



### Features

- Miniature 12A 125VAC, 10A 250VAC/30VDC PCB Relay.
- UL/CUL, CSA, TUV, VDE approved.
- 450mW and 200mW coil are available.
- Optional for high CTI 250 plastic material (E version) and VDE approved type.
- Comply with RoHS-Directive 2011/65/EU.

### »» Type List

#### ◆ Standard type

Terminal style	Contact form	Insulation system	Designation (provided with)	
			Flux tight	Sealed type washable
PCB terminal	1A (SPNO)	-----	307-1AH-C	307-1AH-S
		F	307-1AH-F-C	307-1AH-F-S

#### ◆ High power type

PCB terminal	1A (SPNO)	-----	307H-1AC-C	307H-1AC-S
		F	307H-1AC-F-C	307H-1AC-F-S

### »» Ordering Information

$\frac{307}{1}$     $\frac{H}{2}$     $\frac{N}{3}$    -    $\frac{1A}{4}$     $\frac{H}{5}$     $\frac{F}{6}$     $\frac{S}{7}$     $\frac{E}{8}$     $\frac{XXVDC}{9}$

- |  |  |
|--|--|
| 1. 307 -- Basic series designation                           | 6. Blank -- Standard type<br>F -- Class F  |
| 2. Blank -- Standard type<br>H -- High power type            | 7. C -- Flux tight<br>S -- Sealed type washable                                      |
| 3. Blank -- Standard Type<br>N -- High sensitive type        | 8. Blank -- Standard type<br>E -- CTI 250V   |
| 4. 1A -- Single pole normally open                           | 9. XXVDC -- Coil voltage (please refer to the coil rating data for the availability) |
| 5. C -- Contact Material AgNi<br>H -- Contact Material AgSnO |  |

### »» Contact Rating

Type	307	307 H
Resistive load	5A 240VAC	8A 240VAC 10A 240VAC <sup>(※)</sup> 12A 125VAC <sup>(※)</sup>

Note: 307H special version of 10A 240VAC 100K ops. can be selected.

### »» Coil Rating (DC)

#### ◆ Standard Type

Rated voltage (V)	Rated current ±10 % at 23°C (mA)	Coil resistance ±10 % at 23°C (Ω)	Max. continuous voltage at 70°C (307) at 85°C (307H)	Pick up voltage(Max) at 23°C	Drop out voltage(Min) at 23°C	Power consumption at rated voltage
5	90.9	55	130 % of rated voltage	75 % of rated voltage	5 % of rated voltage	approx. 0.45W
6	75	80				
9	50	180				
12	37.5	320				
18	25	720				
24	18.8	1280				



# 307

## ◆ High sensitive type

Rated voltage (V)	Rated current ±10 % at 23°C (mA)	Coil resistance ±10 % at 23°C (Ω)	Max.continuous voltage at 70°C (307) at 85°C (307H)	Pick up voltage(Max) at 23°C	Drop out voltage(Min) at 23°C	Power consumption at rated voltage
5	40.0	125	130 % of rated voltage	80 % of rated voltage	5 % of rated voltage	approx. 0.2W
6	33.3	180				
9	22.2	405				
12	16.7	720				
18	11.1	1620				
24	8.3	2880				

## »» Specification

Contact material	AgNi / AgSnO alloy	
Contact resistance <sup>(1)</sup>	100mΩ Max.	
Operate time <sup>(1)</sup>	100ms Max.	
Release time <sup>(1)</sup>	5ms Max.	
Insulation resistance <sup>(1)</sup>	100MΩ Min. (DC 500V)	
Dielectric strength <sup>(1)</sup>	Between open contact	: AC 1000V, 50/60Hz 1 min.
	Between contact and coil	: AC 2500V, 50/60Hz 1 min.
Vibration resistance	Operating extremes	10~50Hz , amplitude 1.0 mm
	Damage limits	10~50Hz , amplitude 1.0 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 (※) 30,000 operations (frequency 360 operations/hr)
Operating ambient temperature	307	-30~+70°C (no freezing)
	307H	-40~+85°C (no freezing) <sup>(2)</sup>
Weight	Approx. 6 g	

Note : (1) initial value.

(2) special version of high temperature 105°C can be selected.

## »» Safety Approval

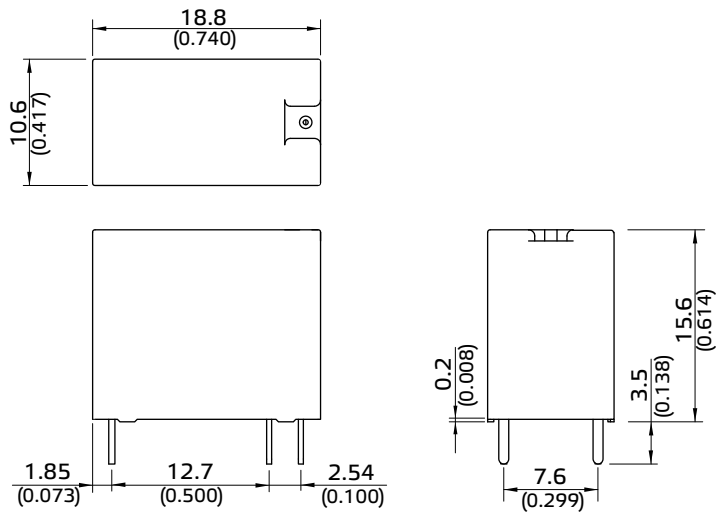
Certified	307, 307H	307	307H
		UL/CUL	TUV
File No.	E88991	R50128391	40028236

## »» Safety Approval Rating

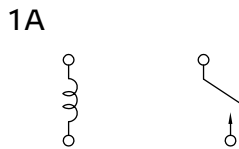
UL/CUL		307	307H
307	307H	TUV	VDE
5A 277VAC 5A 30VDC 1/4HP 125/250VAC	10A 277VAC 10A 30VDC 12A 125VAC 1/4HP 125/250VAC TV-3 (for AgSnO contact)	5A 250VAC 5A 30VDC	10A 250VAC T85 6A 240VAC T105

Note : If there is cleaning process and sealed type is selected, the vent-hole should be removed after the process.

