



### »» Features

- ☐ ISO 280 footprint design.
- ☐ High temperature endurance up to 125 degree C.
- ☐ Optional SPNC, SPNO, SPDT contact configurations.
- ☐ Optional to be equipped with protection diode or resistor.
- ☐ Available for dust cover type, skirted cover flanged cover, and weather proof versions.
- ☐ Comply with RoHS-Directive 2002/95/EC, and ELV-Directive 2000/53/EC.

### »» Type List

| Terminal style  | Contact form | Enclosure style |            |                      |
|-----------------|--------------|-----------------|------------|----------------------|
|                 |              | Dust cover      | Flux tight | Sealed type washable |
| Socket terminal | 1A (SPNO)    | 898-1AH-D       | 898-1AH-C  | 898-1AH-S            |
|                 |              | 898H-1AH-D      | 898H-1AH-C | 898H-1AH-S           |
|                 | 1C (SPDT)    | 898-1CH-D       | 898-1CH-C  | 898-1CH-S            |
|                 |              | 898H-1CH-D      | 898H-1CH-C | 898H-1CH-S           |

| Terminal style  | Contact form | Enclosure style            |                            |
|-----------------|--------------|----------------------------|----------------------------|
|                 |              | Flanged cover (dust cover) | Flanged cover (flux tight) |
| Socket terminal | 1A (SPNO)    | 898-1AH-D1                 | 898-1AH-C1                 |
|                 |              | 898H-1AH-D1                | 898H-1AH-C1                |
|                 | 1C (SPDT)    | 898-1CH-D1                 | 898-1CH-C1                 |
|                 |              | 898H-1CH-D1                | 898H-1CH-C1                |

| Terminal style  | Contact form | Enclosure style            |                            |
|-----------------|--------------|----------------------------|----------------------------|
|                 |              | Steel bracket (dust cover) | Steel bracket (flux tight) |
| Socket terminal | 1A (SPNO)    | 898-1AH-D1S                | 898-1AH-C1S                |
|                 |              | 898H-1AH-D1S               | 898H-1AH-C1S               |
|                 | 1C (SPDT)    | 898-1CH-D1S                | 898-1CH-C1S                |
|                 |              | 898H-1CH-D1S               | 898H-1CH-C1S               |

| Terminal style  | Contact form | Designation (provided with) | Enclosure style                        |                                               |
|-----------------|--------------|-----------------------------|----------------------------------------|-----------------------------------------------|
|                 |              |                             | Steel bracket (dust cover with shroud) | Steel bracket (dust cover with weather proof) |
| Socket terminal | 1C (SPDT)    | Resistor                    | 898H-1CH-D1SF-R1                       | 898H-1CH-D1SW-R1                              |

## »» Ordering Information

898      H      -      1CH      -      C      -      R1      001  
 1          2          3          4          5          6

- |          |                                                        |          |                                                                           |
|----------|--------------------------------------------------------|----------|---------------------------------------------------------------------------|
| 1. 898   | -- Basic series designation                            | D1S      | -- Steel bracket (dust cover)                                             |
| 2. Blank | -- Standard type                                       | C1S      | -- Steel bracket (flux tight)                                             |
| H        | -- High power type                                     | S1S      | -- Steel bracket (sealed type washable)                                   |
| 3. 1AH   | -- Single pole normally open, contact material AgSnO   | D1SF     | -- Steel bracket (Dust cover with shroud)                                 |
| 1BH      | -- Single pole normally closed, contact material AgSnO | D1SW     | -- Steel bracket (Dust cover with weather proof)                          |
| 1CH      | -- Single pole double throw, contact material AgSnO    | 5. Blank | -- Standard type                                                          |
| 4. D     | -- Dust cover                                          | R1       | -- Coil parallel with resistor 1/2W for 12V 680Ω, 24V 2700Ω               |
| C        | -- Flux tight                                          | 6. Blank | -- Standard type                                                          |
| S        | -- Sealed type washable                                | 001      | -- Coil parallel with diode IN4007 the positive pole "+" on # 85 terminal |
| D1       | -- Flanged cover (dust cover)                          | 002      | -- Coil parallel with diode IN4007 the negative pole "-" on # 85 terminal |
| C1       | -- Flanged cover (flux tight)                          |          |                                                                           |
| S1       | -- Flanged cover (sealed type washable)                |          |                                                                           |

