



## »» Features

- 70A high power automotive relay.
- High temperature endurance up to 125 degree C.
- Optional to be equipped with protection diode or resistor.
- Dust cover version, flux free type, sealed & weather proof type or flange cover version to be chosen.
- Tinned terminal is available on request.
- Comply 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 washable
Socket terminal	1A (SPNO)	-----	897-1AH-D	897-1AH-C	897-1AH-S
		Resistor	897-1AH-D-R1	897-1AH-C-R1	897-1AH-S-R1
PCB terminal <sup>(1)</sup>	1A (SPNO)	-----	897P-1AH-D	897P-1AH-C	897P-1AH-S
		Resistor	897P-1AH-D-R1	897P-1AH-C-R1	897P-1AH-S-R1
Terminal style	Contact form	Designation (provided with)	Enclosure style		
			Flanged cover (dust cover)	Flanged cover (flux tight)	
Socket terminal	1A (SPNO)	-----	897-1AH-D1	897-1AH-C1	
		Resistor	897-1AH-D1-R1	897-1AH-C1-R1	
Terminal style	Contact form	Designation (provided with)	Enclosure style		
			Steel bracket (dust cover)	Steel bracket (flux tight)	
Socket terminal	1A (SPNO)	-----	897-1AH-D1S	897-1AH-C1S	
		Resistor	897-1AH-D1S-R1	897-1AH-C1S-R1	
Terminal style	Contact form	Designation (provided with)	Enclosure style		
			Steel bracket (dust cover with shroud)	Steel bracket (dust cover with weather proof)	
Socket terminal	1A (SPNO)	Resistor	897-1AH-D1SF-R1	897-1AH-D1SW-R1	

Note : (1) Special PCB terminal version (NO, COM 3 pin type) are available.

## »» Ordering Information

897        -    1AH    -    C    -        -           

1        2        3        4        5        6        7        8

- |   |   |
|---|---|
| 1. 897 -- Basic series designation<br>2. Blank -- Socket terminal<br>P -- PCB terminal<br>P1 -- Special PCB terminal (NO,COM 3 pin type)<br>3. 1AH -- Single pole normally open, contact material AgSnO | 4. D -- Dust cover<br>C -- Flux tight<br>S -- Sealed type washable<br>D1 -- Flanged cover (dust cover)<br>C1 -- Flanged cover (flux tight)<br>S1 -- Flanged cover (sealed type washable)<br>D1S -- Steel bracket (dust cover) |
|---|---|

- C1S -- Steel bracket (flux tight)
- S1S -- Steel bracket (sealed type washable)
- D1SF -- Steel bracket (dust cover with shroud)
- D1SW -- Steel bracket (dust cover with weather proof)
- DUSW -- Dust cover with weather proof
- 5. Blank -- Standard type
- R1 -- Coil parallel with resistor 1/2W for 12V 680Ω · 24V 2700Ω
- 6. Blank -- Standard type
- T -- Special requirement for Tin plated terminal
- 7. Blank -- Standard type
- 001 -- Coil parallel with diode IN4007 the positive pole on # 85 terminal
- 002 -- Coil parallel with diode IN4007 the negative pole on # 85 terminal
- 8.  -- Coil voltage (please refer to the coil rating data for the availability)

»» Contact Rating

Max. Continuous current	70A 14VDC, 25A 28VDC
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»» Coil Rating (DC)

Rated voltage (V)	Rated current ±10 % at 23°C (mA)	Coil resistance ±10 % at 23°C (Ω)	Max. continuous Voltage at 85°C <sup>(1)</sup>	Pick up voltage(Max.) at 23°C	Drop out voltage(Min.) at 23°C	Power consumption at rated voltage
12	133	90	100 % of	65 % of	10 % of	approx. 1.6W
24	66.7	360	rated voltage	rated voltage	rated voltage	

Notes : (1) Continuous contact current at 50A.

