



»» 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

1A



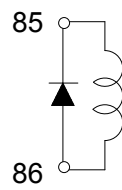
R1



001

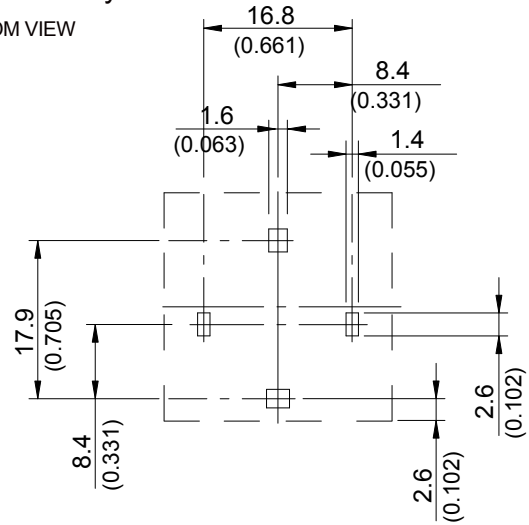


002



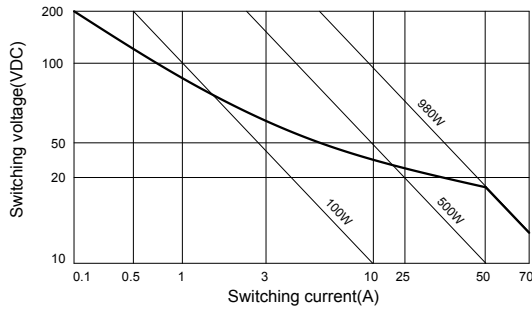
»» PC Board Layout

BOTTOM VIEW



»» Engineering Data

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



Life expectancy



Life expectancy



Ambient temperature vs coil voltage for continuous duty



Operate time/Release time



Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Song Chuan:

[897-1AH-D1S-R1-12VDC](#) [897-1AH-C-R1-U03-12VDC](#) [897P-1AH-C-R1-12VDC](#) [897-1AH-C-R1-U06-12VDC](#) [897-1AH-D1SW-R1-T-12VDC](#) [897-1AH-S1-24VDC](#) [897-1AH-D1-12VDC](#) [897-1AH-C1S-R1-U06-12VDC](#) [897-1AH-D-R1-12VDC](#) [897P-1AH-C-R1-24VDC](#) [897-1AH-D1SW-12VDC](#) [897-1AH-D1-001-24VDC](#) [897-1AH-D1-24VDC](#) [897P-1AH-D-12VDC](#) [897P-1AH-D-24VDC](#) [897-1AH-D-12VDC](#) [897P-1AH-C-12VDC](#) [897-1AH-C-12VDC](#) [897P-1AH-S-24VDC](#) [897-1AH-C-R1-24VDC](#) [897-1AH-C1S-R1-24VDC](#) [897-1AH-C-002-12VDC](#) [897-1AH-C-001-12VDC](#) [897-1AH-D1SF-R1-12VDC](#) [897-1AH-C1-001-12VDC](#) [897-1AH-C1S-24VDC](#) [897-1AH-C1-R1-12VDC](#) [897-1AH-C-001-24VDC](#) [897-1AH-S-12 VDC](#) [897-1AH-S1S-T-001-12VDC](#) [897-1AH-C1S-001-12VDC](#) [897-1AH-C1-24VDC](#) [897-1AH-D1SW-R1-12VDC](#) [897-1AH-C-R1-U09-12VDC](#) [897-1AH-C1S-002-12VDC](#) [897H-1AH-D-R1-U02-12VDC](#) [897H-1AH-D-R1-U02-12VDC](#) [897141](#) [897H-1AH-D-R1-U01-12VDC](#)