202

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-V	202N-1AH-F-S

Ordering Information

202 ☐ ☐ - 1A H - ☐ - 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)

◆ Standand 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				

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Specification

Contact material	AgNi / AgSnO alloy	
Contact resistance (1)	100mΩ Max. (1A(100mA for Au-plating contact)/6VDC by 4 pipes mΩ meter)	
Operate time (1)	10 ms Max.	
Release time (1)	10 ms Max.	
Insulation resistance (1)	1000 MΩ Min. (DC 500V)	
Dielectric strength (1)	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) (2)	
Weight	Approx. 4 g	

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

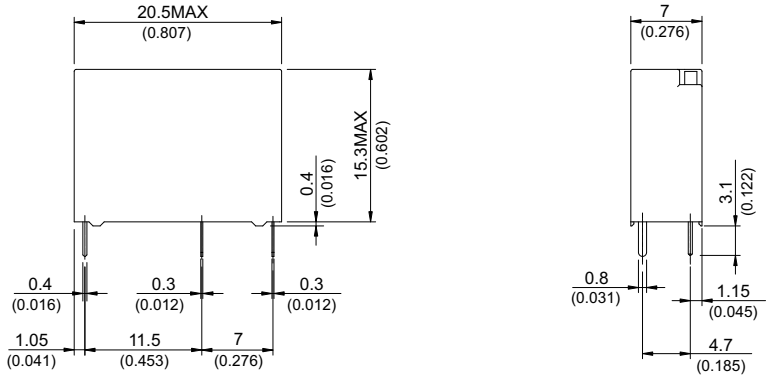
Safety Approval

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



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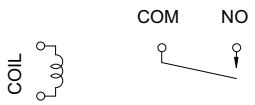
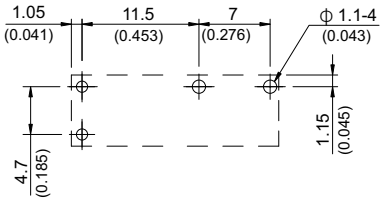
Wiring Diagram
BOTTOM VIEW

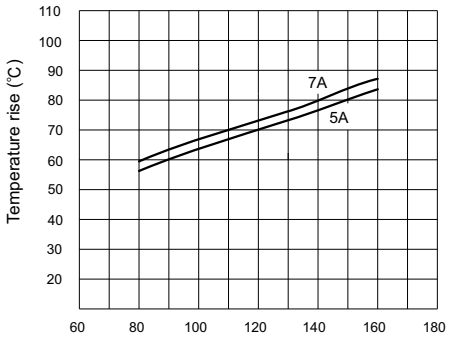


PC Board Layout
BOTTOM VIEW

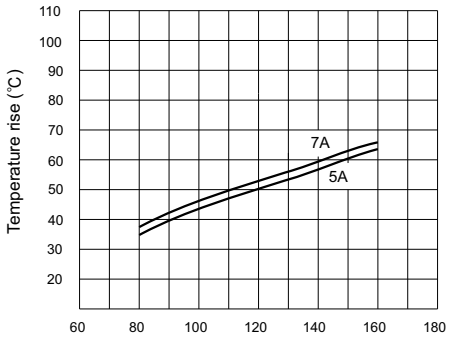


Engineering Data

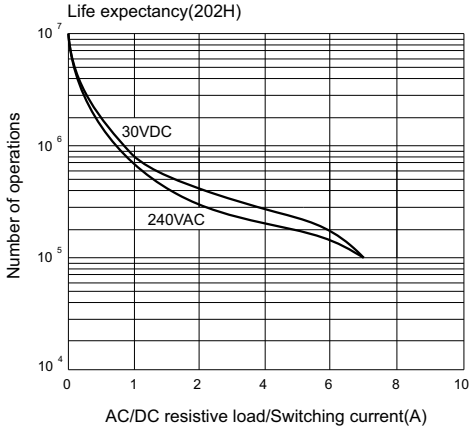
Coil temperature rise



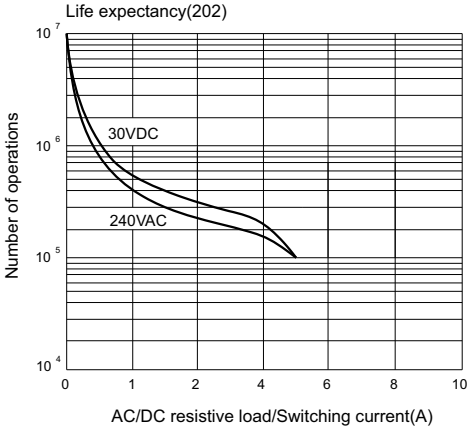
Coil temperature rise



Life expectancy(202H)



Life expectancy(202)



Operate time/Release time