



### »» 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.

### »» 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 <sup>(1)</sup>	897-1AH-D-R1	897-1AH-C-R1	897-1AH-S-R1
PCB terminal	1A (SPNO)	-----	897P-1AH-D	897P-1AH-C	897P-1AH-S
		Resistor <sup>(1)</sup>	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)	Flanged cover (sealed type washable)
Socket terminal	1A (SPNO)	-----	897-1AH-D1	897-1AH-C1	897-1AH-S1
		Resistor <sup>(1)</sup>	897-1AH-D1-R1	897-1AH-C1-R1	897-1AH-S1-R1

Terminal style	Contact form	Designation (provided with)	Enclosure style		
			Steel bracket (dust cover)	Steel bracket (flux tight)	Steel bracket (sealed type washable)
Socket terminal	1A (SPNO)	-----	897-1AH-D1S	897-1AH-C1S	897-1AH-S1S
		Resistor <sup>(1)</sup>	897-1AH-D1S-R1	897-1AH-C1S-R1	897-1AH-S1S-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 <sup>(1)</sup>	897-1AH-D1SF-R1	897-1AH-D1SW-R1

Note : (1) 12VDC COIL: 680 Ω Resistor in parallel 、 24VDC COIL: 2700 Ω Resistor in parallel

### »» Ordering Information

897      P      -      1AH      -      C      -      R1      001  
 1          2          3          4          5          6

- |   |  |
|---|--|
| <p>1. 897 -- Basic series designation</p> <p>2. Blank -- Socket terminal<br/>P -- PCB terminal</p> <p>3. 1AH -- Single pole normally open, contact material AgSnO</p> | <p>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)</p> |
|---|--|

- 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 , 24VDC 2700Ω
6. 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
-------------------------	-----------

### »» 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 rated voltage	65 % of rated voltage	10 % of rated voltage	approx. 1.6W
24	66.7	360				

