



»» Features

- High Power Mini ISO automotive relay.
- Switches up to 70A resistive load, 100,000 ops., 23°C.
- Operating ambient temperature -40°C to 125°C.
- Available with plain cover, flanged cover, bracketed cover, skirted cover, and weather proof cover.
- Available with PCB terminals or quick connect terminals.
- 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 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 ⁽¹⁾	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 | 4. D | -- Dust cover |
| 2. Blank | -- Socket terminal | C | -- Flux tight |
| P | -- PCB terminal | S | -- Sealed type washable |
| P1 | -- Special PCB terminal (NO,COM 3 pin type) | D1 | -- Flanged cover (dust cover) |
| 3. 1AH | -- Single pole normally open, contact material AgSnO | C1 | -- Flanged cover (flux tight) |
| | | S1 | -- Flanged cover (sealed type washable) |
| | | 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 1N4007 the diode anode on # 85 terminal
 002 -- Coil parallel with diode 1N4007 the diode cathode on # 85 terminal
8. -- Coil voltage (please refer to the coil rating data for the availability)

»» Contact Rating

Resistive load	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 ⁽¹⁾	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.

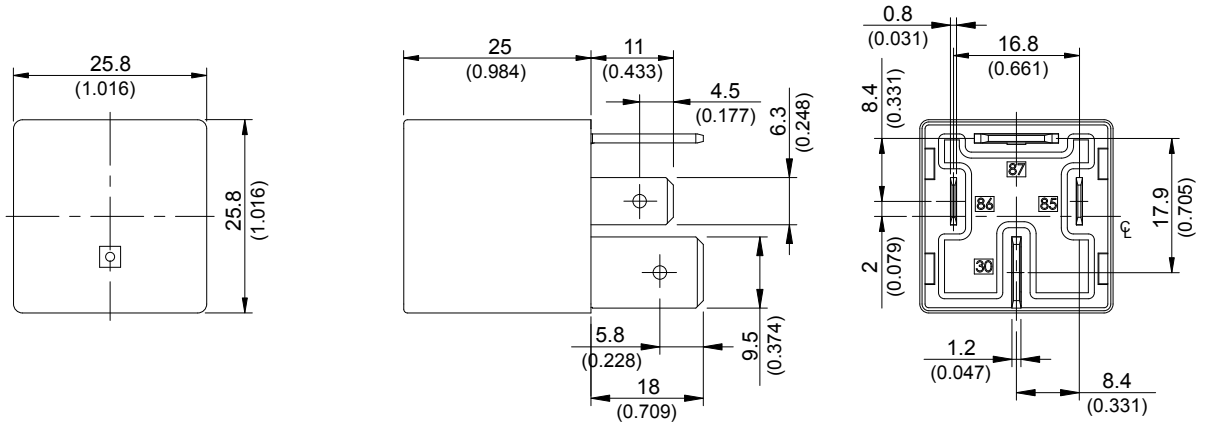
»» Specification

Contact material	AgSnO alloy	
Contact voltage drop ⁽¹⁾	Typ. 30mV at 10A	
Insulation resistance ⁽¹⁾	20 MΩ Min. (DC 500V)	
Operate time ⁽¹⁾	20ms Max.	
Release time ⁽¹⁾	20ms Max.	
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	10,000,000 operations (frequency 18,000 operations/hr)
	Electrical	100,000 operations (frequency 1,200 operations/hr)
Operating ambient temperature	-40~+125°C (no freezing)	
Weight	Approx. 40 g	

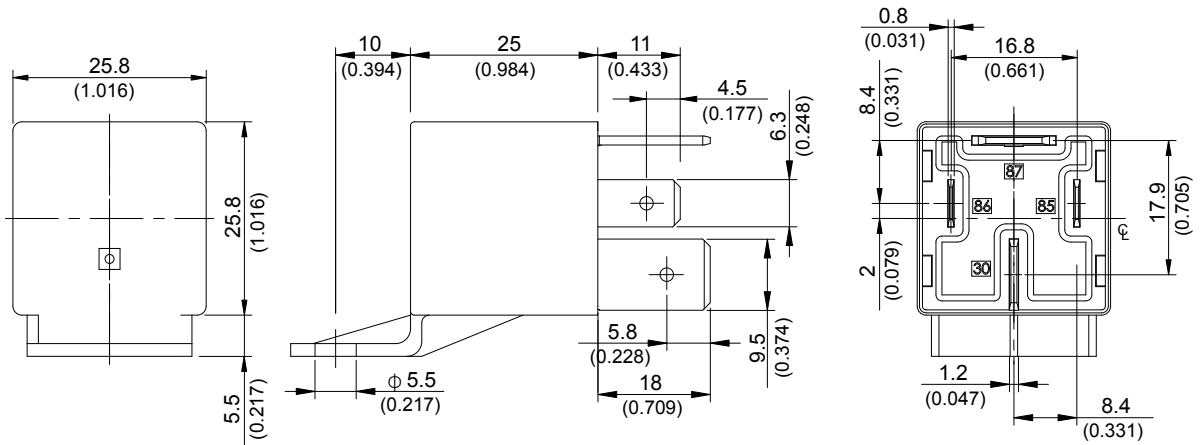
Note : (1) Initial value. Operate and release time excluding contact bounce.

