

# S4H RELAY

SHORI

## ◆ Features

- Slim type and small occupying area can be applied in high density PC Board mounting technique.
- 10A switching capability.
- Transparent sealed available.



## ◆ Coil Data [at 23°C]

- Standard Type

Rated voltage ( V )	Coil Resistance ±10% (Ω)	Rated Current ±10% (mA)	Pick up Voltage (Max)	Drop out Voltage (Min)	Max continuous Voltage	Power consumption At rated Voltage
5	34.7	144	80% of rated voltage	5% of rated voltage	130% Max of Rated voltage	Approx.0.72W
6	50	120				
9	112.5	80				
12	200	60				
18	450	40				
24	800	30				
48	3200	15				

- High sensitivity Type

Rated voltage ( V )	Coil Resistance ±10% (Ω)	Rated Current ±10% (mA)	Pick up Voltage (Max)	Drop out Voltage (Min)	Max continuous Voltage	Power consumption At rated Voltage
5	46	108	80% of rated voltage	5% of rated voltage	130% Max of Rated voltage	Approx.0.54W
6	67	90				
9	150	60				
12	270	45				
18	600	30				
24	1060	22.5				
48	4360	11				

## ◆ Contact Rating

Resistive load	10A 250VAC,10A 30VDC
Max. switching current	10A
Max. switching voltage	250VAC
Max. switching capacity	2500VA

### ◆ Type List

Terminal style	Contact form	UL Insulation System approval	Type	Designation(provided with)	
				Sealed type	Sealed type washable
PCB terminal	1A (SPNO)	-----	Standard	S4H-12-1A	S4H-12-1AS
		F	High sensitivity	S4H-12B-1A-F	S4H-12B-1AS-F
	1C(SPDT)	-----	Standard	S4H-12-1C	S4H-12-1CS
		F	High sensitivity	S4H-12B-1C-F	S4H-12B-1CS-F

### ◆ Ordering information

S4H - 12 B - 1A S - F  
 1            2 3        4 5        6

1. S4H -- Basic series designation.

2. 12 -- Coil Voltage (5V~48V)

3. Power Consumption

B --High sensitivity Type(0.54W)

Blank --Standard Type(0.72W)

4. 1A -- 1 Form A, Single pole normally open

1B -- 1 Form B, Single pole normally closed

1C -- 1 Form C, Single pole double throw

5. S -- Sealed type washable

Blank -- Sealed type

6. Insulation standard

F -- Class F

Blank -- standard type

### ◆ Specification

Contact material	Ag Alloy	
Contact resistance	100 mΩ Max	
Operate time	20 ms Max	
Release time	10 ms Max	
Insulation resistance	100 MΩ Min. (DC 500V)	
Dielectric strength	Between open contact : AC 1000V ,50/60Hz 1 min.	
	Between contact and coil : AC 5000V, 50/60Hz 1 min.	
Vibration resistance	Operating extremes	10~50Hz, amplitude 1.5 mm
	Damage limits	10~50Hz, amplitude 1.5 mm
Shock resistance	Operating extremes	10G
	Damage limits	100G
Life expectancy	Mechanical	10,000,000 operations (frequency 18,000 operations/hr)
	Electrical	100,000 operations (frequency 1,800 operations/hr)
Operating ambient temperature	-40~+70°C(no freezing)	
Weight	Approx 13 g	

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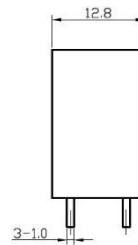
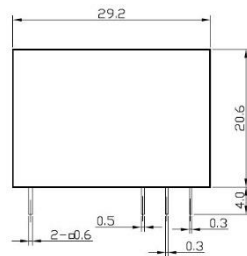
## ◆ Safety Approval

Certified	UL/CUL	TUV
File No.	E188091	R 50177786

## ◆ Safety Approval Rating

UL/CUL	TUV
10A 250VAC 10A 30VDC	10A 250VAC

## ◆ Outline Dimension



Dimension:mm

TOLERANCE:

<1mm:±0.2mm

1-5mm:±0.3mm

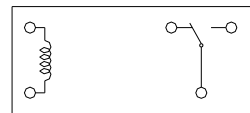
>5mm :±0.4mm

## ◆ Wiring Diagram (BOTTOM VIEW)

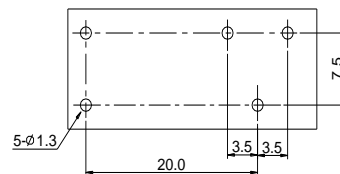
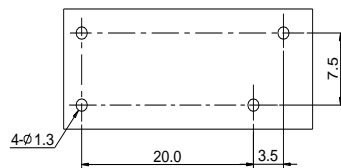
1A



1C

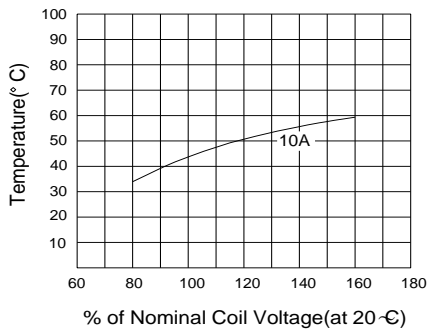


## ◆ PC Board Layout (BOTTOM VIEW)

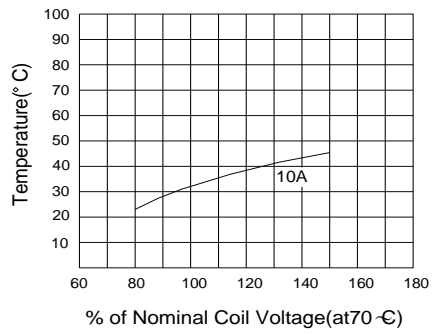


### ◆ Engineering Data

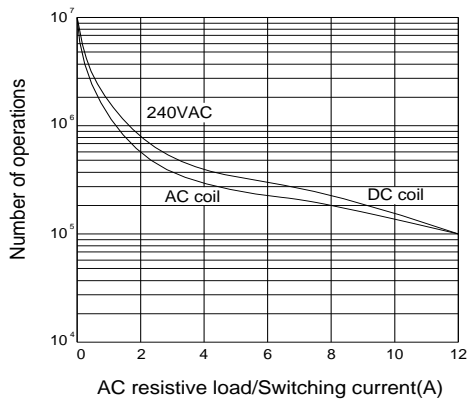
Coil temperature rise



Coil temperature rise



Life expectancy



Operate time/Release time