## »» Contact Rating

| Resistive load | 898 1A                 | 898 1B                 | 898 1C                                               |
|----------------|------------------------|------------------------|------------------------------------------------------|
|                | 40A 14VDC              | 40A 14VDC              | NO : 30A 14VDC<br>NC : 20A 14VDC                     |
|                | 898H 1A                | 898H 1B                | 898H 1C                                              |
|                | 50A 14VDC<br>20A 28VDC | 40A 14VDC<br>15A 28VDC | NO: 50A 14VDC, 20A 28VDC<br>NC: 30A 14VDC, 15A 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 <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                                | 120 % of rated voltage                         | 65 % of rated voltage        | 10 % of rated voltage         | approx. 1.6W                       |
| 24                | 66.7                             | 360                               |                                                |                              |                               |                                    |

Notes : (1) Without switching the load.

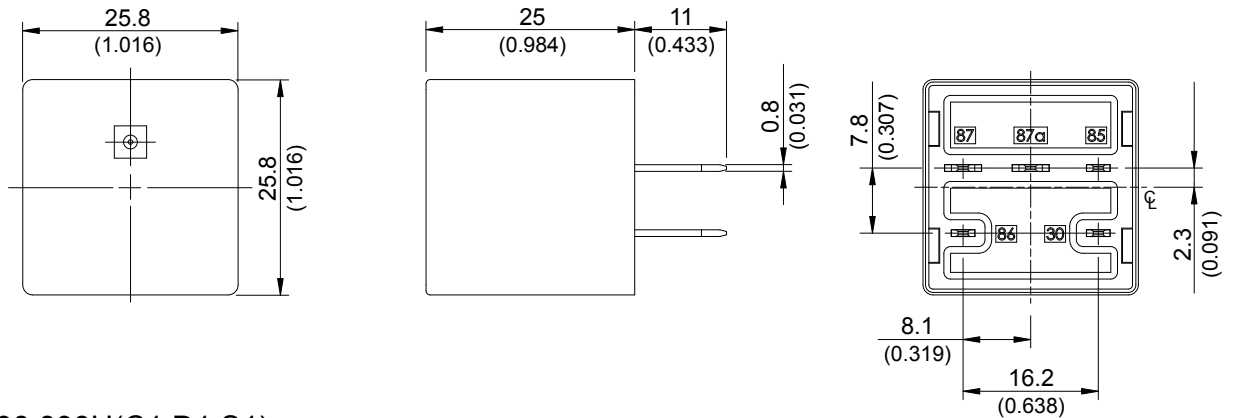
# Specification

|                                      |                          |                                                           |
|--------------------------------------|--------------------------|-----------------------------------------------------------|
| Contact material                     | AgSnO alloy              |                                                           |
| Contact voltage drop <sup>(1)</sup>  | Typ. 50mV at 10A         |                                                           |
| Insulation resistance <sup>(1)</sup> | 20MΩ 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<br>(frequency 18,000 operations/hr) |
|                                      | Electrical               | 100,000 operations<br>(frequency 1,200 operations/hr)     |
| Temperature range                    | Operating                | -40~+125°C (no freezing)                                  |
| Weight                               | Approx. 40 g             |                                                           |