»» Outline Dimensions

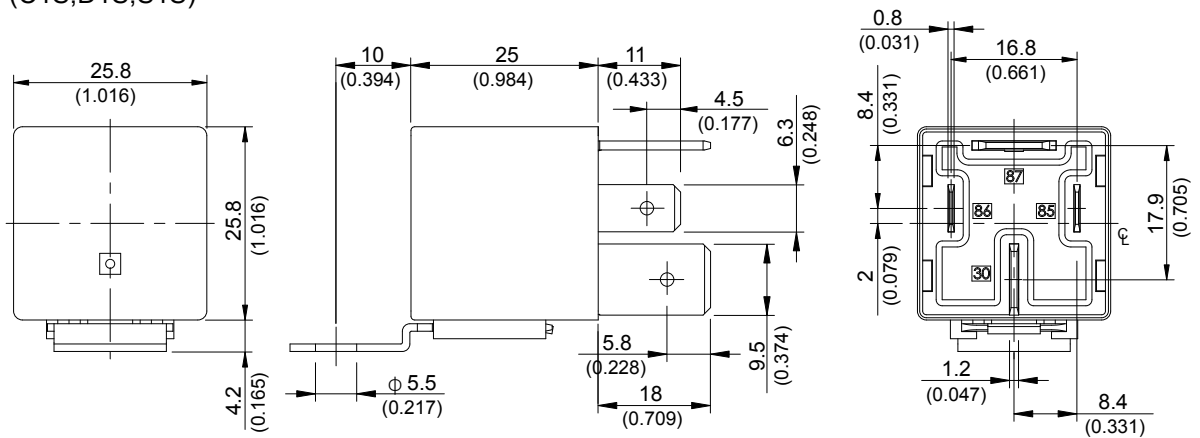
◆ 897 (C,D,S)



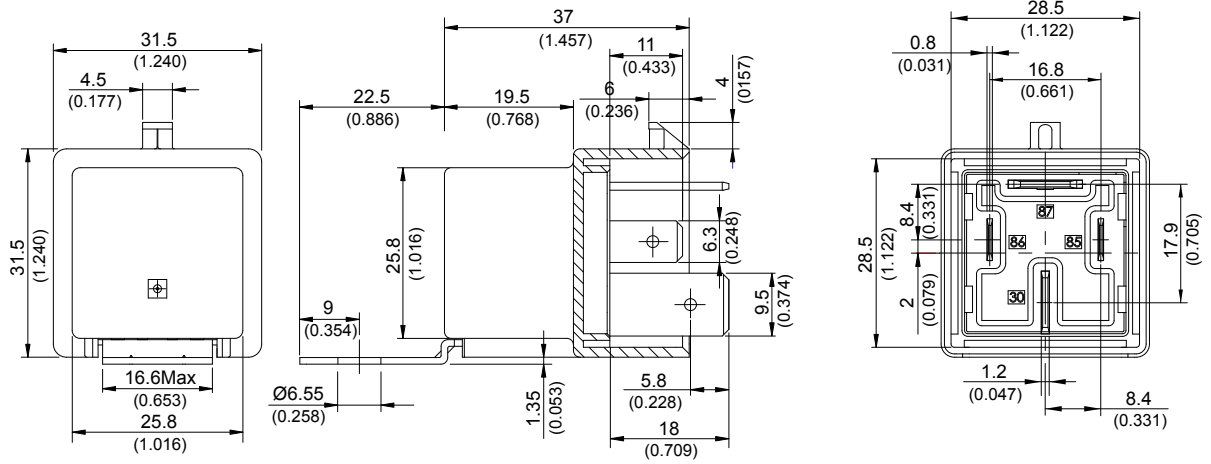
◆ 897 (C1,D1,S1)



