

»» 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 configurations.
- ☐ Complies 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	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 ☐ - 1A - ☐ ☐
1 2 3 4 5 6

- | | |
|--|---|
| 1. 822 -- Basic series designation | 1C -- Single pole double throw |
| 2. E -- Europe footprint | 5. Blank -- Open type |
| U -- USA footprint | C -- Flux tight |
| UA -- USA different terminal | V -- Sealed type |
| | S -- Sealed type washable |
| 3. Blank -- Standard type | |
| N -- High sensitivity type | 6. ☐ -- Coil voltage (please refer to the coil rating data for the availability) |
| 4. 1A -- Single pole normally open | |
| 1B -- Single pole normally close | |

»» Contact Rating

Resistive load	1A	1B	1C
	40A 14VDC	30A 14VDC	NC: 20A 14VDC ; NO: 40A 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 ⁽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 ±10 % at 23°C (mA)	Coil resistance ±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.

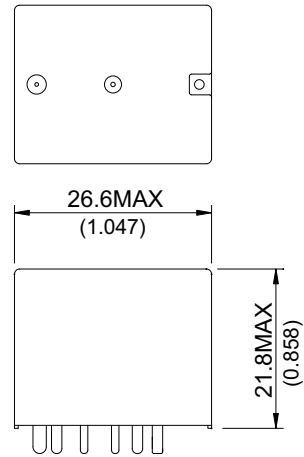
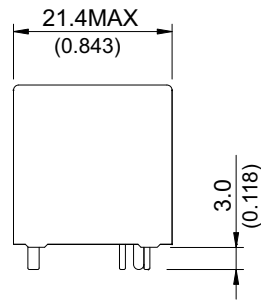
»» Specification

Contact material	AgSnO alloy	
Contact voltage drop ⁽¹⁾	Typ. 40mV at 10A	
Insulation resistance ⁽¹⁾	50MΩ 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	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	

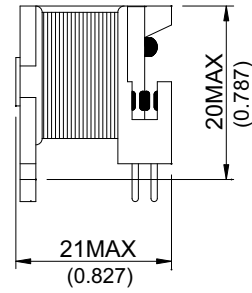
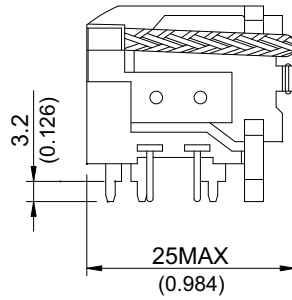
Note : (1) Initial value. Operate and release time excluding contact bounce.

>>> Outline Dimensions

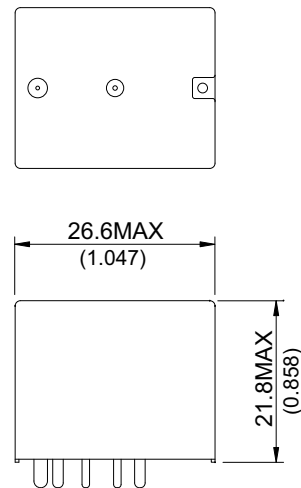
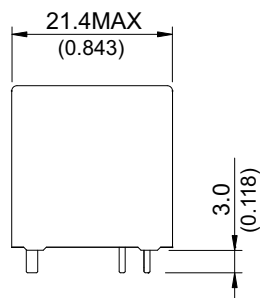
◆ 822E,UA



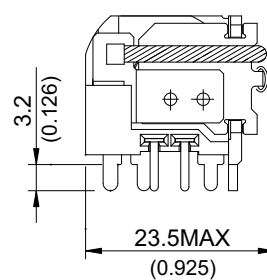
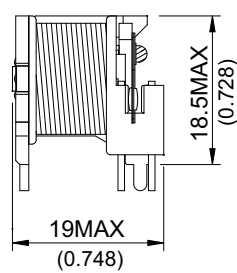
◆ 822E OPEN



◆ 822U

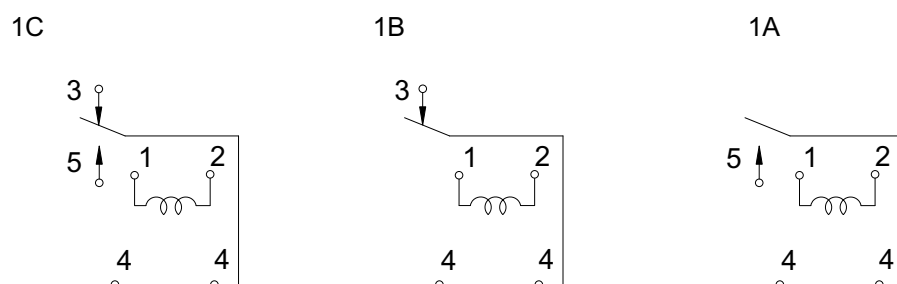
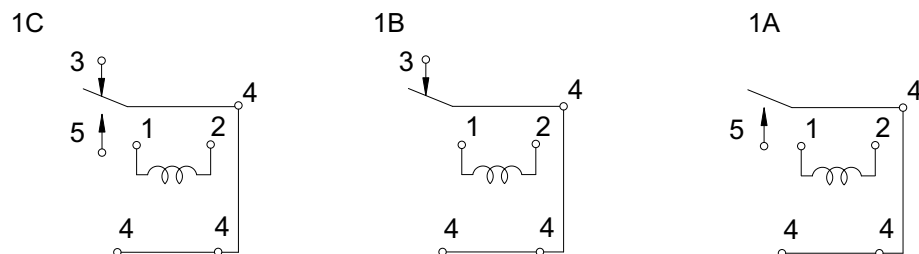