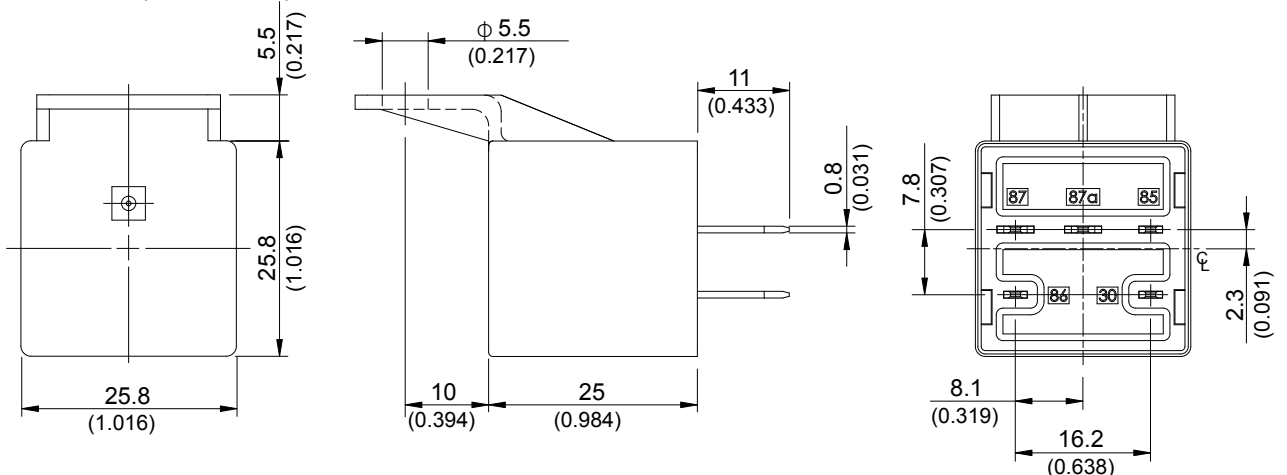
Note : (1) initial value

# Outline Dimensions

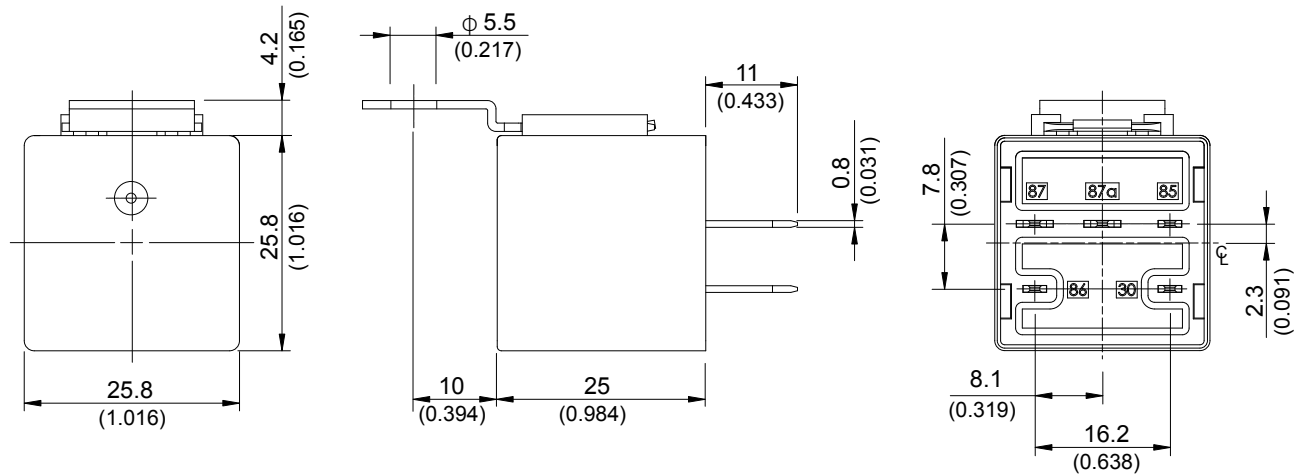
## ◆898,898H(C,D,S)



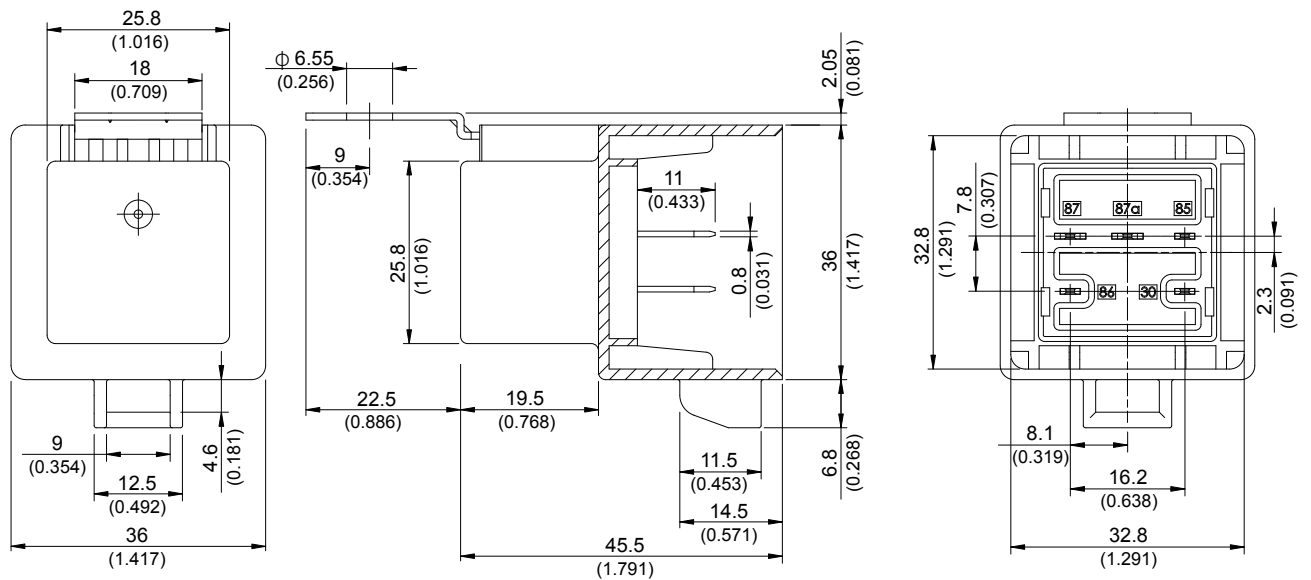
## ◆898,898H(C1,D1,S1)