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

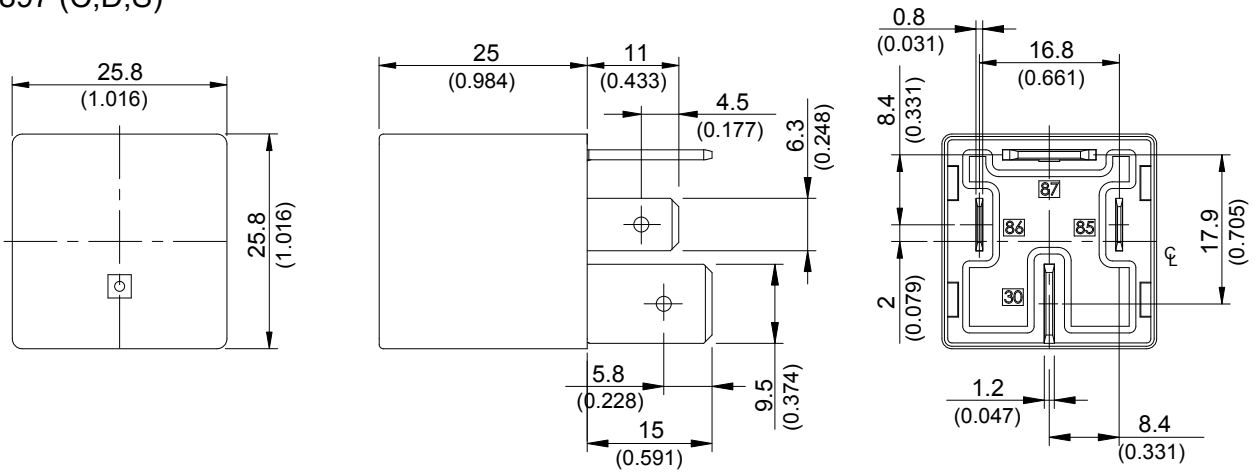
### »» Specification

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	

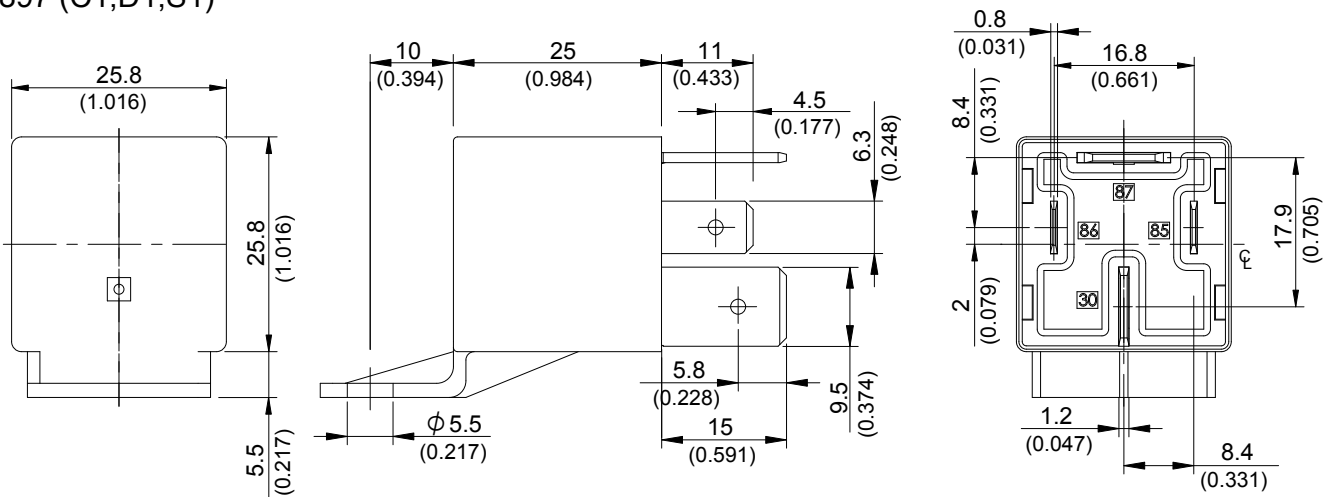
Note : (1) initial value

## »» Outline Dimensions

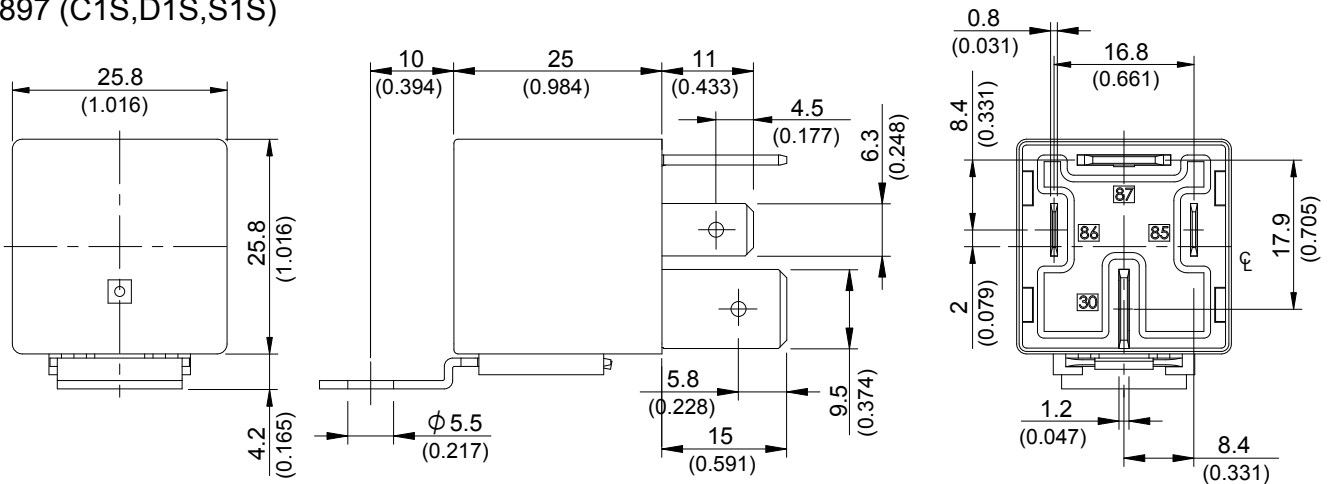
### ◆ 897 (C,D,S)



