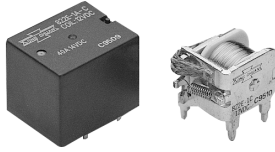




# 822



### »» Features

- High power PCB relay with 40A rating.
- USA & European footprint are both available.
- Open frame, dust cover, flux-free type, and sealed type are available.
- Offering SPNC, SPNO, SPDT of contact configuration
- Comply with RoHS-Directive 2011/65/EU, and ELV-Directive 2000/53/EC.

### »» Type List

#### ◆ Standard type

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

#### ◆ High sensitivity type

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

### »» Ordering Information

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

- |                                    |                                    |
|------------------------------------|------------------------------------|
| 1. 822 -- Basic series designation | 4. 1A -- Single pole normally open |
| 2. E -- Europe footprint           | 1B -- Single pole normally close   |
| U -- USA footprint                 | 1C -- Single pole double throw     |
| UA -- USA different terminal       |                                    |
| 3. Blank -- Standard type          | 5. Blank -- Open type              |
| N -- High sensitivity type         | C -- Flux tight                    |
|                                    | 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 ±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
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 ±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
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 <sup>(1)</sup>	Typ. 40mV at 10A	
Insulation resistance <sup>(1)</sup>	50MΩ Min. (DC 500V)	
Operate time <sup>(1)</sup>	5ms Max.	
Release time <sup>(1)</sup>	4ms 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	10~500Hz 4.4G
	Damage limits	10~500Hz 4.4G
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)	
Weight	Approx. 17.5g	

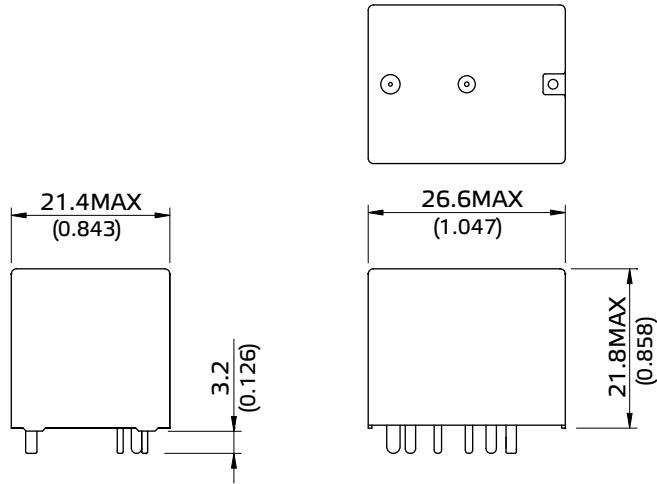
Note : (1) initial value. Operate and release time excluding contact bounce.



