

#### >>> Features

- Mini ISO high power automotive relay 30A/50A.
  High temperature endurance up to 125 degree C.
  Optional SPNC, SPNO, SPDT, DPNO contact configurations.
  Optional to be equipped with protection diode or
- resistor.

  Both available PCB terminal and quick connect terminal versions.
- Available for plain cover type, skirted cover flanged cover, and weather proof versions.
- ☐Tinned terminal is available on request.
- Comply with RoHS-Directive 2002/95/EC, and ELV-Directive 2000/53/EC.

## >>> Type List

Terminal	Contact	Enclosure style				
style	form	Dust cover	Flux tight	Sealed type washable		
	1A (CDNO)	896-1AH-D	896-1AH-C	896-1AH-S		
	1A (SPNO)	896H-1AH-D	896H-1AH-C	896H-1AH-S		
	4.C. (CDDT)	896-1CH-D	896-1CH-C	896-1CH-S		
Socket terminal	1C (SPDT)	896H-1CH-D	896H-1CH-C	896H-1CH-S		
	2A (DPNO)	896-2AH-D	896-2AH-C	896-2AH-S		
		896H-2AH-D	896H-2AH-C	896H-2AH-S		
	14 (CDNO)	896P-1AH-D	896P-1AH-C	896P-1AH-S		
	1A (SPNO)	896HP-1AH-D	896HP-1AH-C	896HP-1AH-S		
DCD to was in al	4.0 (ODDT)	896P-1CH-D	896P-1CH-C	896P-1CH-S		
PCB terminal	1C (SPDT)	896HP-1CH-D	896HP-1CH-C	896HP-1CH-S		
	24 (DDNO)	896P-2AH-D	896P-2AH-C	896P-2AH-S		
	2A (DPNO)	896HP-2AH-D	896HP-2AH-C	896HP-2AH-S		

<b>-</b>	Contact form	Enclosure style			
Terminal style		Flanged cover ( dust cover)	Flanged cover (flux tight)		
	1A (SPNO)	896-1AH-D1	896-1AH-C1		
		896H-1AH-D1	896H-1AH-C1		
Socket terminal	1C (SPDT)	896-1CH-D1	896-1CH-C1		
Socket terminal		896H-1CH-D1	896H-1CH-C1		
	2A (DPNO)	896-2AH-D1	896-2AH-C1		
		896H-2AH-D1	896H-2AH-C1		





Terminal	Contact	Enclosure style			
style	form	Steel bracket ( dust cover)	Steel bracket (flux tight)		
	1A (SPNO)	896-1AH-D1S	896-1AH-C1S		
		896H-1AH-D1S	896H-1AH-C1S		
Cooket to main al	1C (SPDT)	896-1CH-D1S	896-1CH-C1S		
Socket terminal		896H-1CH-D1S	896H-1CH-C1S		
		896-2AH-D1S	896-2AH-C1S		
		896H-2AH-D1S	896H-2AH-C1S		

Terminal	Contact	Designation	Enclo	sure style
style		Designation (provided with)	Steel bracket ( dust cover with shroud)	Steel bracket ( dust cover with weather proof)
Socket terminal	1C (SPDT)	Resistor	896H-1CH-D1SF-R1	896H-1CH-D1SW-R1

#### >>> Ordering Information

896	Н	Р	- 1CH -	С	- R1	- T	001
1	2	3	4	5	6	7	8

- 1. 896 -- Basic series designation
- 2. Blank -- Standard typeH -- High power type
- 3. Blank -- Socket terminal P -- PCB terminal
- 4. 1AH -- Single pole normally open, contact material AgSnO
  - 1BH -- Single pole normally closed, contact material AgSnO
  - 1CH -- Single pole double throw, contact material AgSnO
  - 2AH -- Double pole double make, contact material AgSnO
- 5. D -- Dust cover
  - C -- Flux tight
  - S -- Sealed type washable
  - C1 -- Flanged cover (flux tight)
  - D1 -- Flanged cover (dust cover)
  - 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)
- 6. Blank -- Standard type
  - R1 -- Coil parallel with resistor 1/2W for  $12V 680 \Omega$ ,  $24V 2700 \Omega$
- 7. Blank -- Standard type
  - T -- Special requirement for Tin plated terminal
- 8. Blank -- Standard type
  - -- Coil parallel with diode IN4007 the positive pole on # 85 terminal
  - -- Coil parallel with diode IN4007 the negative pole on # 85 terminal

