


**»» 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 2002/95/EC, 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      P    -    1AH    -    C    -    R1    -    T            001  
 1        2        3        4        5        6            7

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|--|--|
| 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)
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

### »» 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	rated	rated	
			voltage	voltage	voltage	

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

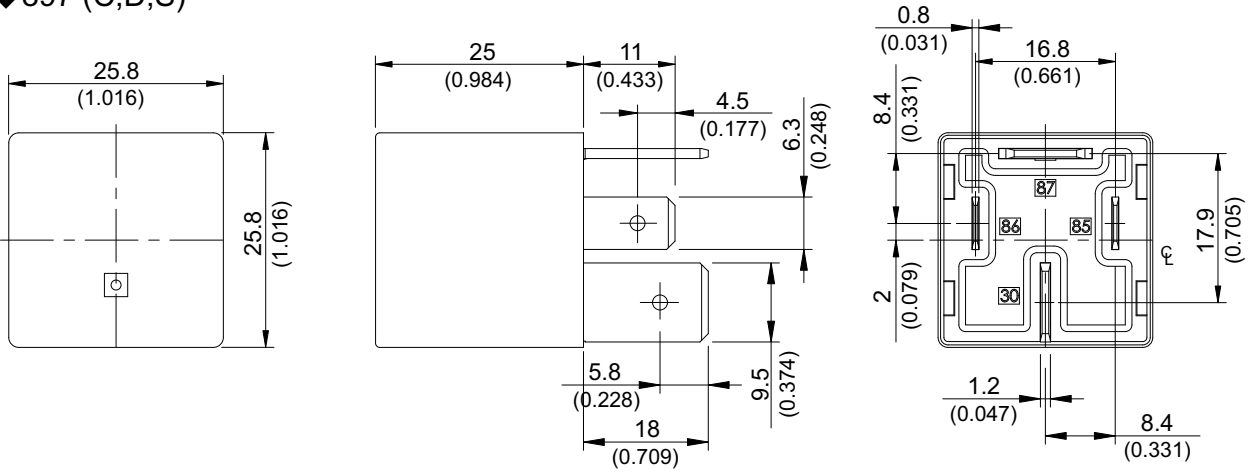
### »» Specification

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	10~55Hz , amplitude 2mm
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	