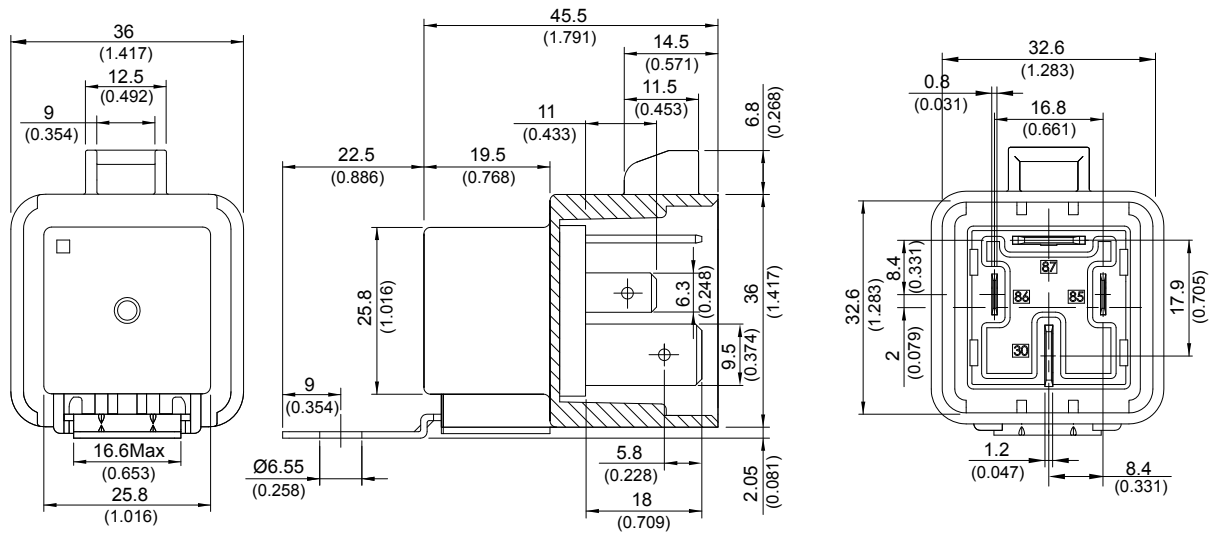
◆ 897 (C1S,D1S,S1S)



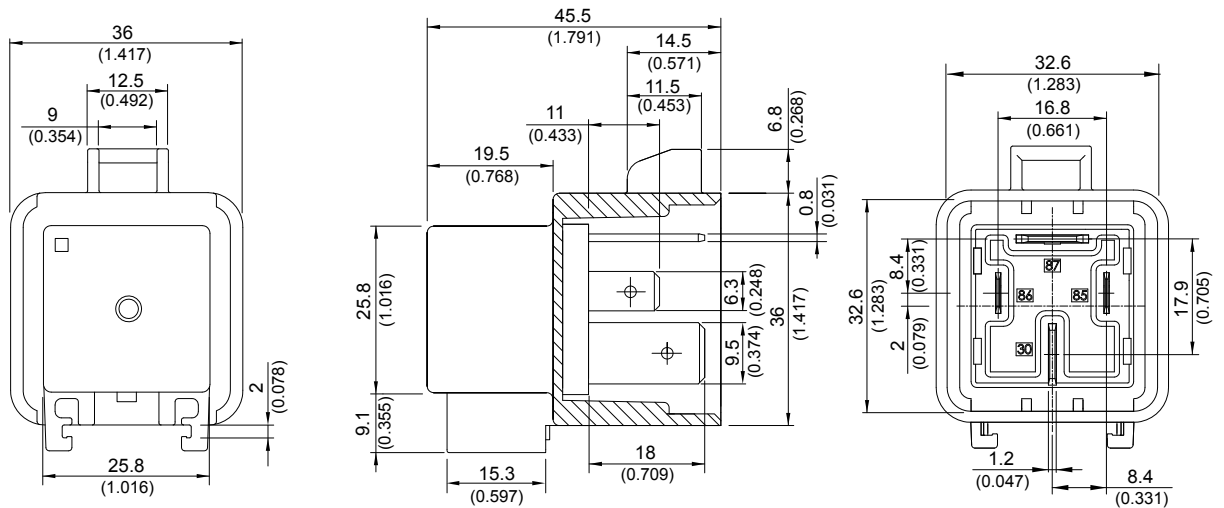
◆ 897 (D1SF)