◆ 822U OPEN



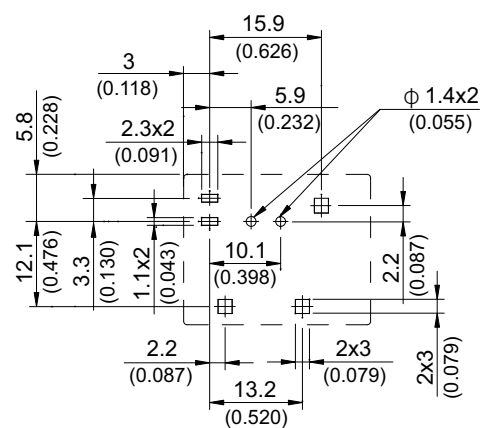
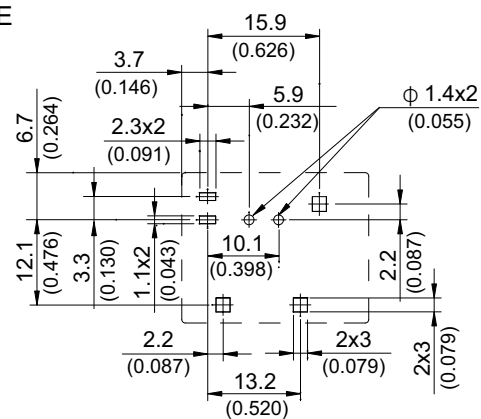
BOTTOM VIEW

◆822U

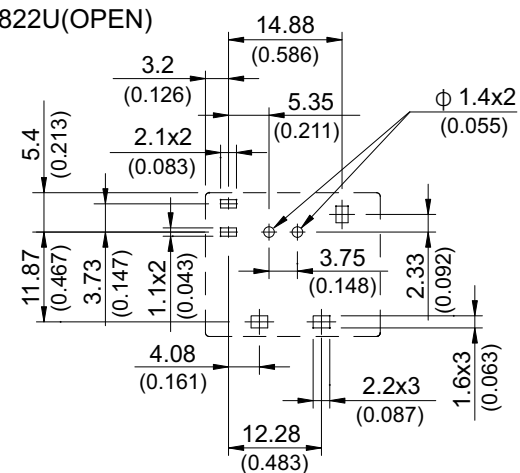
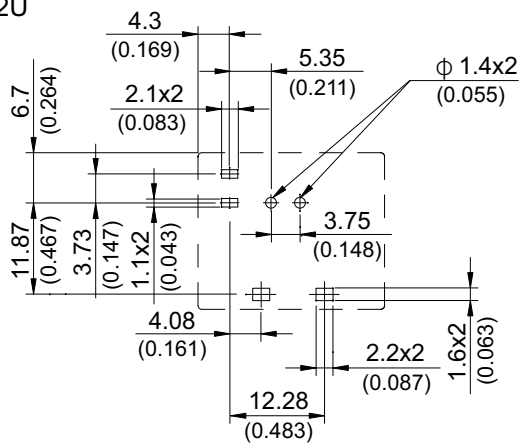


BOTTOM VIEW

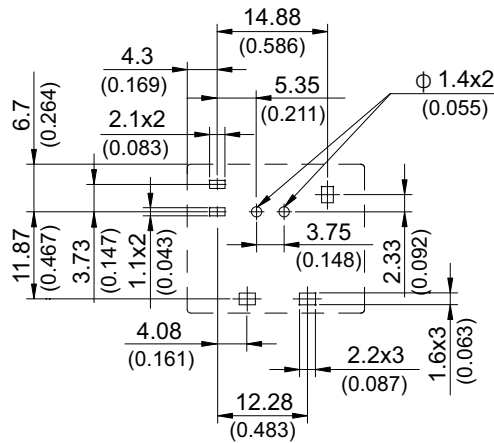
◆822E(OPEN)



◆822U(OPEN)



◆ 822UA



» Engineering Data