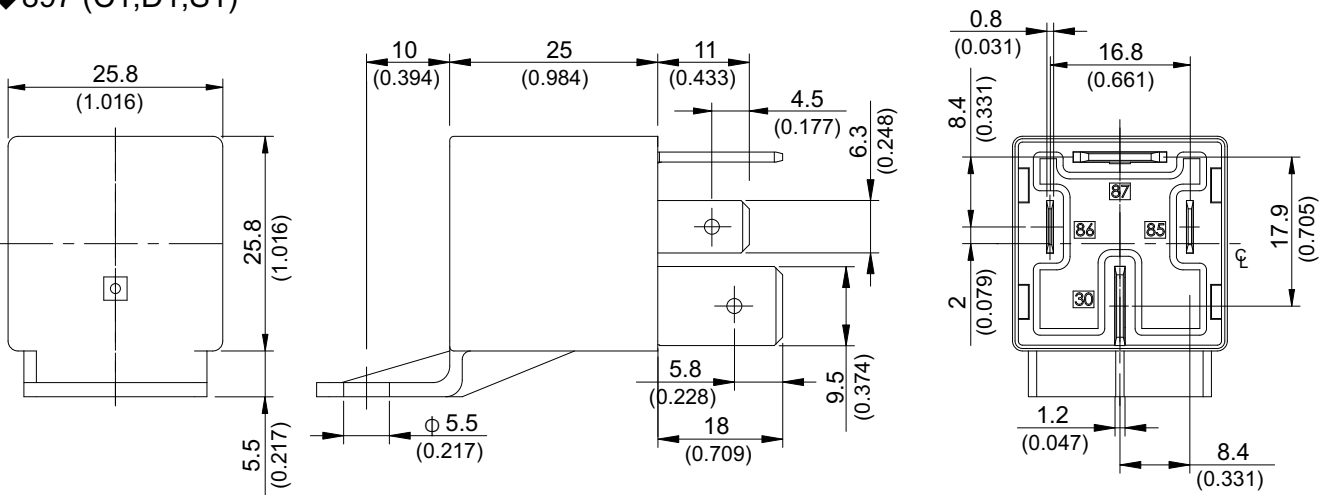
Note : (1) initial value

## »» Outline Dimensions

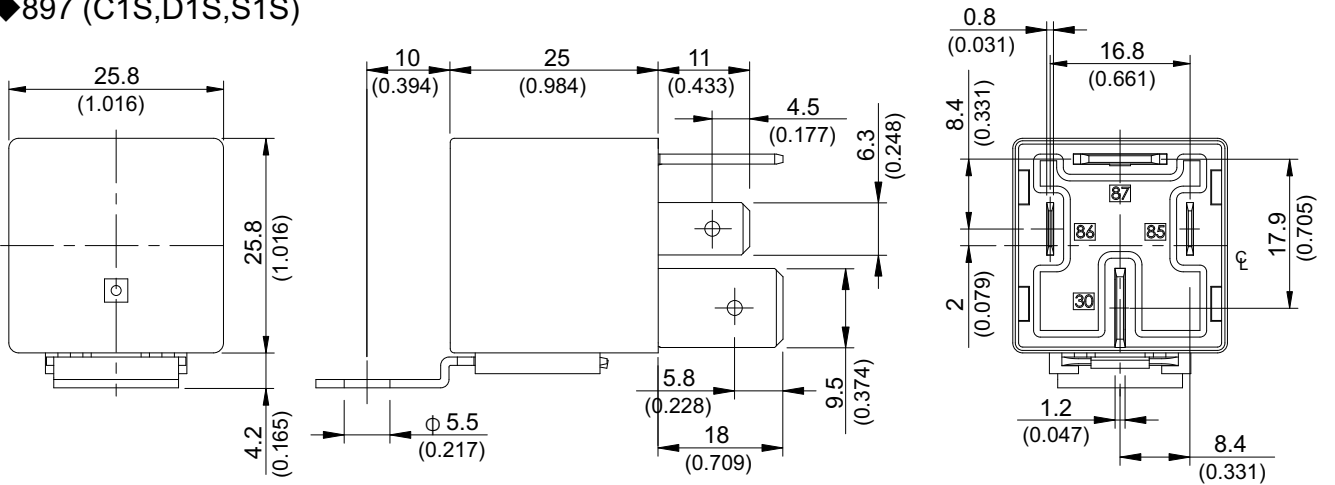
### ◆ 897 (C,D,S)



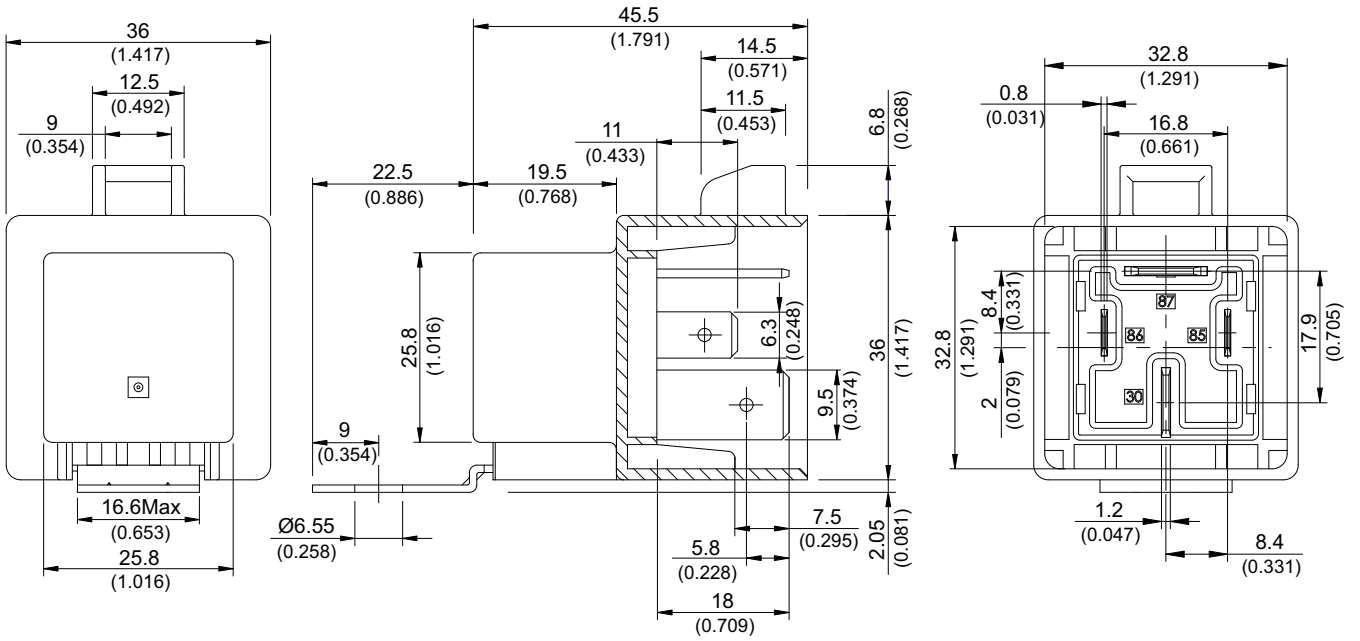
### ◆ 897 (C1,D1,S1)



