

S1 RELAY

SHORI

◆ Features

- S1 Relay Performs high reliability in dry circuit.
- Low current and low profile miniature PCB relay.
- Plastic sealed and flow solder types are available.
- Fine Ag contacts with rating 1A and 3A.
- UL/CUL approval.



◆ 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
3	20	150	75% of rated voltage	5% of rated voltage	130% Max of Rated voltage	Approx.0.45W
5	56	90				
6	80	75				
9	180	50				
12	320	37.5				
24	1280	18.8				
48	5120	9.3				

- 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
3	45	66.7	75% of rated voltage	5% of rated voltage	130% Max of Rated voltage	Approx.0.2W
5	125	40				
6	180	33.3				
9	400	22.5				
12	700	17				
24	2800	8.6				

◆ Contact Rating

Resistive load	1A/120VAC, 2A/24VDC
Max. switching current	2A
Max. switching voltage	120VAC
Max. switching capacity	120VA

◆ Type List

Terminal style	Coil Power	UL Insulation System approval	Designation(provided with)	
			Sealed type	Sealed type washable
PCB terminal	Standard	-----	S1-12	S1-12-S
	High sensitivity	F	S1-12B-F	S1-12B-S-F

◆ Ordering information

S1 - 12B - S

1 2 3 4

1. S1 -- Basic series designation

2. 12 -- Coil Voltage (3V~48V)

3. Power Consumption

B -- High sensitivity Type(0.2W)

Blank -- Standard Type(0.45W)

4. S -- Sealed type washable

Blank -- Sealed type

5. Insulation standard

F -- Class F

Blank-- standard type

◆ Specification

Contact material	Ag Alloy	
Contact resistance	100 mΩ Max	
Operate time	10 ms Max	
Release time	5 ms Max	
Insulation resistance	100 MΩ Min. (DC 500V)	
Dielectric strength	Between open contact : AC 500V ,50/60Hz 1 min.	
	Between contact and coil : AC 1000V, 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	Standard Type(-25~+55°C),High sensitivity Type(-25~75°C)	
Weight	Approx 3.5 g	

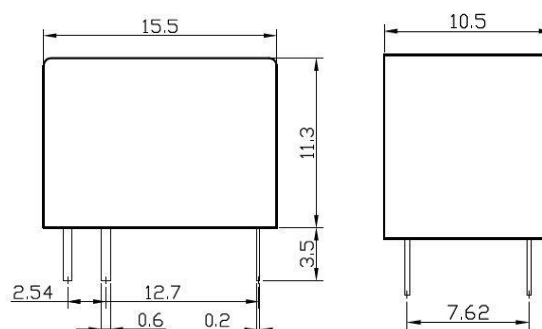
◆ Safety Approval

Certified	UL/CUL
File No.	E188091

◆ Safety Approval Rating

UL/CUL
1A 120VAC 2A 24VDC

◆ Outline Dimension



Dimension:mm

TOLERANCE:

<1mm:±0.2mm

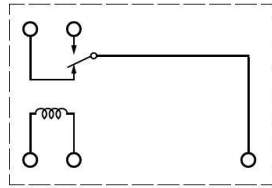
1-5mm:±0.3mm ²

>5mm :±0.4mm

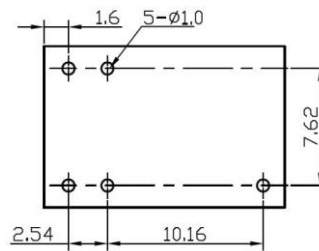
S1 RELAY

SHORI

◆ Wiring Diagram (BOTTOM VIEW)



◆ PC Board Layout (BOTTOM VIEW)



◆ Engineering Data