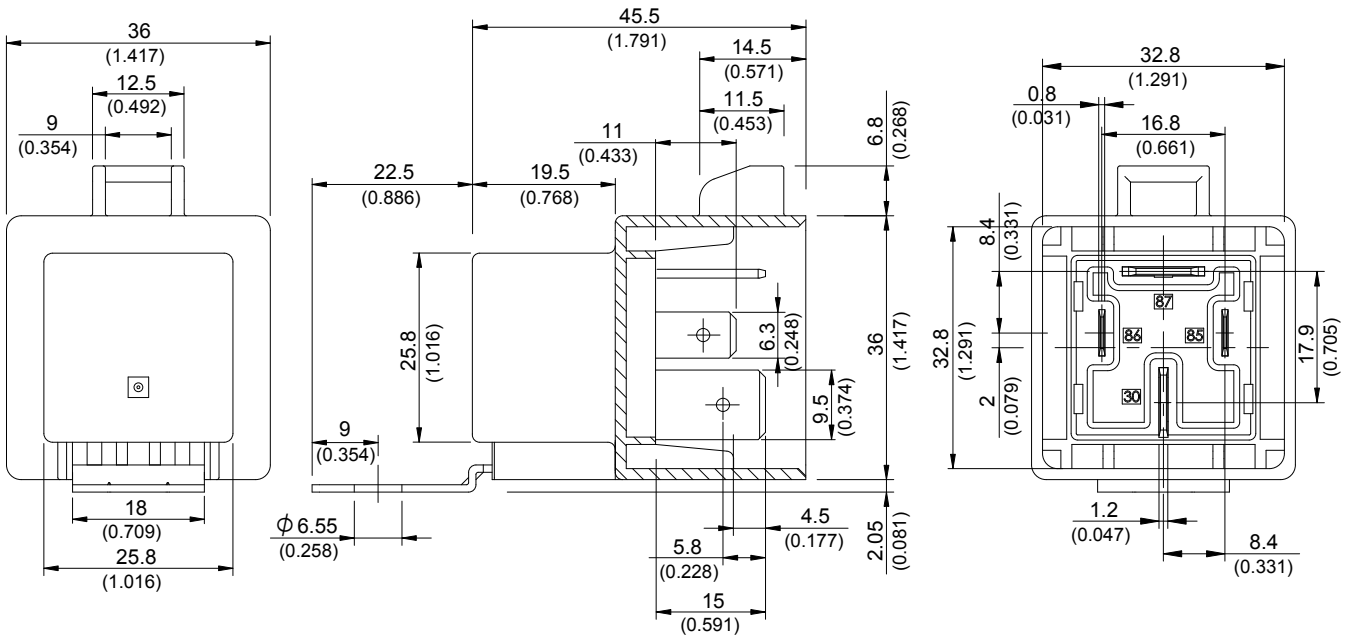
### ◆ 897 (C1,D1,S1)



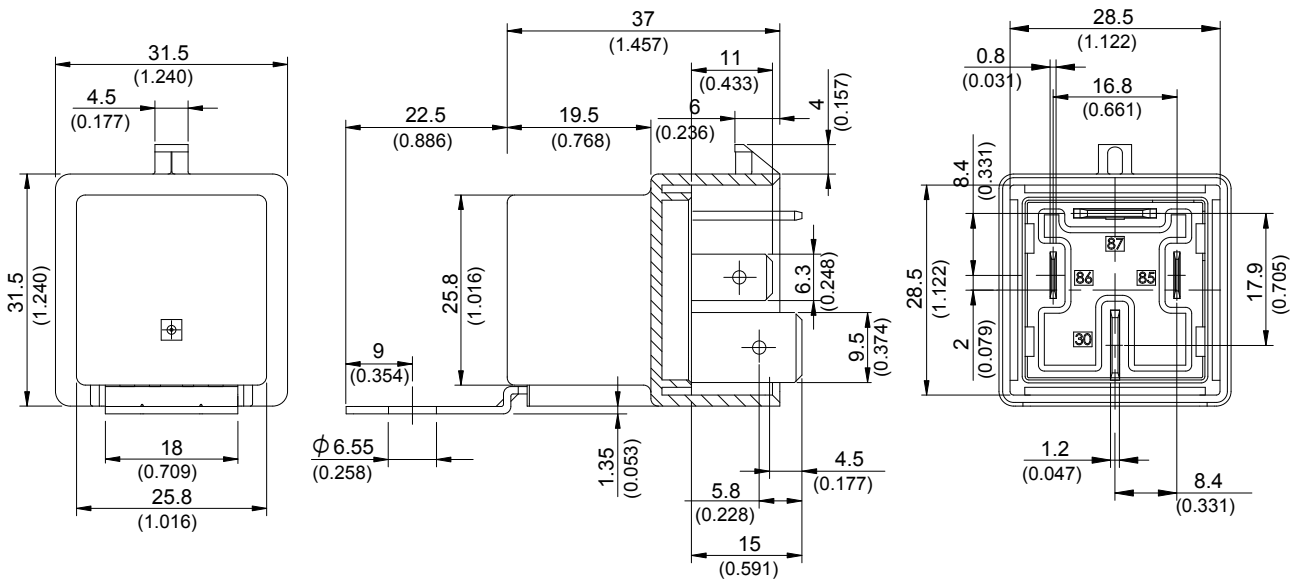
### ◆ 897 (C1S,D1S,S1S)



