# 832AM



#### >>> Features

- ☐ Heavy duty 20/30A automotive PCB Relay.
- $\hfill \square$  High dielectric strength up to 4000Vrms.
- ☐ SPNO, SPDT contact configurations.
- ☐ Dust cover, flux-free and sealed type.
- ☐ Complies with RoHS-Directive 2011/65/EU and ELV-Directive 2000/53/EC.

### >>> Type List

Terminal style	Contact form	Designation			
		Flux tight	Sealed type	Sealed type washable	
DOD (	1A (SPNO)	832AM-1A-C	832AM-1A-V	832AM-1A-S	
PCB terminal	1C (SPDT)	832AM-1C-C	832AM-1C-V	832AM-1C-S	

#### >>> Ordering Information

- 1. 832 -- Basic series designation
- 2. A -- Different type (provided with 1 common terminal)
- 5. C -- Flux tight V -- Sealed type

1C

3. M -- Automotive relay

S -- Sealed type washable

- 4. 1A -- Single pole normally open
- 6. -- Coil voltage (please refer to the coil rating data for the availability)

-- Single pole double throw

#### >>> Contact Rating

Loodhuo	4.0	1C		
Load type	1A	NO	NC	
Resistive load	30A 14VDC	20A 14VDC	10A 14VDC	

### >>> Coil Rating (DC)

Rated voltage	Rated current ±10 % at 23 °C		Max. continuous voltage	Pick up Voltage (Max.)	Drop out Voltage (Min.)	Power consumption at rated
(V)	(mA)	$(\Omega)$	at 85°C <sup>(1)</sup>	at 23°C	at 23°C	voltage
9	93	97	133 % of	75 % of	10 % of	
12	77	155	rated	rated	rated	approx. 0.93W
24	36	660	voltage	voltage	voltage	

Note: (1) Without continuous contact current.



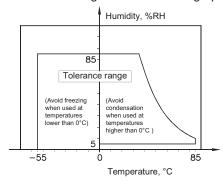
# 832AM

#### >>> Specification

Contact material	AgSnO alloy		
Contact voltage drop (1)	Typ. 50mV at 10A		
Operate time (1)	15ms Max.		
Release time (1)	10ms Max.		
Insulation resistance (1)	100MΩ Min. (DC 500V)		
Dielectric strength <sup>(1)</sup>	Between open contact : AC 500V , 50/60Hz 1min.		
Dielectric strength	Between contact and coil : AC 500V , 50/60Hz 1min.		
Vibration resistance	Operating extremes	10∼500Hz , 4.4G	
Vibration resistance	Damage limits	10∼500Hz , 4.4G	
Shock resistance	Operating extremes	10G	
SHOCK TESISTATICE	Damage limits	100G	
	Mechanical	10,000,000 ops.	
Life evacetancy		(frequency 18,000 ops./hr)	
Life expectancy	Electrical	100,000 ops.	
		(frequency 1,200 ops./hr)	
Operating ambient temperature	-55∼+85°C (no freezing)		
Weight	Approx. 27g		

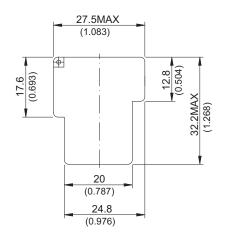
Note: (1) Initial value. Operate and release time excluding contact bounce.

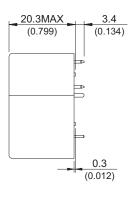
- (2) Unless otherwise specified, all tests are under room temperature and humidity.
- (3) Consider the heat of PCB is necessary, please check the actual condition of PCB.
- (4) Applying no diode to this relay. The life expectancy will be lower when a diode is used. To use a varistor (ZNR) could absorb the coil surge of relay that is recommended.
- (5) Do not use the relay exceeding the coil rating, contact rating and life expectancy, or this may cause the risk of overheating.
- (6) To assure optimum performance, avoid the relay from dropping, hitting, or other unnecessary shocks.
- (7) Do not switch the contacts without any load as the contact resistance may become increased rapidly.
- (8) Flux tight version is recommended. If there is cleaning process and sealed type is selected, the vent-hole should be removed after the process.
- (9) Usage, transport and storage conditions
  - 1. Temperature: -55~+85°C
  - 2. Humidity: 5 to 85% R.H.
  - 3. Pressure: 86 to 106 kPa
  - Furthermore, the humidity range varies with the temperature. So, use relays within the range indicated in the graph below.

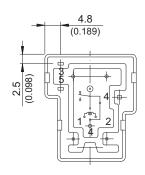


(10) Please contact Song Chuan for the detailed information.

#### >>> Outline Dimensions







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

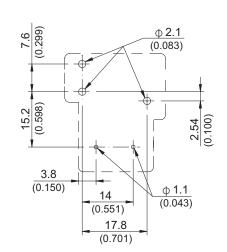
1C

1A

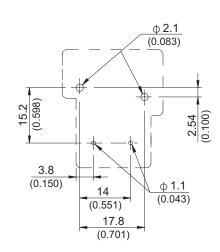


## >>> PC Board Layout

1C



1A

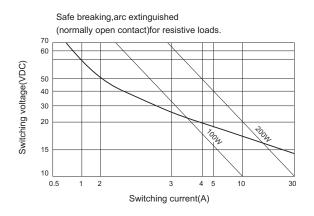


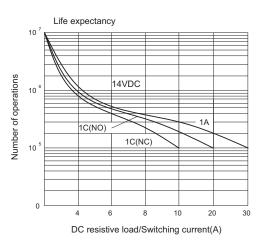


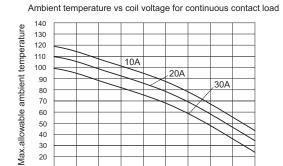
### >>> Engineering Data

70

80

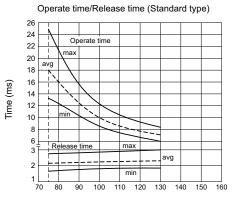






Applied coil voltage (% of rated nominal) Maximum mean coil temperature=155°C

100 110 120 130 140



% of Nominal coil voltage (at 23°C)