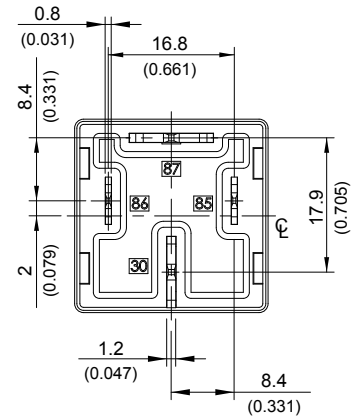
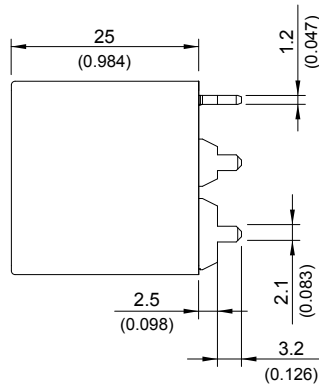
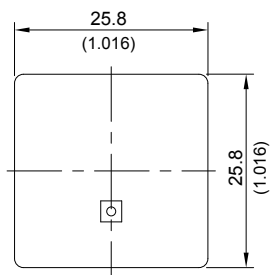
◆ 897 (D1SW)



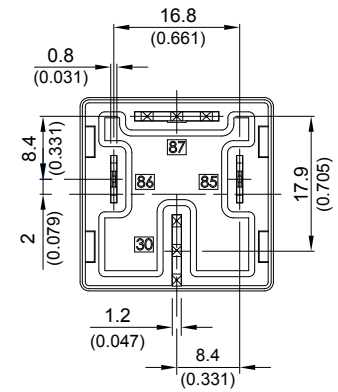
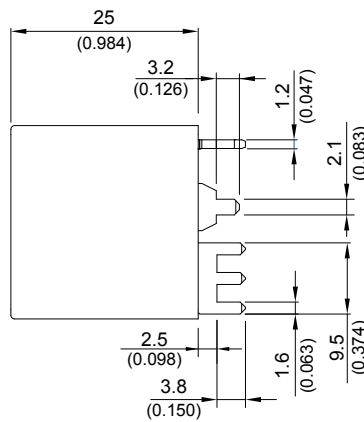
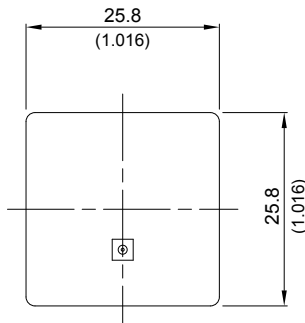
◆ 897 (DUSW)



◆ 897P (C,D,S)



◆ 897P1 (C,D,S)

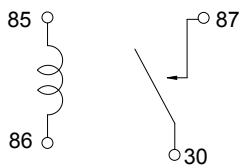


TOLERANCE:
 LESS THAN: 1(0.039) ±0.1(0.004)
 5(0.197) ±0.3(0.012)
 20(0.787) ±0.5(0.020)
 MORE THAN: 20(0.787) ±1(0.039)

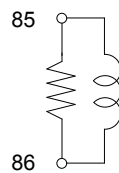
»» Wiring Diagram

BOTTOM VIEW

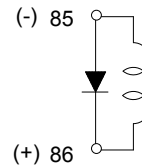
1A



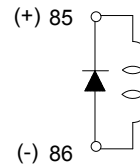
R1



001



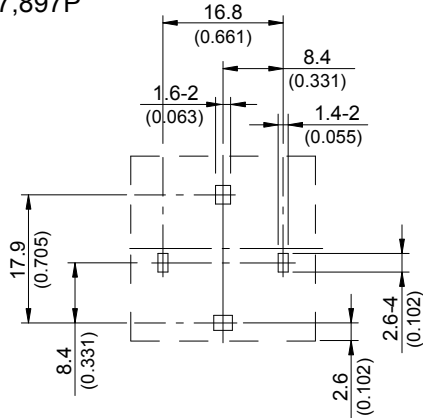
002



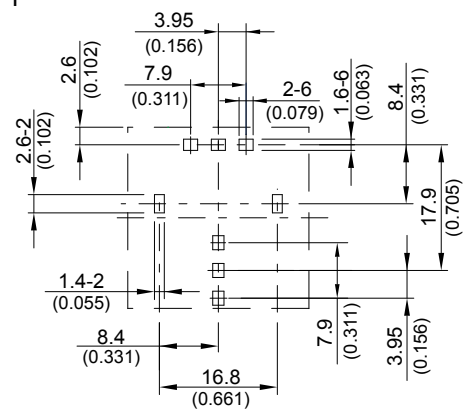
»» PC Board Layout

BOTTOM VIEW

◆ 897,897P



◆ 897P1



»» Engineering Data

