

307



### »» Features

- Miniature 12A 125VAC, 10A 250VAC/30VDC PCB Relay.
- UL/CUL, TUV, VDE approved.
- 450mW and 200mW coil are available.
- High CTI 250 material or product comply with IEC 60335-1 are available.
- Complies with RoHS-Directive 2011/65/EU.
- Optional for halogen free version.

### »» Type List

#### ◆ Standard type

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

#### ◆ High power type

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

### »» Ordering Information

307   - 1A H -  - C   
 1 2 3 4 5 6 7 8

- |                                                              |                                                                                                         |
|--------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| 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>V -- Sealed type<br>S -- Sealed type washable                                     |
| 3. Blank -- Standard type<br>N -- High sensitivity type      | 8. <input type="checkbox"/> -- Coil voltage (please refer to the coil rating data for the availability) |
| 4. 1A -- Single pole normally open                           |                                                                                                         |
| 5. C -- Contact material AgNi<br>H -- Contact material AgSnO |                                                                                                         |

### »» Contact Rating

Type	307	307H
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
3	150	20	130 % of rated voltage	75 % of rated voltage	5 % of rated voltage	approx. 0.45W
5	90.9	55				
6	75	80				
9	50	180				
12	37.5	320				
18	25	720				
24	18.8	1280				

◆ High sensitivity type

Rated voltage (V)	Rated current $\pm 10\%$ at 23°C (mA)	Coil resistance $\pm 10\%$ at 23°C ( $\Omega$ )	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
3	66.7	45	130 % of rated voltage	80 % of rated voltage	5 % of rated voltage	approx. 0.2W
5	40.0	125				
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>	100m $\Omega$ Max. (at 1A/6VDC by 4-wire resistance measurement)	
Operate time <sup>(1)</sup>	10ms Max.	
Release time <sup>(1)</sup>	5ms Max.	
Insulation resistance <sup>(1)</sup>	100M $\Omega$ 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. Operate and release time excluding contact bounce.

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

» Safety Approval

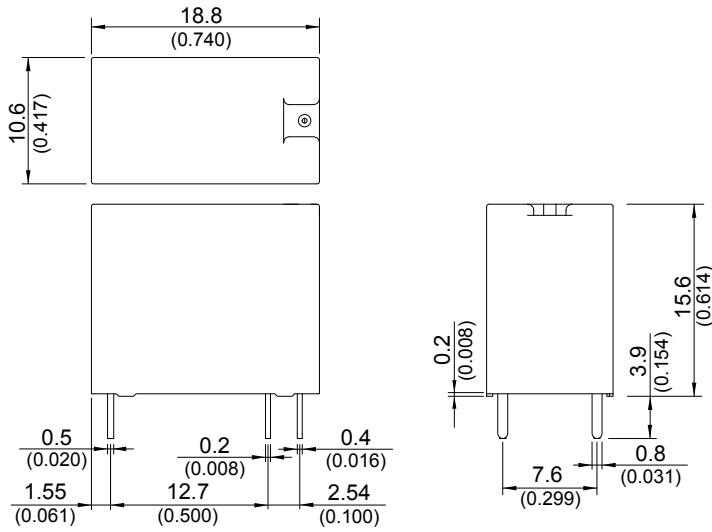
Certified	UL/CUL	TUV	VDE
	307, 307H	307	307H
File No.	E88991	R50128391	40028236

» Safety Approval Rating

UL/CUL		TUV	VDE
307	307H	307	307H
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 250VAC T105

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

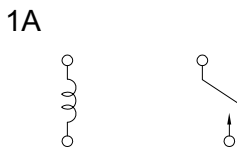
## »» Outline Dimensions



TOLERANCE:  
 LESS THAN: 1(0.039) ±0.1(0.004)  
 5(0.197) ±0.3(0.012)  
 20(0.787) ±0.5(0.020)  
 MORE THAN: 20(0.787) ±1(0.039)

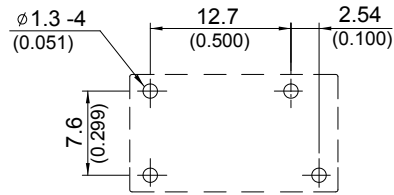
## »» Wiring Diagram

BOTTOM VIEW



## »» PC Board Layout

BOTTOM VIEW



## »» Engineering Data

