



»» Features

- High power 40A automotive relay.
- USA & European footprint are both available.
- Open frame, dust cover, flux-free type, and sealed washable type are available.
- Offering SPNC, SPNO, SPDT of contact configurations.

»» Type List

◆ Standard type

Terminal style	Contact form	Designation (enclosure)			
		Open type	Flux tight	Sealed type	Sealed type washable
PCB terminal (Footprint for European)	1A (SPNO)	822E-1A	822E-1A-C	822E-1A-V	822E-1A-S
	1B (SPNC)	822E-1B	822E-1B-C	822E-1B-V	822E-1B-S
	1C (SPDT)	822E-1C	822E-1C-C	822E-1C-V	822E-1C-S
PCB terminal (Footprint for USA)	1A (SPNO)	822U-1A	822U-1A-C	822U-1A-V	822U-1A-S
	1B (SPNC)	822U-1B	822U-1B-C	822U-1B-V	822U-1B-S
	1C (SPDT)	822U-1C	822U-1C-C	822U-1C-V	822U-1C-S
PCB terminal (Footprint for USA different terminal)	1A (SPNO)	-----	822UA-1A-C	822UA-1A-V	822UA-1A-S
	1B (SPNC)		822UA-1B-C	822UA-1B-V	822UA-1B-S
	1C (SPDT)		822UA-1C-C	822UA-1C-V	822UA-1C-S

◆ High sensitivity type

PCB terminal (Footprint for European)	1A (SPNO)	822EN-1A	822EN-1A-C	822EN-1A-V	822EN-1A-S
	1B (SPNC)	822EN-1B	822EN-1B-C	822EN-1B-V	822EN-1B-S
	1C (SPDT)	822EN-1C	822EN-1C-C	822EN-1C-V	822EN-1C-S
PCB terminal (Footprint for USA)	1A (SPNO)	822UN-1A	822UN-1A-C	822UN-1A-V	822UN-1A-S
	1B (SPNC)	822UN-1B	822UN-1B-C	822UN-1B-V	822UN-1B-S
	1C (SPDT)	822UN-1C	822UN-1C-C	822UN-1C-V	822UN-1C-S
PCB terminal (Footprint for USA different terminal)	1A (SPNO)	-----	822UAN-1A-C	822UAN-1A-V	822UAN-1A-S
	1B (SPNC)		822UAN-1B-C	822UAN-1B-V	822UAN-1B-S
	1C (SPDT)		822UAN-1C-C	822UAN-1C-V	822UAN-1C-S

»» Ordering Information

822 E N - 1C - C
 1 2 3 4 5

- | | |
|---|---|
| 1. 822 -- Basic series designation
2. E -- Europe footprint
U -- USA footprint
UA -- USA different terminal
3. Blank -- standard type
N -- High sensitivity type | 4. 1A -- Single pole normally open
1B -- Single pole normally close
1C -- Single pole double throw
5. Blank -- Open type
C -- Flux tight
V -- Sealed type
S -- Sealed type washable |
|---|---|

»» Contact Rating

Resistive load	1A	1B	1C
		40A 14VDC	30A 14VDC

»» Coil Rating (DC)

◆ Standard type

Rated voltage (V)	Rated current $\pm 10\%$ at 23 °C (mA)	Coil resistance $\pm 10\%$ 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
6	315	19	130 % of rated Voltage	3.3	0.6	approx. 1.6W
9	180	50		5.0	0.9	
12	133	90		6.8	1.2	
24	66	362		13.9	2.4	

Note:(1)Continuous contact current at 20A.

◆ High sensitivity type

Rated voltage (V)	Rated current $\pm 10\%$ at 23 °C (mA)	Coil resistance $\pm 10\%$ 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
6	200	30	130 % of rated Voltage	75 % of rated Voltage	10 % of rated Voltage	approx. 1.2W
9	133	67.5				
12	100	120				
24	50	480				

Note:(1)Continuous contact current at 20A.