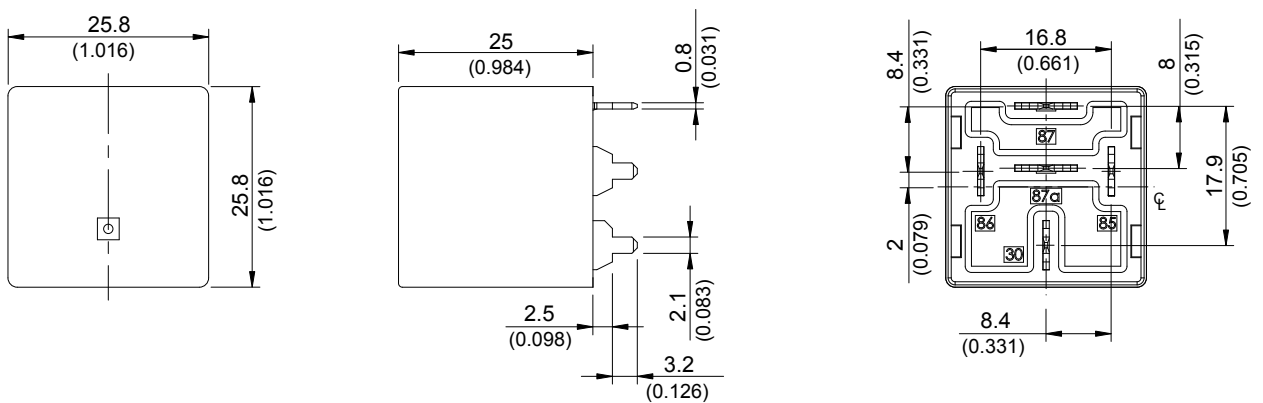
◆ 897 (D1SW)



◆ 897 (D1SF)



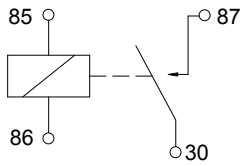
◆ 897P (C,D,S)



### »» Wiring Diagram

BOTTOM VIEW

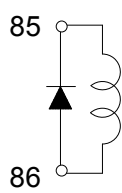
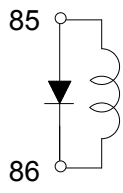
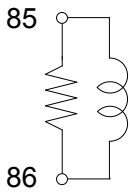
1A



R1

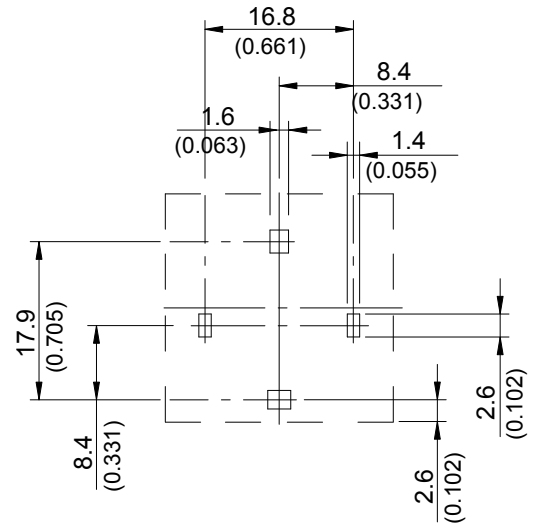
001

002



### »» PC Board Layout

BOTTOM VIEW



### »» Engineering Data

Safe breaking, arc extinguished  
(normally open contact) for resistive loads.