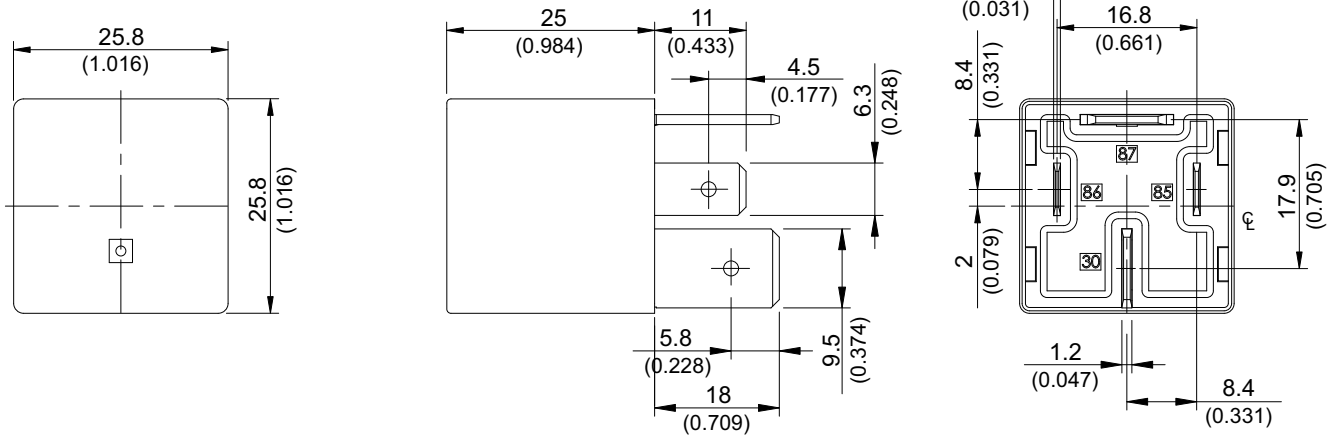
»» Specification

Contact material	AgSnO alloy	
Contact voltage drop <sup>(1)</sup>	Typ. 30mV at 10A	
Insulation resistance <sup>(1)</sup>	20 MΩ Min. (DC 500V)	
Operate time <sup>(1)</sup>	20ms Max.	
Release time <sup>(1)</sup>	20ms Max.	
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 , 5.0G
	Damage limits	10~500Hz , 5.0G
Shock resistance	Operating extremes	10G
	Damage limits	100G
Life expectancy	Mechanical	10,000,000 operations (frequency 18,000 operations/hr)
	Electrical	100,000 operations (frequency 1,200 operations/hr)
Temperature range	Operating	-40~+125°C (no freezing)
Weight	Approx. 40 g	