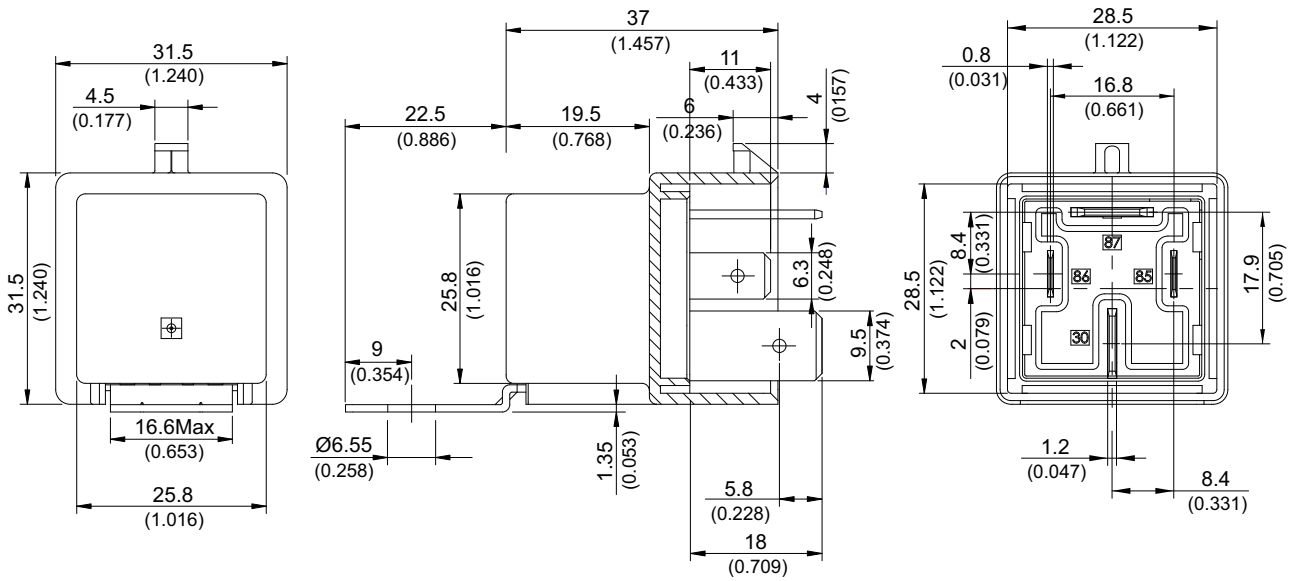
### ◆ 897 (C1S,D1S,S1S)



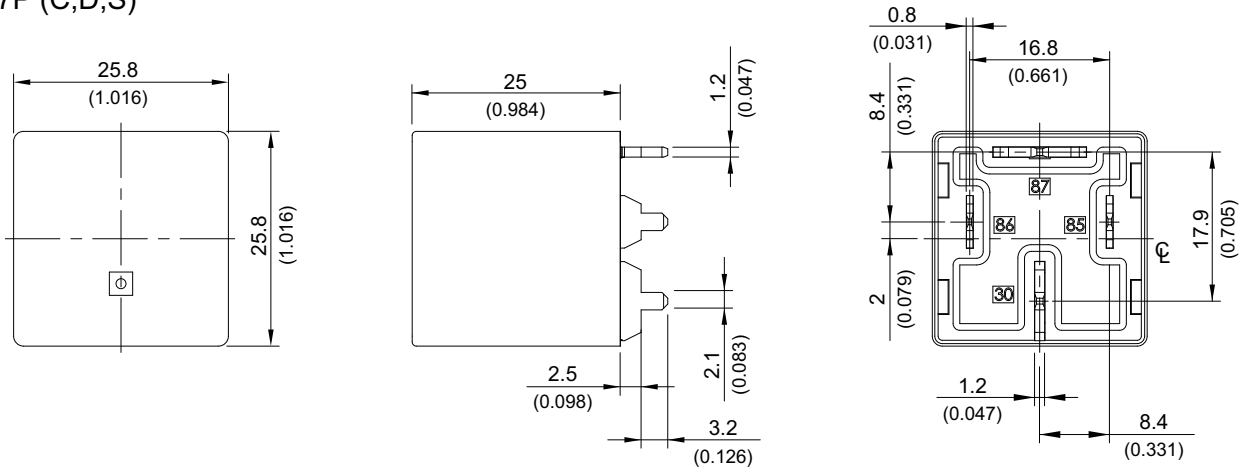
◆897 (D1SW)