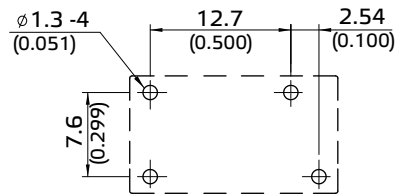
### »» Outline Dimensions



### »» Wiring Diagram BOTTOM VIEW



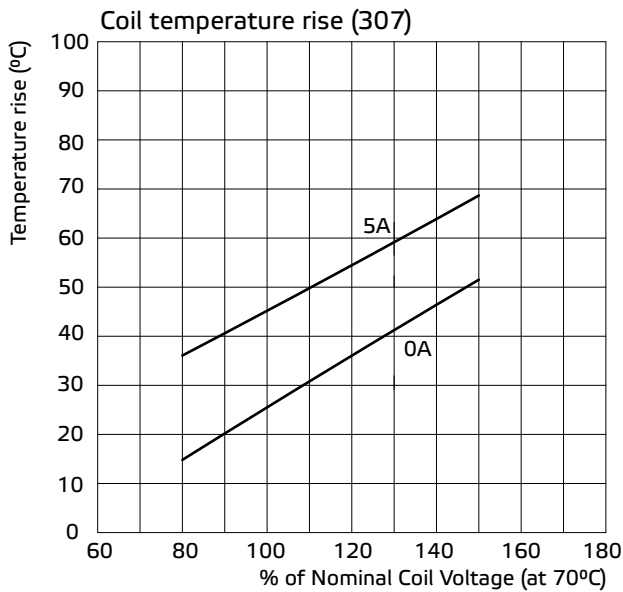
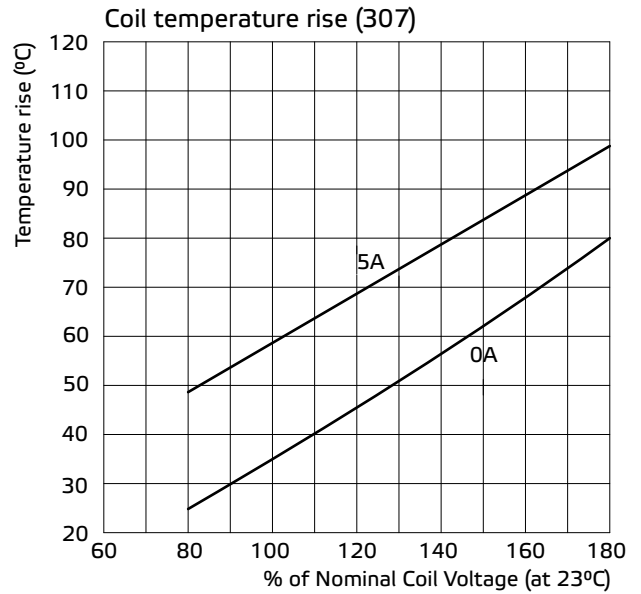
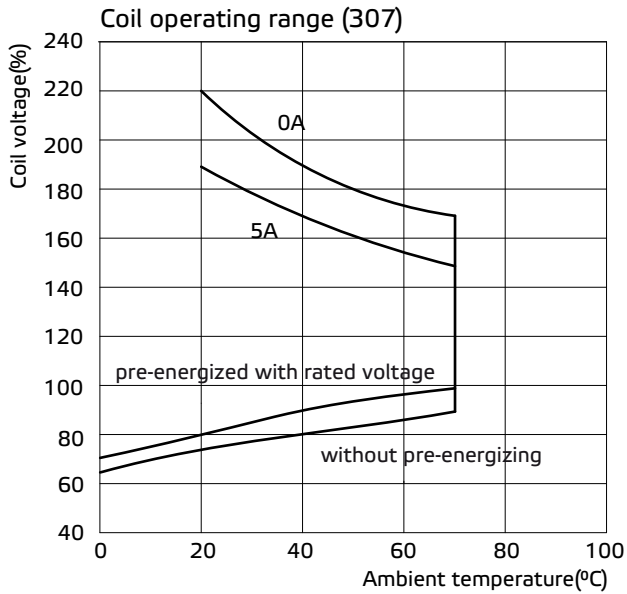
### »» PC Board Layout BOTTOM VIEW





# 307

## »» Engineering Data



**Disclaimer**

All technical performance data apply to the relay as such, specific conditions of the individual application are not considered. Please always check the suitability of the relay for your intended purpose. We do not assume any responsibility or liability for not complying herewith. We recommend to complete our questionnaire and to request our technical service. Any responsibility for the application of the product remains with the customer only. All specifications are subject to change without notification. All rights of Song Chuan are reserved.