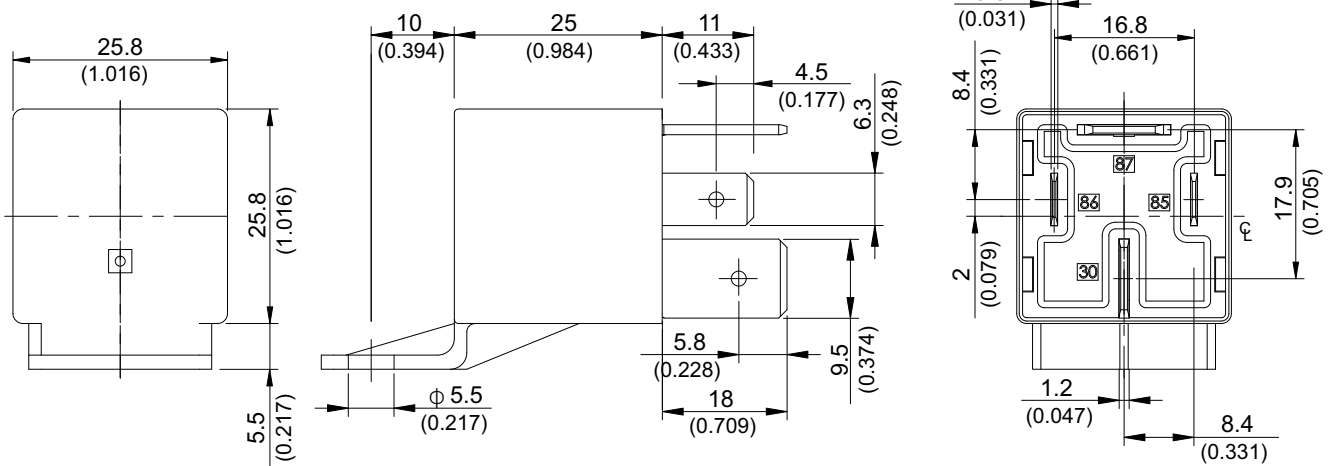
Note : (1) initial value

## &gt;&gt;&gt; Outline Dimensions

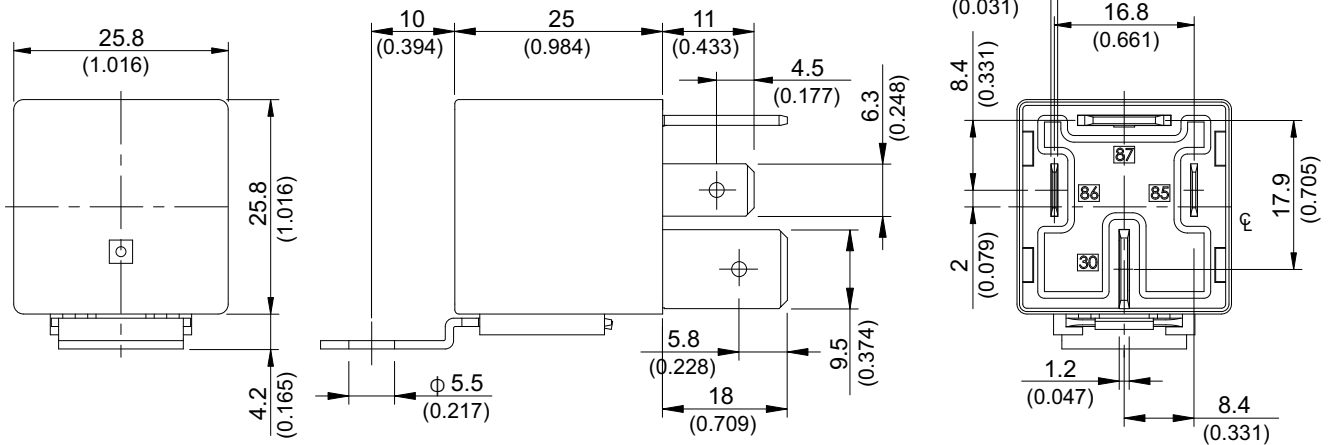
## ◆ 897 (C,D,S)