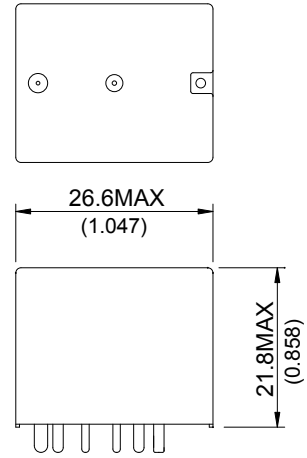
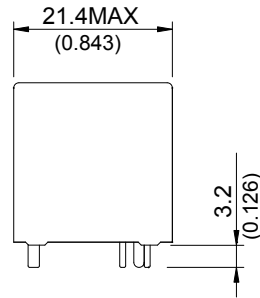
»» Specification

Contact material	AgSnO alloy	
Contact voltage drop ⁽¹⁾	Typ. 40mV at 10A	
Insulation resistance ⁽¹⁾	50M Ω Min. (DC 500V)	
Operate time ⁽¹⁾	5ms Max.	
Release time ⁽¹⁾	4ms 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	10~55Hz , amplitude 1.5 mm	
Shock resistance	20G , 11ms , half sine wave pulse	
Life expectancy	Mechanical	10,000,000 operations (frequency 18,000 operations/hr)
	Electrical	100,000 operations (frequency 1,200 operations/hr)
Operating ambient temperature	-40~+85 °C (no freezing)	
Storage temperature	-40~+130 °C	
Weight	Approx. 17.5g	

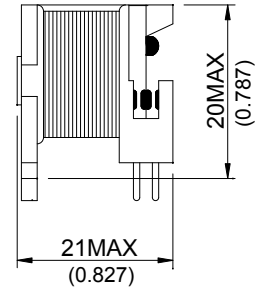
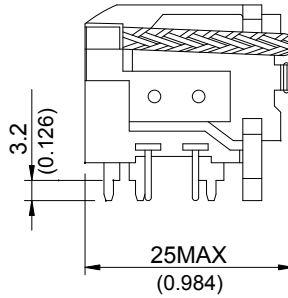
Note : (1) initial value

»» Outline Dimensions

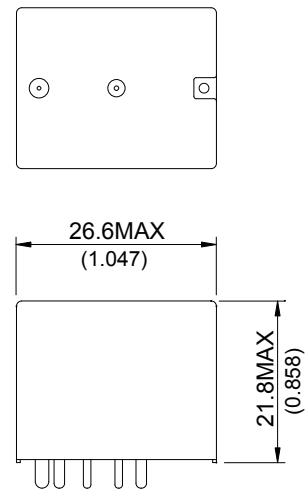
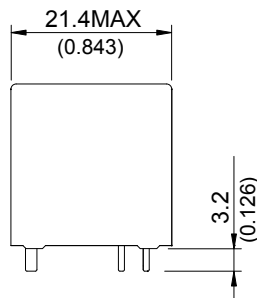
◆ 822E,UA



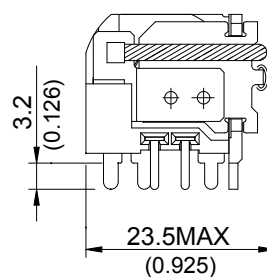
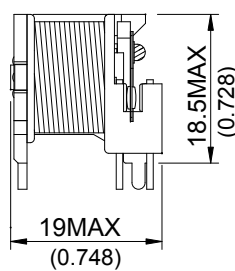
◆ 822E OPEN



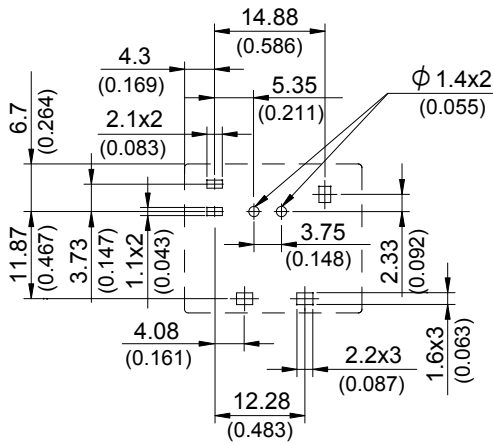
◆ 822U



◆ 822U OPEN

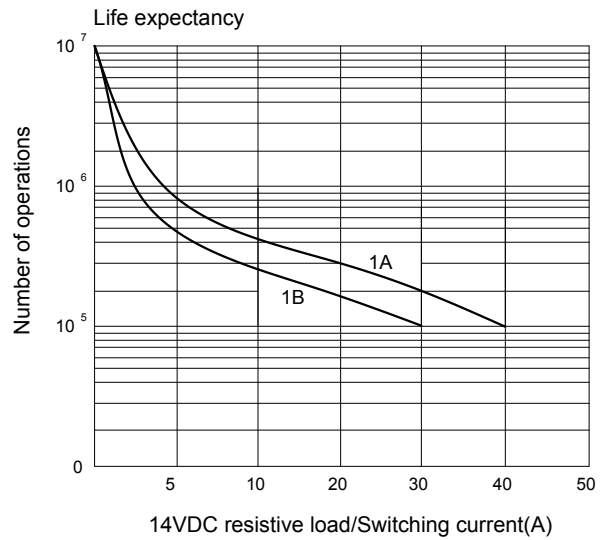
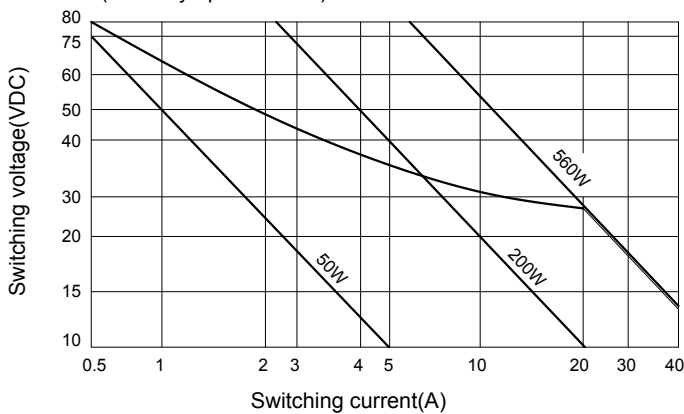


