



### »» Features

- New generation of heavy duty PCB automotive relay.
- Design for multiple function applications with THT terminals and smallest mounting space.
- Most current relay can be replaced by 1 relay for Relay box / USM / PDM /Smart Junction box, etc.
- Contact rating 30A 14VDC.
- High temperature endurance up to 105°C.
- Mounting space less than micro ISO relay.
- Complies with RoHS-Directive 2011/65/EU and ELV-Directive 2000/53/EC.

### »» Type List

Terminal style	Contact form	Enclosure style		
		Flux tight	Sealed type	Sealed type washable
PCB terminal	1A (SPNO)	905-1AH-C	905-1AH-V	905-1AH-S
		905-1AC-C	905-1AC-V	905-1AC-S
	1C (SPDT)	905-1CH-C	905-1CH-V	905-1CH-S
		905-1CC-C	905-1CC-V	905-1CC-S

### »» Ordering Information

905 - 1A C - S   
 1 2 3 4 5

- |   |   |
|---|---|
| <p>1. 905 -- Basic series designation</p> <p>2. 1A -- Single pole normally open<br/>1C -- Single pole double throw</p> <p>3. C -- Contact material AgNi<br/>H -- Contact material AgSnO</p> | <p>4. C -- Flux tight<br/>V -- Sealed type<br/>S -- Sealed type washable</p> <p>5. <input type="checkbox"/> -- Coil voltage (please refer to the coil rating data for the availability)</p> |
|---|---|

### »» Contact Rating

Resistive load	NO: 30A 14VDC ; ON 5s / OFF 5s ; 100K ops. NC: 20A 14VDC ; ON 5s / OFF 5s ; 100K ops.
Motor load	Cooling fan : 230W / 14VDC ; ON 1s / OFF 5s ; 200K ops.
Lamp load	Head lamp : 120W / 14VDC ; ON 1s / OFF 9s ; 200K ops.
Max. carry current	100A/5sec. (25°C nominal voltage) 60A/10sec. (85°C nominal voltage) 40.5A/30min. (85°C nominal voltage)

### »» Coil Rating (DC)

Rated voltage (V)	Rated current ±10 % at 23°C (mA)	Coil resistance ±10 % at 23°C (Ω)	Max. continuous voltage at 105°C <sup>(1)</sup>	Pick up voltage(Max.) at 23°C	Drop out voltage(Min.) at 23°C	Power consumption at rated voltage
12	60	200	14 V	7.2V	0.6V	approx. 0.72W

Note : (1) Continuous contact current at 25A.

## »» Specification

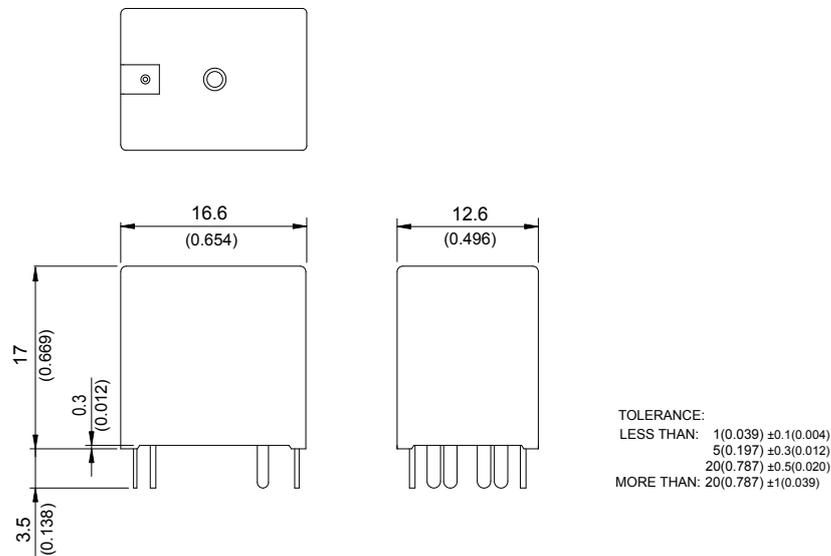
Contact material	AgSnO alloy <sup>(2)</sup>	
Contact voltage drop <sup>(1)</sup>	Typ. 50mV at 10A	
Operate time <sup>(1)</sup>	10ms Max.	
Release time <sup>(1)</sup>	10ms Max.	
Insulation resistance <sup>(1)</sup>	100MΩ Min. (DC 500V)	
Dielectric strength <sup>(1)</sup>	Between open contact	: AC 500V, 50/60Hz 1 min.
	Between contact and coil	: AC 500V, 50/60Hz 1 min.
Vibration resistance	Operating extremes	10~500Hz , 4.4G
	Damage limits	10~500Hz , 4.4G
Shock resistance	Operating extremes	10G
	Damage limits	100G
Life expectancy	Mechanical	10,000,000 operations (frequency 18,000 operations/hr)
Operating ambient temperature	-40~+105°C (no freezing) <sup>(3)</sup>	
Weight	Approx. 8.6 g	

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

(2) Contact material of AgNi is also available, for the details please contact Song Chuan.

(3) Ambient temperature of -40~+125°C is also available, for the details please contact Song Chuan.

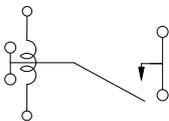
## »» Outline Dimensions



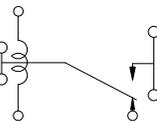
## »» Wiring Diagram

BOTTOM VIEW

1A

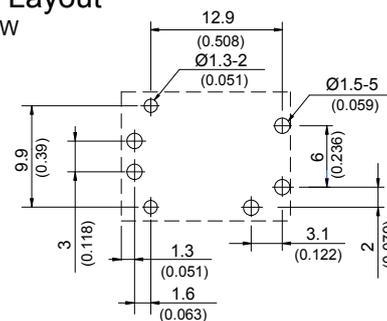


1C



## »» PC Board Layout

BOTTOM VIEW



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