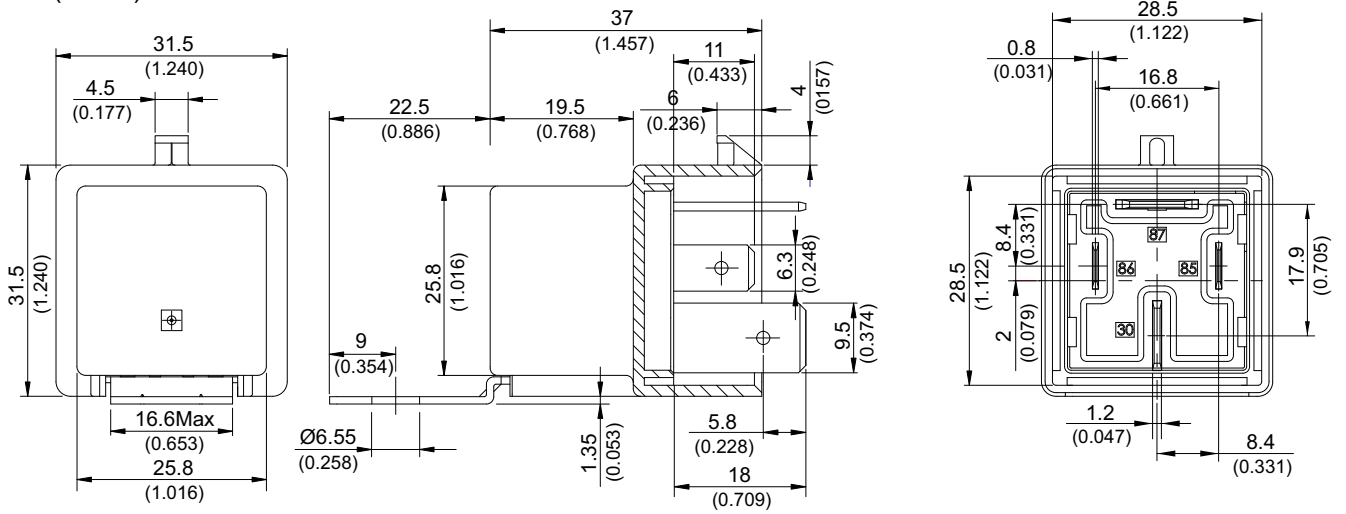
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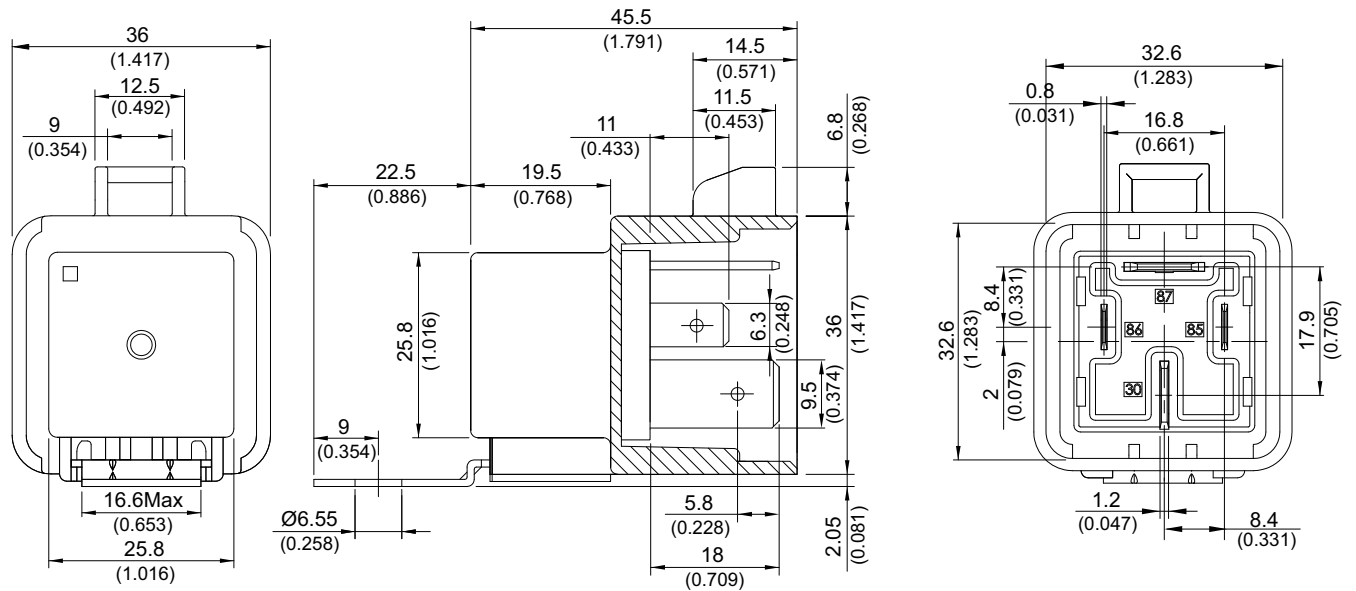
## ◆ 897 (C1S,D1S,S1S)