# >>> Contact Rating

Туре	896 1A	896 1B		896 1C		896 2A
Resistive load	40A 14VDC		2×15A 14VDC			
Resistive load	40A 14VDC	40A 14VDC		NC : 30A 14VDC	2×15A 14VDC	
Туре	896H 1A	896H 1B		896H 1C		896H 2A
Decistive lead	50A 14VDC	40A 14VDC	40A 14VDC NO : 50A 14VDC, 20A 28VDC		2×30A 14VDC	
Resistive load	20A 28VDC	15A 28VDC	NC:	30A 14VDC, 15A 28V	DC	2×10A 28VDC

SONG CHUAN

# >>> Coil Rating(DC)

Rated	Rated current	Coil resistance	Max. continuous	Pick up	Drop out	Power consumption
voltage	±10 % at 23°C	±10 % at 23°C	Voltage	voltage(Max)	voltage(Min)	at rated
(V)	(mA)	(Ω)	at 85°C <sup>(1)</sup>	at 23°C	at 23°C	voltage
12	133	90	120 % of	65 % of	10 % of	
24	66.7	360	rated	rated	rated	approx. 1.6W
			voltage	voltage	voltage	

Notes: (1) Without switching the load.

# >>> Specification

Contact material	AgSnO alloy			
Contact voltage drop (1)	Typ. 50mV at 10A			
Insulation resistance (1)	20MΩ 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.		
Dielectric strength	Between contact and coil : AC 500V , 50/60Hz 1 min.			
Vibration resistance	Operating extremes 10~55Hz , amplitude 2mm			
Shock resistance	Operating extremes	10G		
SHOCK resistance	Damage limits	100G		
	Mechanical	10,000,000 operations		
Life expectancy	Mechanical	(frequency 18,000 operations/hr)		
Life expectancy	Electrical	100,000 operations		
		(frequency 1,200 operations/hr)		
Temperature range	Operating	-40∼+125°C (no freezing)		
Weight	Approx. 40 g			

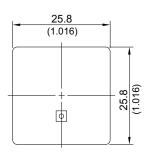
Note: (1) initial value

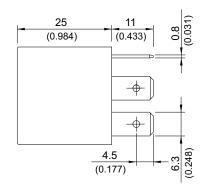


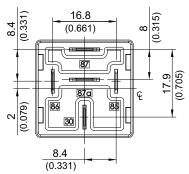


#### >>> Outline Dimensions

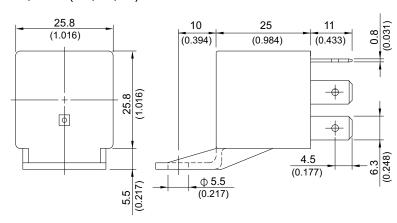
#### ◆896,896H (C,D,S)

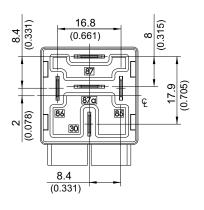




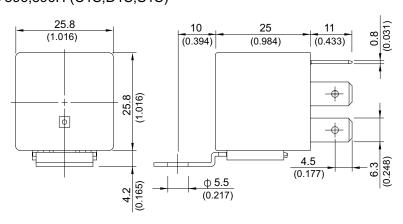


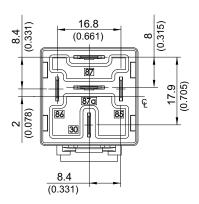
## ◆896,896H (C1,D1,S1)



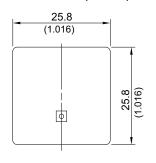


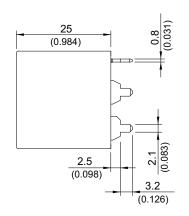
## ◆896,896H (C1S,D1S,S1S)