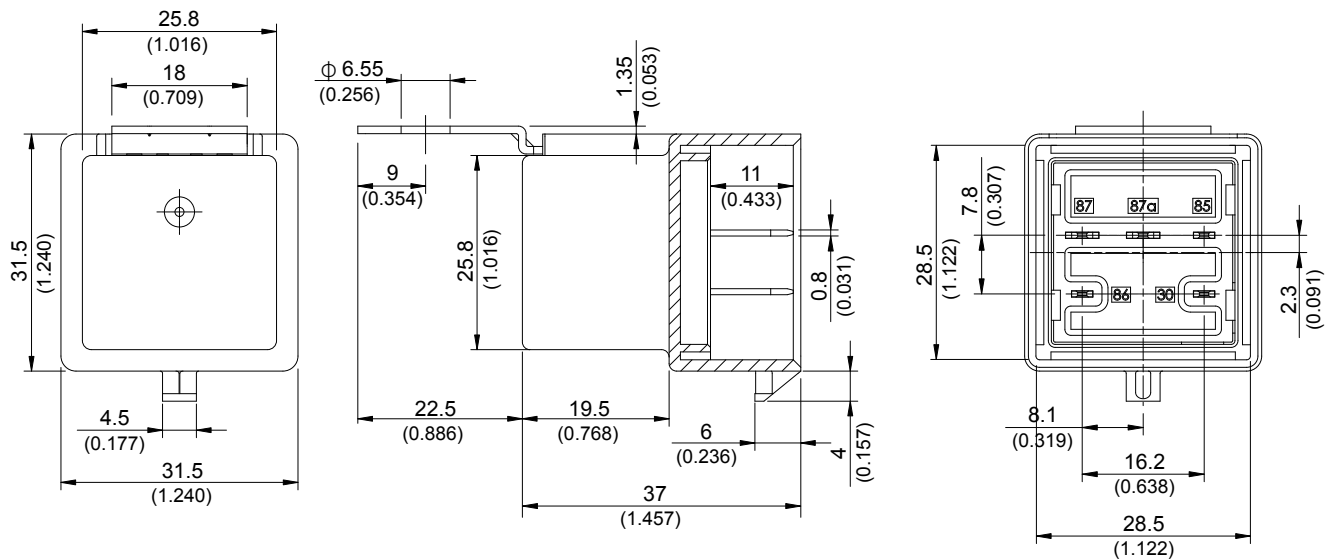
## ◆898,898H(C1S,D1S,S1S)



## ◆898H (D1SW)



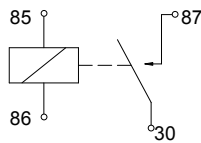
## ◆898H (D1SF)