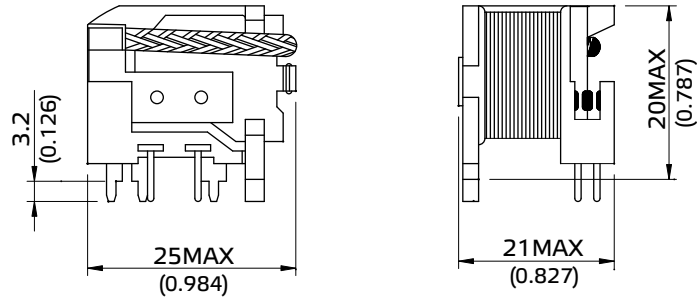
# 822

## »» Outline Dimensions

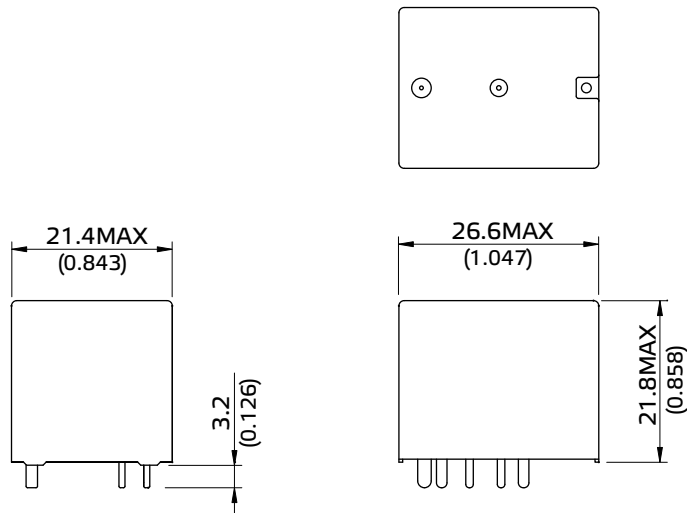
### ◆ 822E,UA



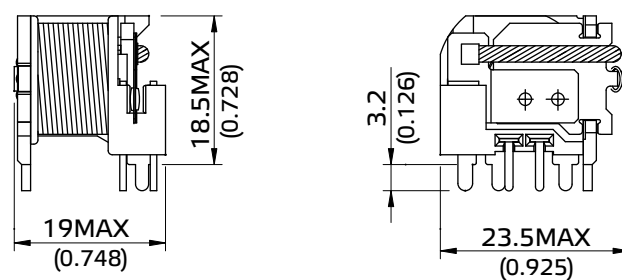
### ◆ 822E OPEN



### ◆ 822U



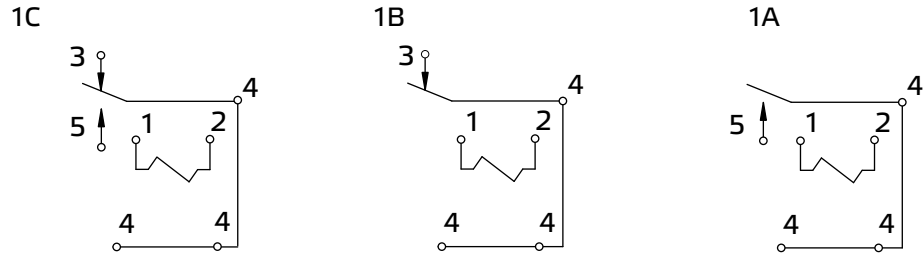
### ◆ 822U OPEN



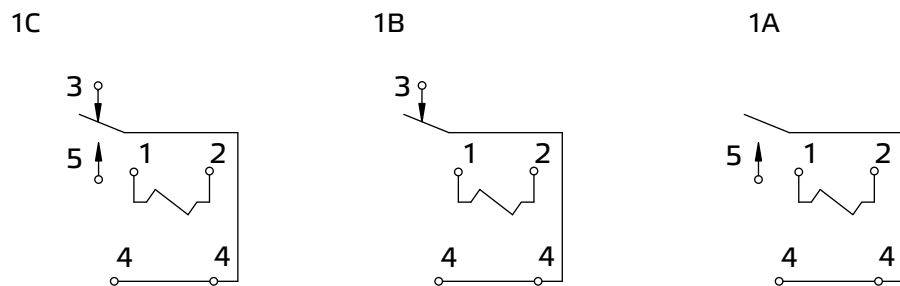
## Wiring Diagram

BOTTOM VIEW