◆ 822UA

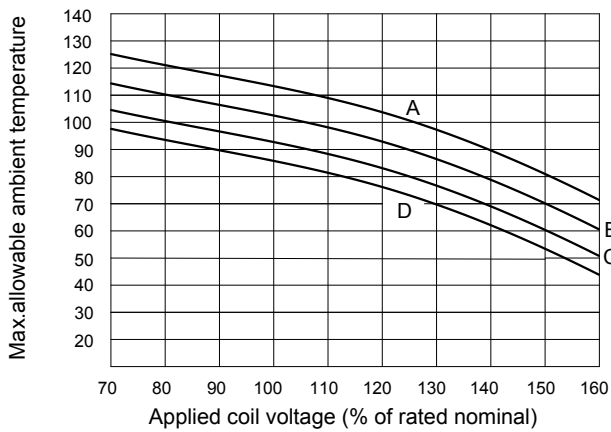


»» Engineering Data

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



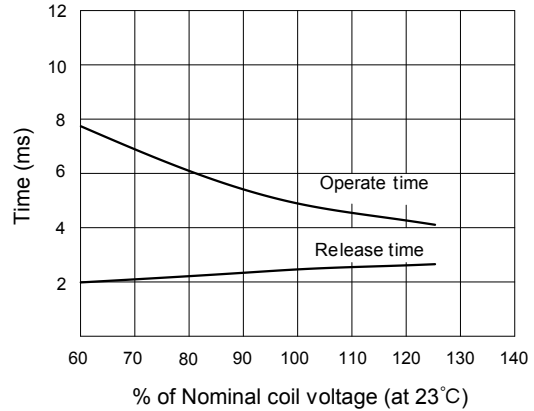
Ambient temperature vs coil voltage for continuous duty



A:10A B:20A C:30A D:40A Contact load(resistive)

Maximum mean coil temperature=155°C

Operate time/Release time



X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Automotive Relays](#) category:

Click to view products by [Song Chuan](#) manufacturer:

Other Similar products are found below :

[7-1414968-8](#) [7-1617345-6](#) [9-1617516-5](#) [G5CE1ASIDC12](#) [1393204-2](#) [1393302-3](#) [13Z99A115-0074](#) [1432872-1](#) [AR4-15F11-S01](#) [AR4-15H11](#)
[1617057-2](#) [1617058-6](#) [1617518-5](#) [2-1617057-2](#) [2-1617057-6](#) [2-1617058-3](#) [CB1F-M-12V-H15](#) [898H-1AH-D-001-12VDC](#) [AR4-11F11](#)
[AR4-15F11](#) [AR4-41F11](#) [24198-1](#) [4-1617057-0](#) [41FZ-200ACG-BSL](#) [5-1616920-2](#) [5-1617052-9](#) [5407-0011-HS](#) [CB1AF-M-12V-H59](#) [5-](#)
[1617346-8](#) [103-1AH-C-12VDC](#) [V23134A1052X299](#) [6-1393302-1](#) [897H-1AH-D-R1-U01-12VDC](#) [FTR-P3CP024W1-06](#) [1-1617057-8](#) [3-](#)
[1393305-1](#) [5436-0001-HS](#) [V23086-R1851-A502](#) [V23136-A0004-X075](#) [898H-1AH-D1SW-R1-12VDC](#) [RH4C1P2607](#) [RE031005](#)
[V23134M0052G242](#) [1393204-1](#) [23234B0001X001-EV-144](#) [AZ979-1A-24D](#) [2-1904020-1](#) [V23134B0052C642](#) [V23134B0053C642](#) [V23234-](#)
[A1001-X036](#)