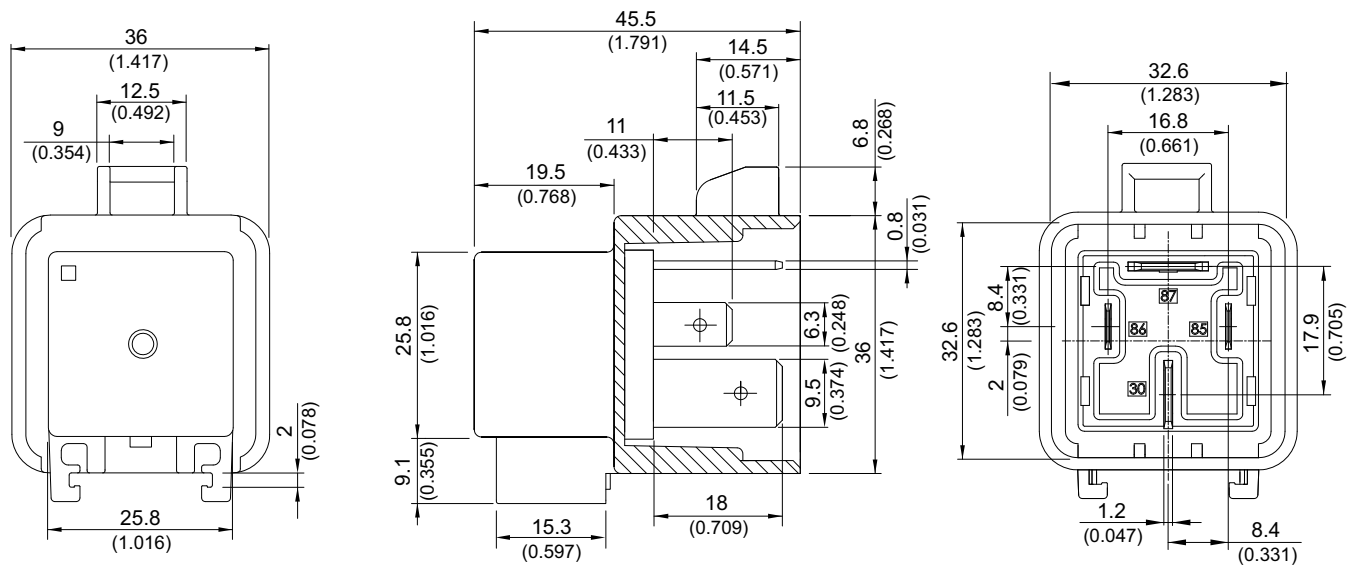
◆ 897 (D1SF)



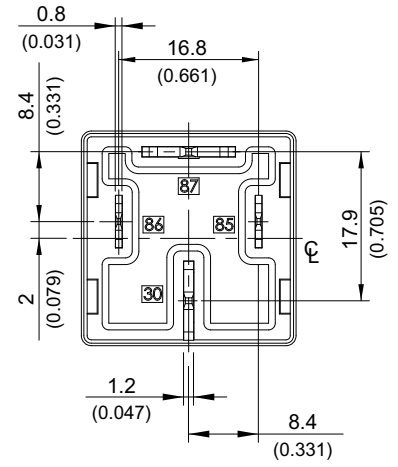
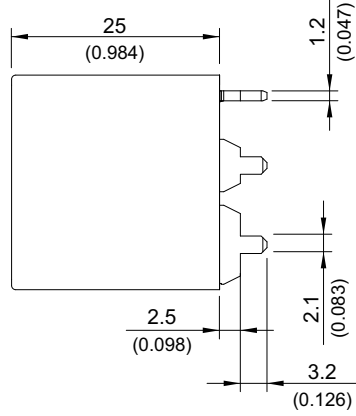
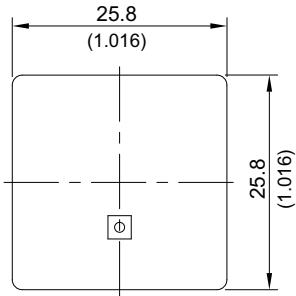
◆ 897 (D1SW)