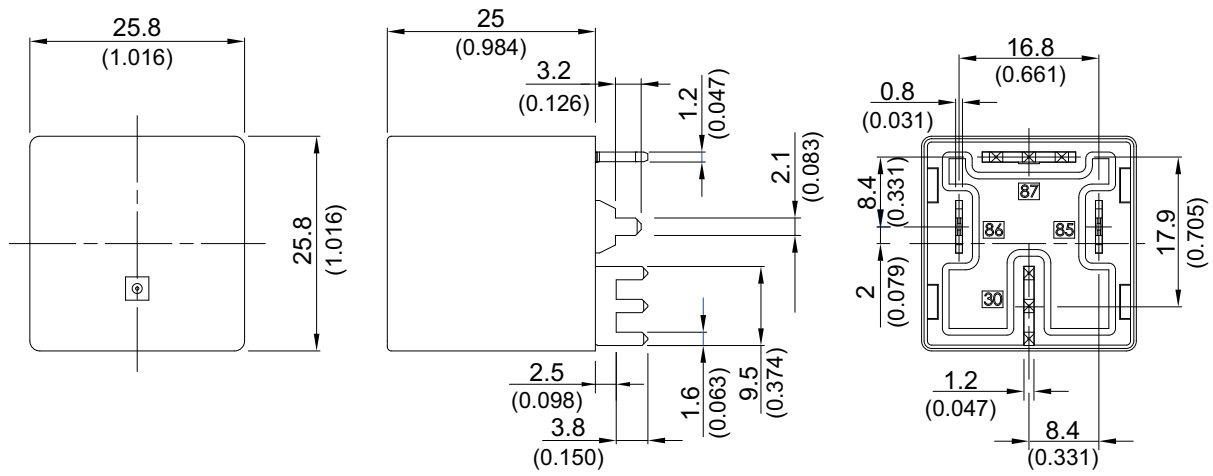
◆897 (D1SF)



◆897P (C,D,S)



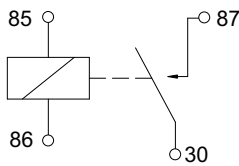
◆ 897P1 (C,D,S)



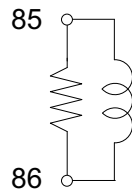
»» Wiring Diagram

BOTTOM VIEW

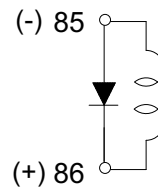
1A



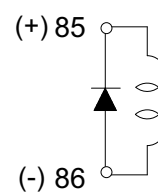
R1



001



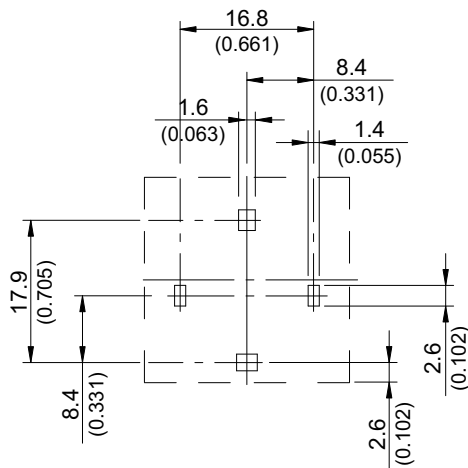
002



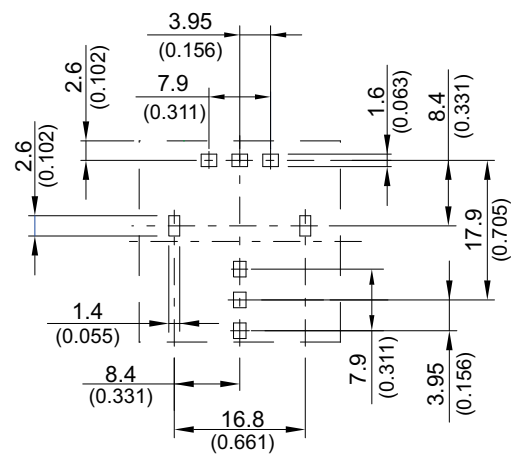
»» PC Board Layout

BOTTOM VIEW

◆ 897,897P



◆ 897P1



## »» Engineering Data