### ◆822E,822UA,822U(OPEN)



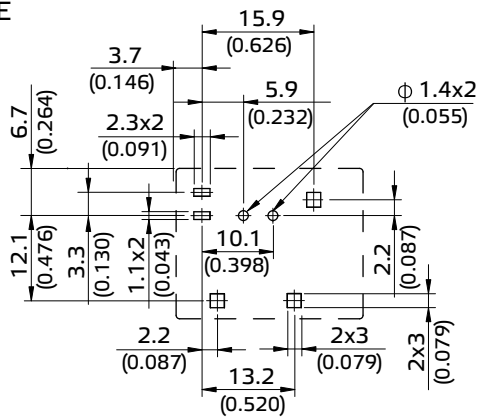
### ◆822U



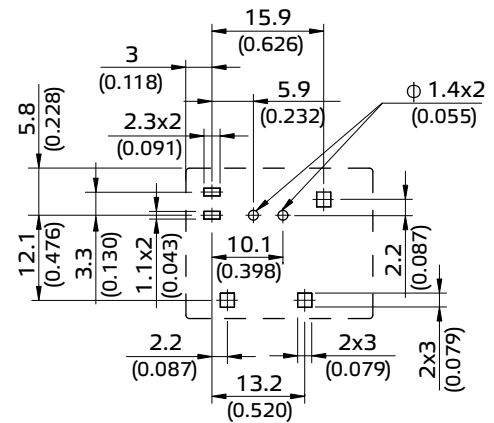
## PC Board Layout

BOTTOM VIEW

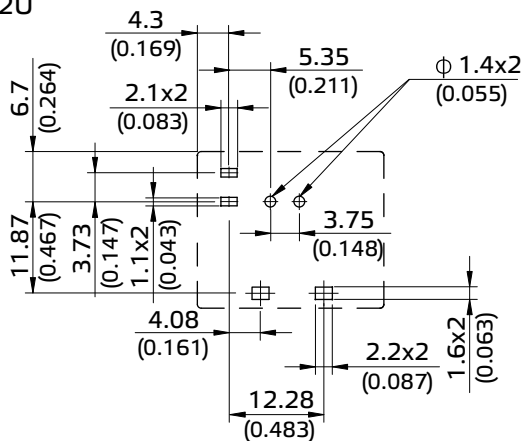
### ◆822E



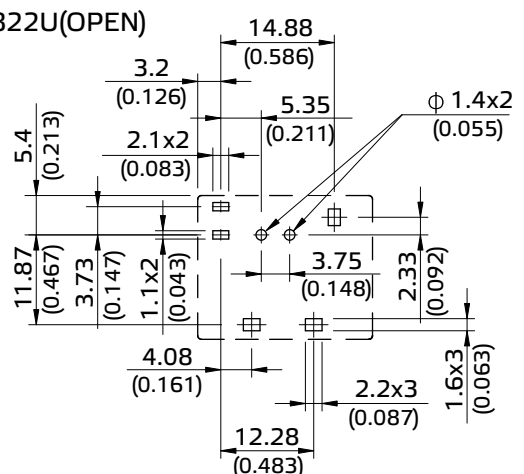
### ◆822E(OPEN)



### ◆822U



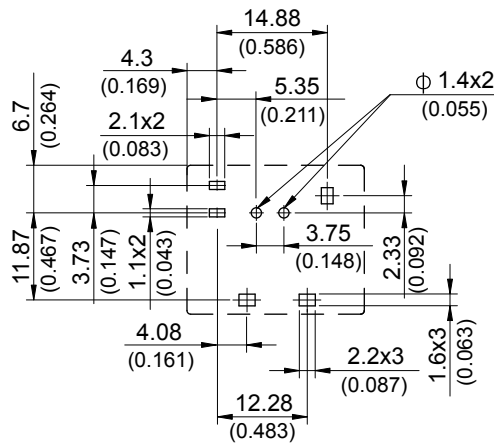
### ◆822U(OPEN)