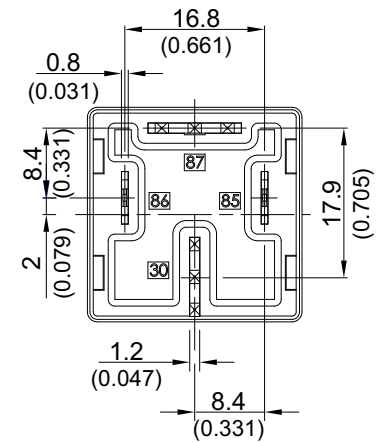
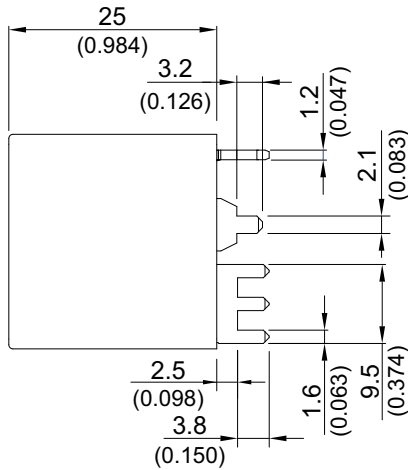
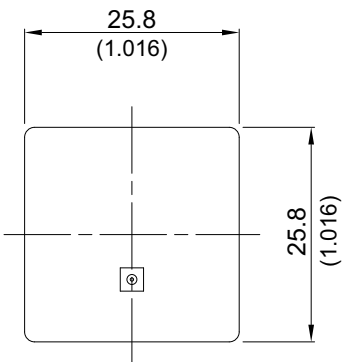
◆ 897 (DUSW)



◆ 897P (C,D,S)



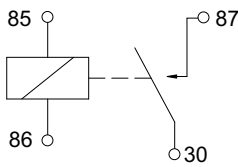
◆ 897P1 (C,D,S)



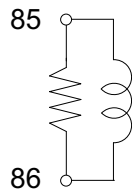
»» Wiring Diagram

BOTTOM VIEW

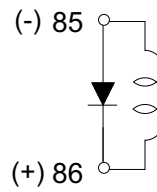
1A



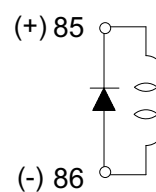
R1



001



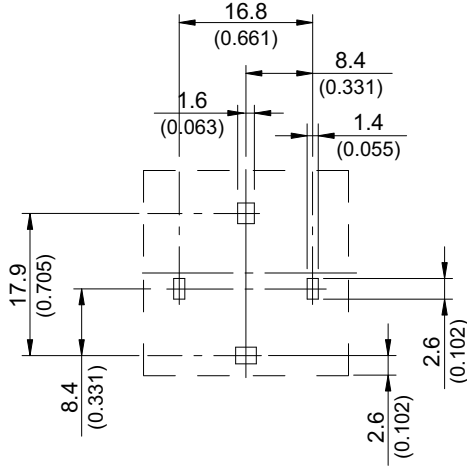
002



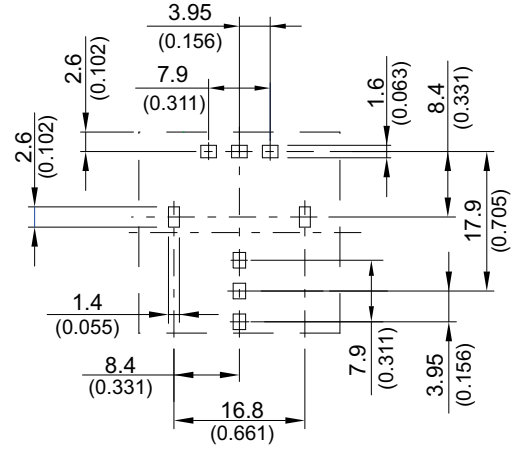
## »» PC Board Layout

BOTTOM VIEW

### ◆897,897P



### ◆897P1



## »» Engineering Data

