



»» 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 | 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 |

»» Ordering Information

897 P - 1AH - C - R1 - T 001
 1 2 3 4 5 6 7

- | | | | |
|----------|---|------|---|
| 1. 897 | -- Basic series designation | 4. D | -- Dust cover |
| 2. Blank | -- Socket terminal | C | -- Flux tight |
| P | -- PCB terminal | S | -- Sealed type washable |
| 3. 1AH | -- Single pole normally open, contact material AgSnO | D1 | -- Flanged cover (dust cover) |
| | | C1 | -- Flanged cover (flux tight) |
| | | S1 | -- Flanged cover (sealed type washable) |
| | | D1S | -- Steel bracket (dust cover) |

- | | | | | |
|------|--|--|----------|---|
| C1S | -- Steel bracket (flux tight) | 6. | Blank | -- Standard type |
| S1S | -- Steel bracket (sealed type washable) | | T | -- Special requirement for Tin plated terminal |
| D1SF | -- Steel bracket (dust cover with shroud) | | | |
| D1SW | -- Steel bracket (dust cover with weather proof) | 7. | Blank | -- Standard type |
| | | | 001 | -- Coil parallel with diode IN4007 the positive pole "+" on # 85 terminal |
| 5. | Blank | -- Standard type | | |
| | R1 | -- Coil parallel with resistor 1/2W for 12V 680Ω , 24V 2700Ω | 002 | -- Coil parallel with diode IN4007 the negative pole "-" on # 85 terminal |

»» Contact Rating

| | |
|-------------------------|----------------------|
| Max. Continuous current | 70A 14VDC, 25A 28VDC |
|-------------------------|----------------------|

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

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

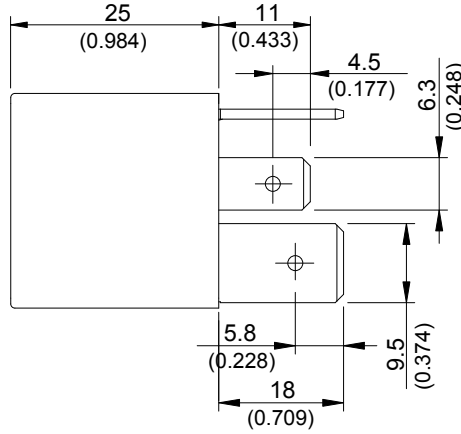
»» Specification

| | | |
|--------------------------------------|--------------------------|---|
| Contact material | AgSnO alloy | |
| Contact voltage drop ⁽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 | 10~55Hz , 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 | |

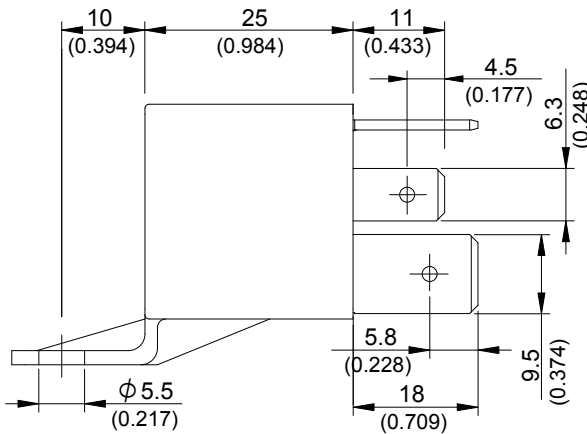
Note : (1) initial value

»» Outline Dimensions

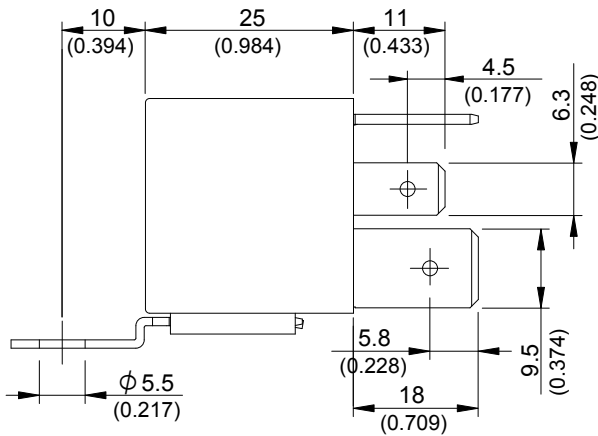
◆ 897 (C,D,S)



◆ 897 (C1,D1,S1)



◆ 897 (C1S,D1S,S1S)



◆897 (D1SW)



◆897 (D1SF)



◆897P (C,D,S)



»» Wiring Diagram

BOTTOM VIEW



»» PC Board Layout

BOTTOM VIEW



»» Engineering Data

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