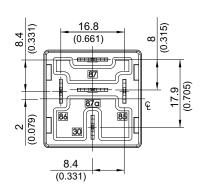




#### ◆896P,896HP (C,D,S)

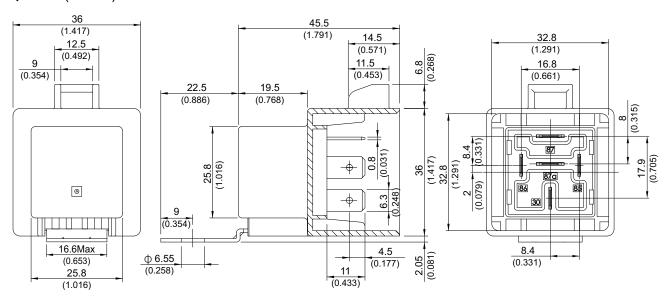




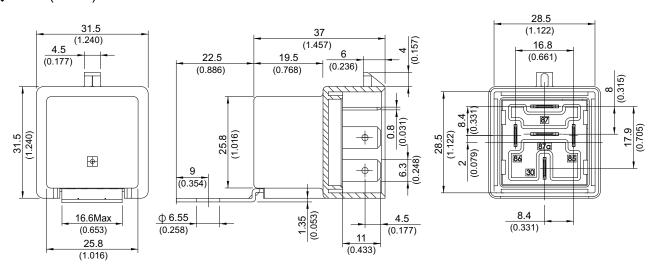


896

### ◆896H (D1SW)



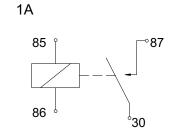
### ◆896H (D1SF)

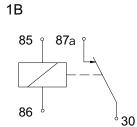


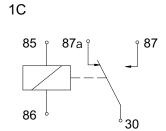
#### >>> Wiring Diagram

2A

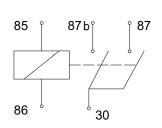
BOTTOM VIEW

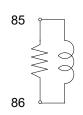




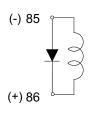


002

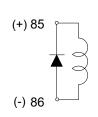




R1



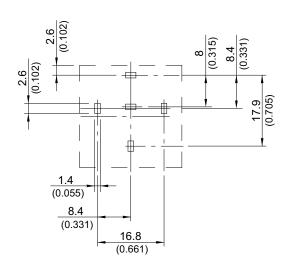
001



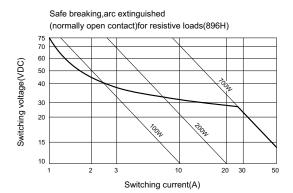


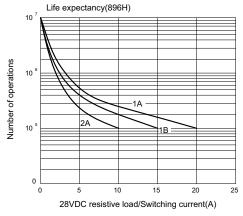
# >>> PC Board Layout

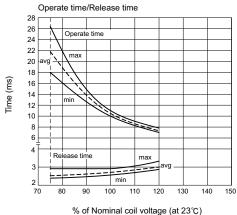
BOTTOM VIEW

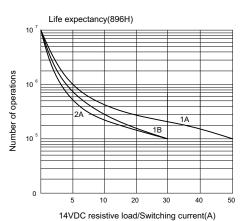


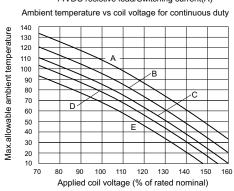
## >>> Engineering Data





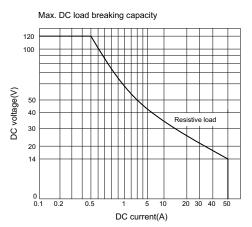






A:0A B:25A C:30A D:40A E:50A Contact load(resistive)

