5	40.00	125				
6	33.33	180				
9	22.22	405				
12	16.67	720				
24	8.33	2,880				
3	150.00	20				0.45W
5	90.00	55				
6	75.00	80				
9	50.00	180				
12	37.50	320				
24	18.75	1,280				

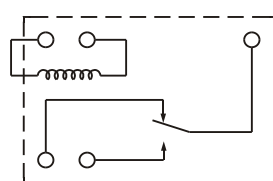
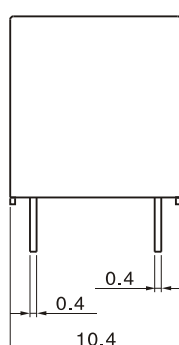
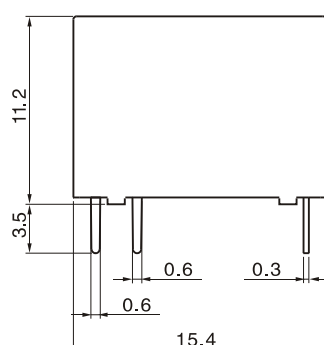
Safety Approval Ratings

Approval	CQC	UL/CUL
File No.	CQC02001002118	E179745
Approved ratings	1 A 125VAC	3A 120VAC 3A 24VDC 1A 120VAC

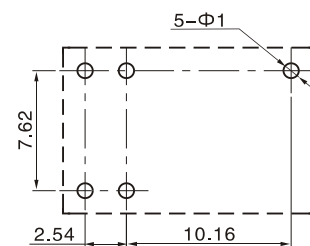
Ordering Information

Nomenclature							
SYS1K	-S	-1	12	D	M	-F	-XX
Special Parameter: Nil-Standard type, Letter or number-Special requirement							
Insulation System: Nil-Standard, B-Class B, F-Class F							
Contact Form: Nil-Form C, M-Form A							
Coil Power: D-0.36W, L-0.20W, Nil-0.45W							
Coil Voltage (VDC): 03, 05, 06, 09, 12, 24							
Number of Poles: 1-1 Pole							
Protective Construction: S-Flux proofed, SH-Sealed type washable							
Type Designation: SYS1K							

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: $\pm 0.2\text{mm}$;
 If dimension 1~5mm, tolerance: $\pm 0.3\text{mm}$;
 If dimension > 5mm, tolerance: $\pm 0.4\text{mm}$.

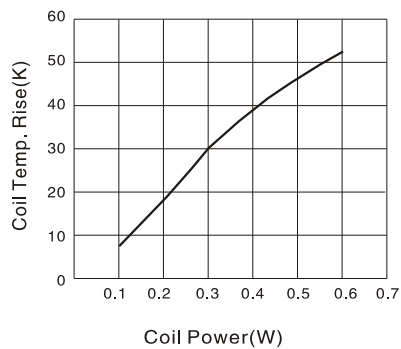
Note: 1. Extended terminal dimension is dimension before soldering.
 2. Tolerance of P.C.B. layout: $\pm 0.1\text{mm}$.

Typical Applications

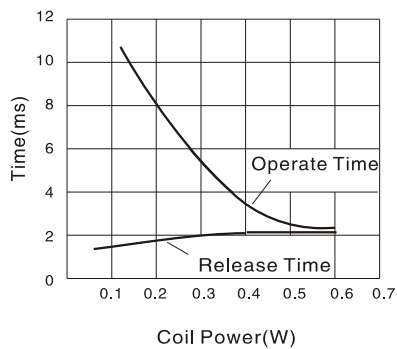
- Telecommunication equipment
- Office equipment
- Home appliances
- Audio equipment, etc.

Characteristic Curves

Coil Temp. Rise



Operate/Release Time



Endurance Curve

