#### **♦** Features

- Single contact and Double contacts type offer switching capacity by 15A in small size for exclusive automobile control relay switching box use.
- Operating ambient temperature range covers from 30 to 80 at no current on Relay's contacts.
- Standard and European Specification are available to comply with various electrical specification requirements.



### ◆ Coil Data [at 20°C]

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	27	186	80% of rated voltage	5% of rated voltage	150% Max of Rated voltage	Approx.0.93W
6	39	155				
9	87	103				
12	155	77.5				
15	242	62				
18	346	52				
24	615	39				

### ◆ Contact Rating

Resistive load	10A 120VAC, 10A 30VDC, TV-5 at 120VAC
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### ◆ Type List

Terminal	Туре	Contact form	Designation(provided with)		
style			Flux tight	Sealed type washable	
	Single contact	1A(SPNO)	S19-12-A	S19-12AS	
PCB terminal		1C(SPDT)	S19-12	S19-12S	
PCB terminal	Double contact	2A(DPNO)	S19W-12-2A	S19W-12-2AS	
	Double contact	2C(DPDT)	S19W-12-2C	S19W-12-2CS	

# S19 RELAY

## **SHORI**

## ◆ Ordering information

S19 W - 12 - A S 1 2 3 4 5

1.S19 -- Basic series designation

2.Blank - Single contact

 $W-Double\ contacts$ 

3.12 -- Coil Voltage (5V~24V)

5. Blank --Flux tight type

S -- Sealed type washable

4. A – Single pole normally open

Blank – Single pole double throw

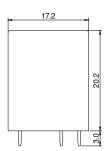
2A – Double pole normally open

2C – Double pole double throw

### ◆ Specification

Contact material	Ag Alloy			
Contact resistance	100 mΩ Max			
Operate time	10 ms Max			
Release time	10 ms Max			
Insulation resistance	100 MΩ Min. (DC 500V)			
Dialogtuja stronath	Between open contact : AC 500V ,50/60Hz 1 min			
Dielectric strength	Between contact and coil : AC 500V, 50/60Hz 1 min			
Vibration resistance	Operating extremes	10~50Hz, amplitude 1.5 mm		
vibration resistance	Damage limits	10~50Hz, amplitude 1.5 mm		
Shock resistance	Operating extremes	10G		
SHOCK resistance	Damage limits	100G		
	Mechanical	10,000,000 operations		
Life expectancy	Mechanical	(frequency 18,000 operations/hr)		
Life expectancy	Electrical	100,000 operations		
	Electrical	(frequency 1,800 operations/hr)		
Operating ambient temperature	-25~+80°C			
Weight	Approx 10 g			

### ♦ Outline Dimension





# ♦ Wiring Diagram

BOTTOM VIEW

Single contact

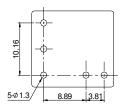


Double contacts

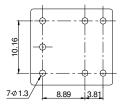


#### ◆ PC BOARD LAYOUT

BOTTOM VIEW



S19 (Single contact)



S19W(Double contacts)