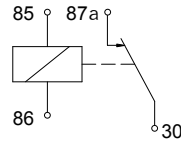
## Wiring Diagram

BOTTOM VIEW

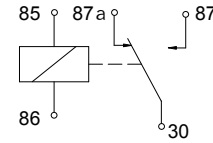
1A



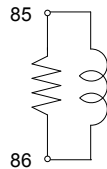
1B



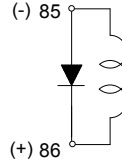
1C



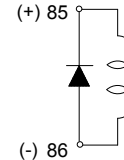
R1



001

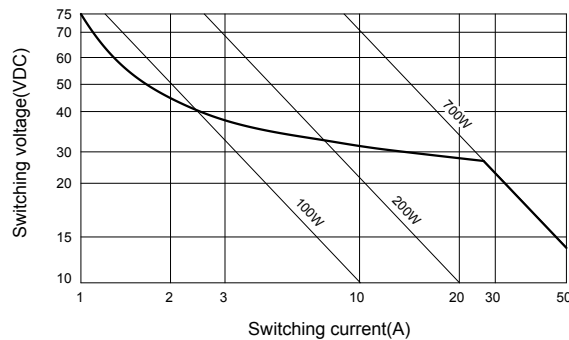


002

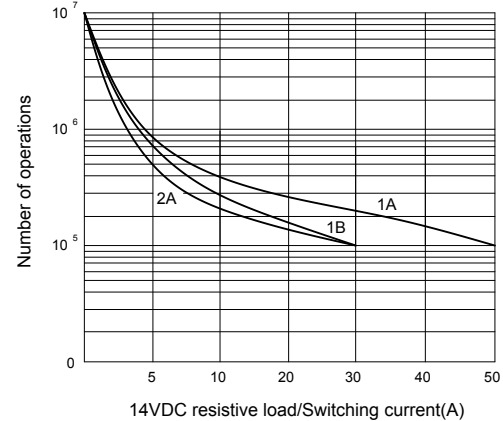


## Engineering Data

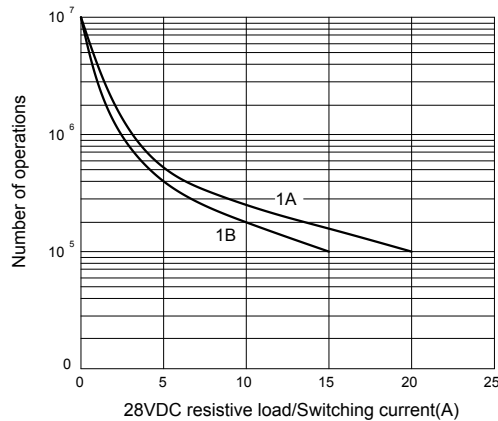
Safe breaking, arc extinguished  
(normally open contact) for resistive loads (898H)



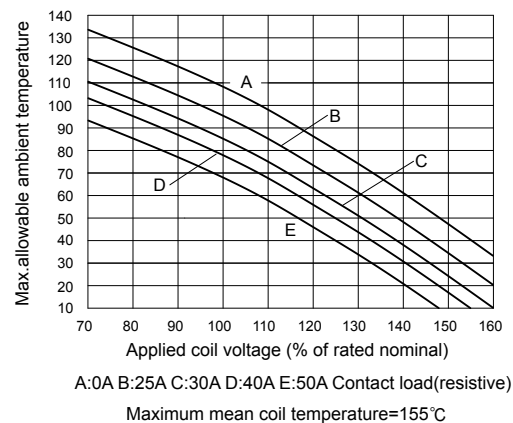
Life expectancy (898H)



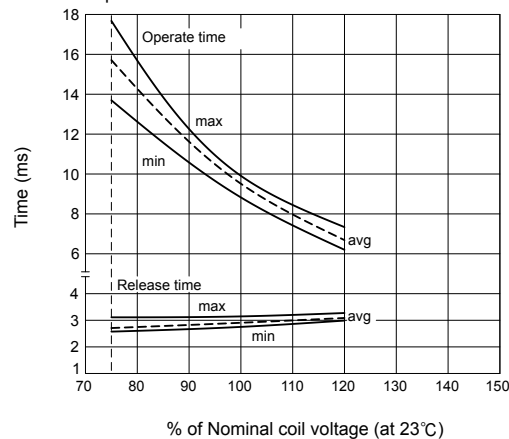
Life expectancy (898H)



Ambient temperature vs coil voltage for continuous duty



Operate time/Release time



# Mouser Electronics

Authorized Distributor

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## Song Chuan:

[898H-1CH-C-R1-U03-12VDC](#) [898H-1CH-C-R1-U02-24VDC](#) [898H-1CH-D1SW-R1-U05-12VDC](#) [898H-1AH-C-R1-U04-12VDC](#) [898H-1CH-S-U06-24VDC](#) [898-1CH-D-R1 12 Vdc](#) [898H-1CH-D-R1 12VDC](#) [899-1A-F-S-12VDC](#) [899-1A-F-S-18VDC](#) [899-1A-F-S-9VDC](#) [899-1A-F-C-E-12VDC](#)