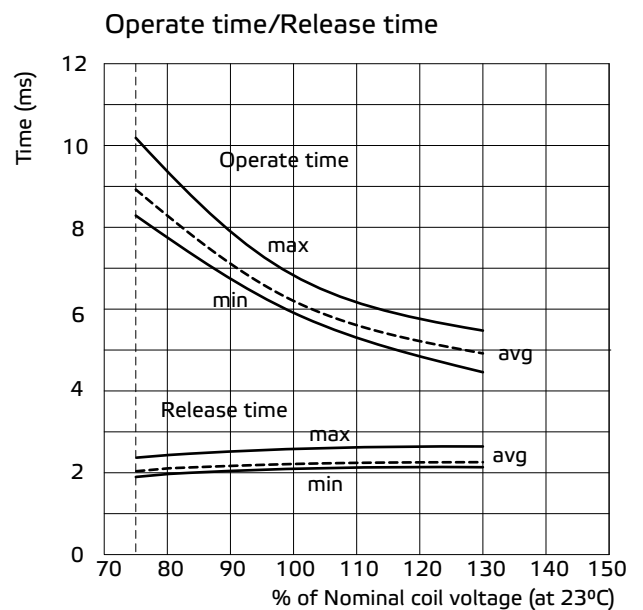
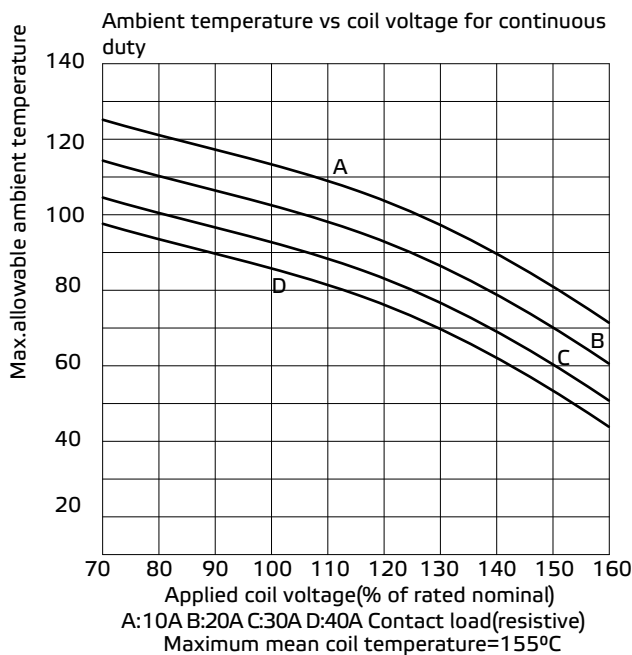
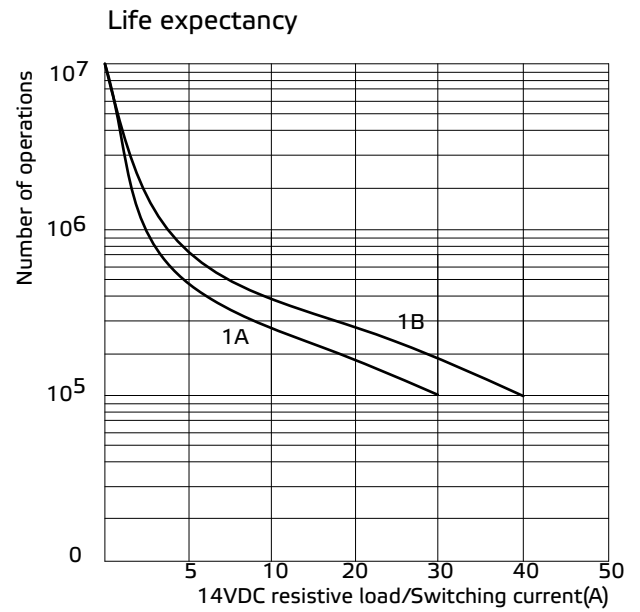
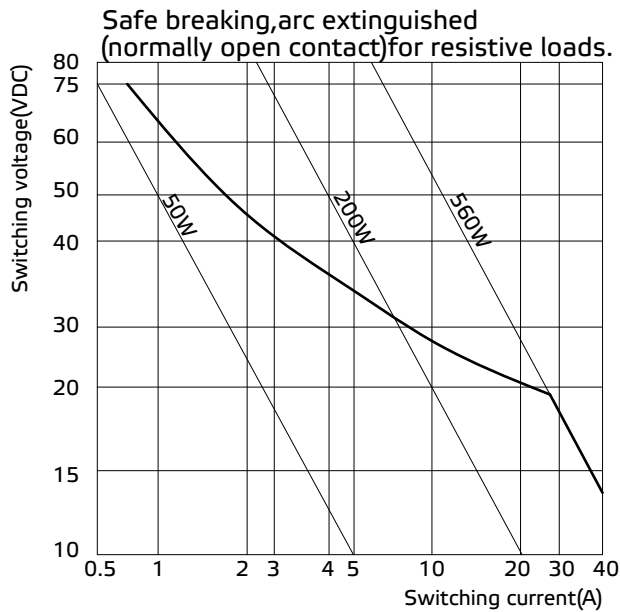


# 822

◆822UA



»» Engineering Data



**Disclaimer**

All technical performance data apply to the relay as such, specific conditions of the individual application are not considered. Please always check the suitability of the relay for your intended purpose. We do not assume any responsibility or liability for not complying herewith. We recommend to complete our questionnaire and to request our technical service. Any responsibility for the application of the product remains with the customer only. All specifications are subject to change without notification. All rights of Song Chuan are reserved.