



### »» Features

- Low cost miniature PCB Power Relays slim type 7mm width.
- 5A 250VAC suitable for PLC and heating element controls.
- High sensitivity coil 200mW, 10KV impulse surge.
- SPST-NO cadmium free contacts.
- Optional for sealed flux free and sealed washable versions.
- Comply with RoHS-Directive 2002/95/EC.

### »» Type List

#### ◆ Standard Type

Terminal style	Contact form	UL Insulation system approval	Designation (provided with)		
			Flux tight	Sealed type	Sealed type washable
PCB terminal	1A (SPNO)	-----	202-1AC-C	202-1AC-V	202-1AC-S
		F	202-1AC-F-C	202-1AC-F-V	202-1AC-F-S
		-----	202-1AH-C	202-1AH-V	202-1AH-S
		F	202-1AH-F-C	202-1AH-F-V	202-1AH-F-S

#### ◆ High Power Type

PCB terminal	1A (SPNO)	-----	202H-1AC-C	202H-1AC-V	202H-1AC-S
		F	202H-1AC-F-C	202H-1AC-F-V	202H-1AC-F-S
		-----	202H-1AH-C	202H-1AH-V	202H-1AH-S
		F	202H-1AH-F-C	202H-1AH-F-V	202H-1AH-F-S

#### ◆ High Sensitivity Type

PCB terminal	1A (SPNO)	-----	202N-1AC-C	202N-1AC-V	202N-1AC-S
		F	202N-1AC-F-C	202N-1AC-F-V	202N-1AC-F-S
		-----	202N-1AH-C	202N-1AH-V	202N-1AH-S
		F	202N-1AH-F-C	202N-1AH-F-V	202N-1AH-F-S

### »» Ordering Information

202 H N - 1A H - F - C  
 1 2 3 4 5 6 7

1. 202 -- Basic series designation

2. Blank -- Standard type  
 H -- High power type

3. Blank -- Standard type (360mW)

N -- High sensitivity type (200mW)  
 (only for 202 type)

4. 1A -- Single pole normally open



5. C -- Contact material AgNi  
 CA -- Contact material AgNi + Au  
 H -- Contact material AgSnO  
 HA -- Contact material AgSnO+ Au
6. Blank -- Standard type  
 F -- Class F
7. C -- Flux tight  
 V -- Sealed type  
 S -- Sealed type washable

### »» Contact Rating

Type	202N	202	202H
Rated load	3A 240VAC	5A 240VAC/30VDC	7A 240VAC/30VDC
Max. switch voltage	277VAC	277VAC ~ 30VDC	277VAC ~ 30VDC
Max. switch current	3A	5A	7A

### »» 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	Pick up voltage(Max) at 23 °C	Drop out voltage(Min) at 23 °C	Power consumption at rated voltage
5	72	69.4	160 % of rated voltage	75 % of rated voltage	5 % of rated voltage	approx. 0.36W
6	60	100				
9	40	225				
12	30	400				
18	20	900				
24	15	1600				

#### ◆ High Sensitivity Type

Rated voltage (V)	Rated current ±10 % at 23 °C (mA)	Coil resistance ±10 % at 23 °C (Ω)	Max. continuous voltage at 70 °C	Pick up voltage(Max) at 23 °C	Drop out voltage(Min) at 23 °C	Power consumption at rated voltage
5	40	125	170 % of rated voltage	75 % of rated voltage	5 % of rated voltage	approx. 0.2W
6	33.3	180				
9	22.5	405				
12	16.7	720				
18	11.1	1620				
24	8.6	2880				

### »» Specification

Contact material	AgNi / AgSnO alloy	
Contact resistance <sup>(1)</sup>	100 mΩ Max.	
Operate time <sup>(1)</sup>	10 ms Max.	
Release time <sup>(1)</sup>	10 ms Max.	
Insulation resistance <sup>(1)</sup>	1000 MΩ Min. (DC 500V)	
Dielectric strength <sup>(1)</sup>	Between open contact	: AC 750V , 50/60Hz 1 min.
	Between contact and coil	: AC 4000V , 50/60Hz 1 min.
Vibration resistance	Operating extremes	10~55Hz , amplitude 1.5 mm
	Damage limits	10~55Hz , amplitude 1.5 mm
Shock resistance	Operating extremes	10G
	Damage limits	100G
Life expectancy	Mechanical	5,000,000 operations (frequency 18,000 operations/hr)
	Electrical	100,000 operations (frequency 900 operations/hr)
Operating ambient temperature	-40~+70 °C (no freezing) <sup>(2)</sup>	
Weight	Approx. 4 g	

Note : (1) initial value    (2) -40~+85 °C is available

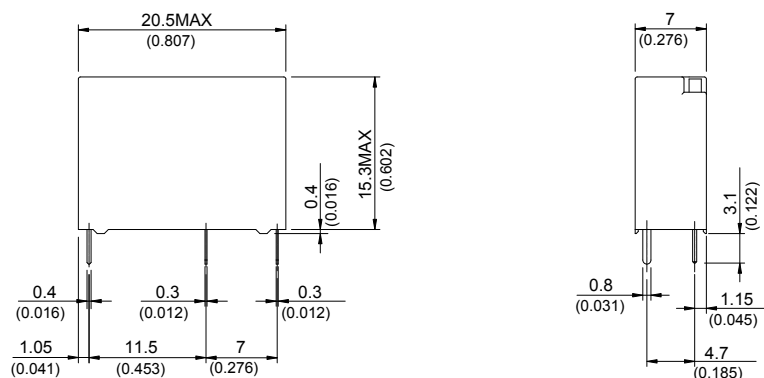
### »» Safety Approval

Certified	UL / CUL	VDE
File No.	E74321	40008369

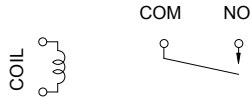
### »» Safety Approval Rating

UL / CUL		VDE	
202 、 202N	202H	202 、 202N	202H
5A 277VAC 5A 30VDC	7A 277VAC 7A 30VDC TV-3 (H contact only)	5A 250VAC T85	7A 250VAC T70

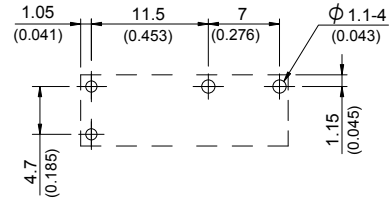
### »» Outline Dimensions



»» Wiring Diagram  
BOTTOM VIEW



»» PC Board Layout  
BOTTOM VIEW



»» Engineering Data