Maximum mean coil temperature=155°C



# **Mouser Electronics**

**Authorized Distributor** 

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

## Song Chuan:

896H-1AH-D1SW-12VDC 896H-1BH-C-R1-U03-12VDC 896H-1CH-C1-R1-12VDC 896H-1CH-C1S-R1-U03-12VDC 896H-1CH-C-R1-24VDC 896H-1CH-C-R1-U24-24VDC 896H-1CH-D1SF-001-T-12VDC 896H-1CH-D1SW-001-12VDC 896H-1CH-S1-R1-T-12VDC 896-1CH-C1-12VDC 896HP-1CH-D-24VDC 896HP-1CH-S-12VDC 896HP-1CH-S-24VDC 896HP-1CH-C-12VDC 896HP-1AH-S-12VDC 896HP-1AH-D-12VDC 896HP-1CH-D-12VDC 896H-1CH-C-R1-U24-12VDC 896H2AHC00112VD 896H-1AH-D1-12VDC 896H-1CH-S-R1-12VDC 896H-1CH-D1SW-R1-T-12VDC 896H-1AH-D1-R1-12VDC 896H-1CH-C1-12VDC 896H-1CH-D1SW-R1-12VDC 896H-1CH-C-R1-U03-12VDC 896H-1CH-D-24VDC 896H-1CH-C-001-12VDC 896H-1CH-D-001-12VDC 896H-1CH-S-12VDC 896H-1CH-C-001-24VDC 896H-1CH-C-12VDC 896H-1AH-S-R1-12VDC 896H-1CH-D1-24VDC 896H-1CH-D1-001-24VDC 896H-1AH-D-12VDC 896H-1CH-D1S-12VDC 896-1CH-C1S-12VDC 896H-1CH-C1S-001-12VDC 896H-1CH-D-R1-24VDC 896H-1CH-C1S-24VDC 896H-1CH-D-12VDC 896H-1CH-D1SW-R1-24VDC 896H-1CH-D-R1-12VDC 896H-1CH-D1-12VDC 896H-1CH-D1-R1-12VDC 896H-1CH-D-001-24VDC 896H-1AH-C-R1-U03-12VDC 896H-1CH-D1S-24VDC 896H-1AH-D-R1-12VDC 896H-1CH-D1SW-12VDC 896H-1CH-D1SW-24VDC 896H-1CH-C1-001-24VDC 896H-1CH-D1SW-001-24VDC 896H-1AH-D1S-12VDC 896H-1CH-S-24VDC 896H-1CH-S1-T-001-12VDC 896H-1CH-S1-T-12VDC 896H-1AH-S-12VDC 896H-2AH-C-R1-12 VDC 896H-1CH-C-002-12VDC 896H-1CH-C1S-12VDC 896H-1AH-S1-001-12VDC 896H-1CH-S1-001-12VDC 896H-1CH-C1S-U35-12VDC 896H-1CH-D-U39-12VDC 896H-1CH-C1-R1-24VDC 896H-1CH-C1-R1-U45-12VDC 896H-1CH-C1S-T-12VDC 896H-1CH-S1-12VDC 896H-1CH-C-001-T-12VDC 896H-1CH-C1-24VDC 896H-1CH-D1S-U41-24VDC 896H-1CH-D1-R1-24VDC 896H-2AH-D1-12VDC 896H-1AH-C1S-R1-24VDC 896H-1CH-S1-T-24VDC 896H-2AH-C-12VDC 896H-1CH-D-002-12VDC 896H-1CH-C1-001-12VDC 896H-1CH-C-R1-U43-12VDC 896H-1CH-C1-002-24VDC 896H-1AH-S1-R1-12VDC 896H-1AH-C1-12VDC 896H-1CH-S-U04-12VDC (89648) 896H-2AH-C-001-12VDC 896H-1CH-S1-001-24VDC 896H-2AH-S1-12VDC 896H-1CH-D1SW-T-001-12VDC 896H-1CH-D1S-001-24VDC 896H-1CH-S1S-R1-12VDC 896H-1CH-D1SF-R1-12VDC 896HP-1CH-C1-12VDC 896HP-1AH-C-12VDC 896H-1CH-S-R1-U25-12VDC 896H-1CH-D1S-R1-12VDC 896H-1CH-D1SW-R1-U30-12VDC 896H-1AH-D1SW-R1-12VDC