

»» Features

- Low Profile Micro ISO automotive relay.
- SPNO contact configuration.
- Switches up to 25A resistive load, 100,000 ops., 23°C.
- Operating ambient temperature -40°C to 105°C.
- Optional resistor or diode for coil transient suppression.
- Complies with RoHS-Directive 2011/65/EU and ELV-Directive 2000/53/EC.



»» Type List

Terminal style	Contact form	Designation (provided with)	Enclosure style		
			Dust cover	Flux tight	Sealed type
Micro ISO Footprint	1A (SPNO)	-----	108-1AH-D	108-1AH-C	108-1AH-V
		Resistor	108-1AH-D-R1	108-1AH-C-R1	108-1AH-V-R1
		Diode	108-1AH-D-D1	108-1AH-C-D1	108-1AH-V-D1

»» Ordering Information

108 - 1A H - D -
 1 2 3 4 5 6

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|--|--|
| <p>1. 108 -- Basic series designation</p> <p>2. 1A -- Single pole normally open</p> <p>3. H -- Contact material AgSnO</p> <p>4. D -- Dust cover</p> <p style="padding-left: 20px;">C -- Flux tight</p> <p style="padding-left: 20px;">V -- Sealed type</p> | <p>5. Blank -- Standard type</p> <p style="padding-left: 20px;">R1 -- Coil parallel with 1/2W resistor for 12V 1.1K Ω</p> <p style="padding-left: 20px;">D1 -- Coil parallel with diode 1N4007 the diode anode on #2 terminal</p> <p>6. <input type="checkbox"/> -- Coil voltage (please refer to the coil rating data for the availability)</p> |
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»» Contact Rating

Resistive load	NO: 25A 14VDC, On 2s / Off 2s, 100K ops.
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»» Coil Rating (DC)

Rated voltage	Rated current ±10 % at 23°C		Coil resistance ±10 % at 23°C		Max. continuous voltage at 80°C ⁽¹⁾	Pick up voltage (Max.) at 23°C	Drop out voltage (Min.) at 23°C	Power consumption at rated voltage	
	without resistor	with resistor	without resistor	with resistor				without resistor	with resistor
12V	66 mA	77 mA	180 Ω	155 Ω	16 V	8.0 V	0.6 V	approx. 0.8W	approx. 0.93W

Note : (1) With continuous contact current 20A.

»» Specification

Contact material	AgSnO alloy
Contact voltage drop ⁽¹⁾	Typ. 50mV at 10A
Operate time ⁽¹⁾	10 ms Max.
Release time ⁽¹⁾	10 ms Max.

Insulation resistance ⁽¹⁾	20 MΩ Min. (DC 500V)	
Dielectric strength ⁽¹⁾	Between open contact	: AC 500V, 50/60Hz 1 min.
	Between contact and coil	: AC 500V, 50/60Hz 1 min.
Vibration resistance	Operating extremes	10~500Hz, 5.0G
	Damage limits	10~500Hz, 5.0G
Shock resistance	Operating extremes	10G
	Damage limits	100G
Life expectancy	Mechanical	1,000,000 ops. (frequency 18,000 ops./hr)
Operating ambient temperature	-40 ~ +105°C (no freezing)	
Weight	Approx. 15 g	

Note : (1) Initial value. Operate and release time excluding contact bounce.

(2) Unless otherwise specified, all tests are under room temperature and humidity.

(3) Do not use the relay exceeding the coil rating, contact rating and life expectancy, or this may cause the risk of overheating.

(4) To assure optimum performance, avoid the relay from dropping, hitting, or other unnecessary shocks.

(5) Do not switch the contacts without any load as the contact resistance may become increased rapidly.

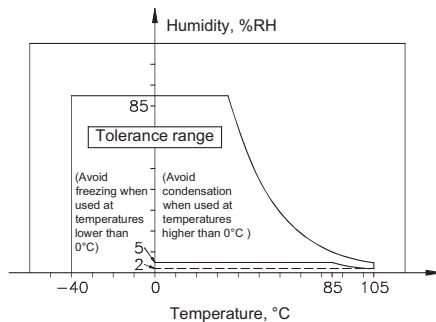
(6) Flux tight version is recommended. If there is cleaning process and sealed type is selected, the vent-hole should be removed after the process.

(7) Use suitable harnesses and bus bars according to the current as below :

25A type : Min. 6.0mm²

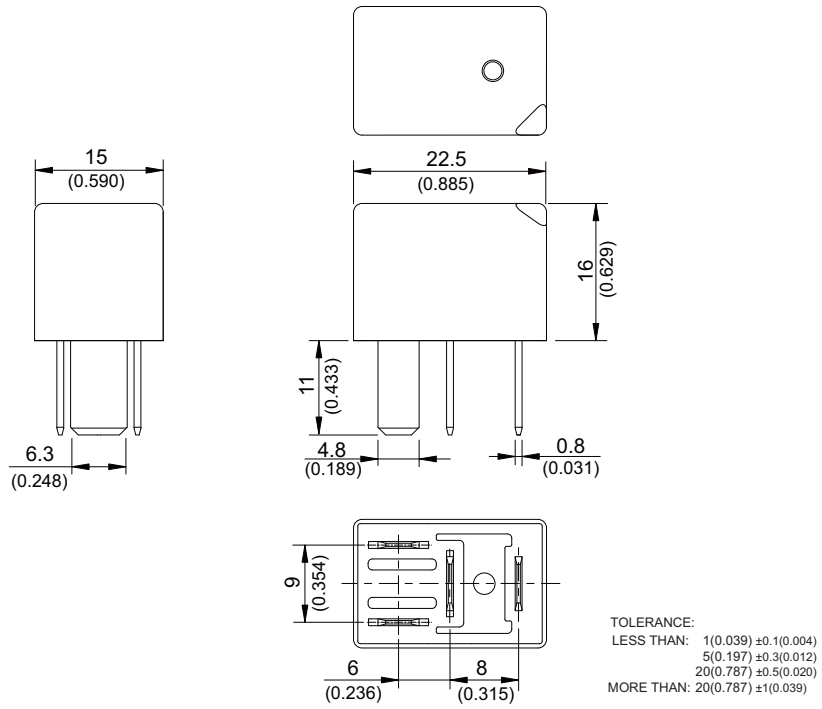
(8) Usage, transport and storage conditions

- 1. Temperature: -40~+105°C
- 2. Humidity: 5 to 85% R.H.
- 3. Pressure: 86 to 106 kPa
- Furthermore, the humidity range varies with the temperature. So, use relays within the range indicated in the graph below.



(9) Please contact Song Chuan for the detailed information.

»» Outline Dimensions



»» Wiring Diagram BOTTOM VIEW

