

833H



### »» Features

- Low cost miniature PCB sugar cube relay.
- General purpose application.
- 10A 277VAC, 15A 125VAC ratings.
- SPNO, SPNC, SPDT and sealed flux free & sealed type washable are available.

### »» Type List

| Terminal style | Contact form | UL Insulation system approval | Designation (provided with) |             |                      |
|----------------|--------------|-------------------------------|-----------------------------|-------------|----------------------|
|                |              |                               | Flux tight                  | Sealed type | Sealed type washable |
| PCB terminal   | 1A<br>(SPNO) | -----                         | 833H-1A-C                   | 833H-1A-V   | 833H-1A-S            |
|                |              | F                             | 833H-1A-F-C                 | 833H-1A-F-V | 833H-1A-F-S          |
|                | 1B<br>(SPNC) | -----                         | 833H-1B-C                   | 833H-1B-V   | 833H-1B-S            |
|                |              | F                             | 833H-1B-F-C                 | 833H-1B-F-V | 833H-1B-F-S          |
|                | 1C<br>(SPDT) | -----                         | 833H-1C-C                   | 833H-1C-V   | 833H-1C-S            |
|                |              | F                             | 833H-1C-F-C                 | 833H-1C-F-V | 833H-1C-F-S          |

### »» Ordering Information

833H - 1A - F - C  
 1            2            3            4

1. 833H -- Basic series designation

2. 1A -- Single pole normally open

1B -- Single pole normally closed

1C -- Single pole double throw

3. Blank -- Standard type

F -- Class F

4. C -- Flux tight

V -- Sealed type

S -- Sealed type washable

### »» Contact Rating

|                |                                   |
|----------------|-----------------------------------|
| Resistive load | 10A 125VAC , 7A 250VAC , 7A 30VDC |
|----------------|-----------------------------------|

### »» Coil Rating (DC)

| Rated voltage (V) | Rated current ±10 % at 23 °C (mA) | Coil resistance ±10 % at 23 °C (Ω) | Max. continuous voltage at 70 °C | Pick up voltage(Max) at 23 °C | Drop out voltage(Min) at 23 °C | Power consumption at rated voltage |
|-------------------|-----------------------------------|------------------------------------|----------------------------------|-------------------------------|--------------------------------|------------------------------------|
| 3                 | 120                               | 25                                 | 150 % of rated voltage           | 75 % of rated voltage         | 10 % of rated voltage          | approx. 0.36W                      |
| 4                 | 91                                | 44                                 |                                  |                               |                                |                                    |
| 5                 | 72                                | 70                                 |                                  |                               |                                |                                    |
| 6                 | 60                                | 100                                |                                  |                               |                                |                                    |
| 9                 | 40                                | 225                                |                                  |                               |                                |                                    |
| 12                | 30                                | 400                                |                                  |                               |                                |                                    |
| 24                | 15                                | 1600                               |                                  |                               |                                |                                    |
| 36                | 10                                | 3600                               |                                  |                               |                                |                                    |
| 48                | 9.4                               | 5120                               |                                  |                               |                                |                                    |

## »» Specification

|                                      |   |   |
|--------------------------------------|---|---|
| Contact material                     | AgCdO alloy                             |   |
| Contact resistance <sup>(1)</sup>    | 100m Ω Max.                             |   |
| Operate time <sup>(1)</sup>          | 10ms Max.                               |   |
| Release time <sup>(1)</sup>          | 5ms Max.                                |   |
| Insulation resistance <sup>(1)</sup> | 100M Ω Min. (DC 500V)                   |   |
| Dielectric strength <sup>(1)</sup>   | Between open contact                    | : AC 500V , 50/60Hz 1 min.                                |
|                                      | Between contact and coil                | : AC 1500V , 50/60Hz 1 min.                               |
| Vibration resistance                 | Operating extremes                      | 10~50Hz , amplitude 1.5 mm                                |
|                                      | Damage limits                           | 10~50Hz , amplitude 1.5 mm                                |
| Shock resistance                     | Operating extremes                      | 10G   |
|                                      | Damage limits                           | 100G  |
| Life expectancy                      | Mechanical                              | 10,000,000 operations<br>(frequency 18,000 operations/hr) |
|                                      | Electrical                              | 100,000 operations<br>(frequency 1,200 operations/hr)     |
| Operating ambient temperature        | -30~+70 °C (no freezing) <sup>(2)</sup> |   |
| Weight                               | Approx. 10 g                            |   |

Note : (1) initial value

(2) -30~+85 °C is available.

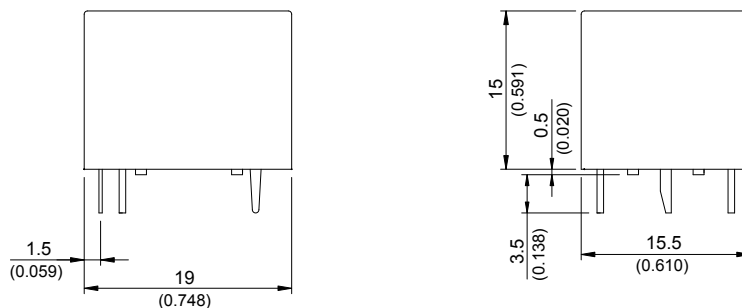
## »» Safety Approval

| Certified | UL / CUL | TUV         |
|-----------|----------|-------------|
| File No.  | E88991   | R3-09754206 |

## »» Safety Approval Rating

| UL / CUL         | TUV               |
|------------------|-------------------|
| 15A 125VAC       | 12A 125VAC        |
| 10A 277VAC       | 7A 250VAC         |
| 7A 30VDC         | 7A 30VDC          |
| 1/4HP 125/250VAC | 4A 250VAC cosφ0.3 |
| 1/3HP 125/250VAC |                   |

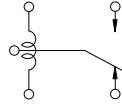
## »» Outline Dimensions



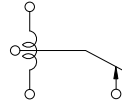
# 833H

## »» Wiring Diagram BOTTOM VIEW

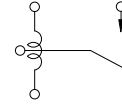
1C



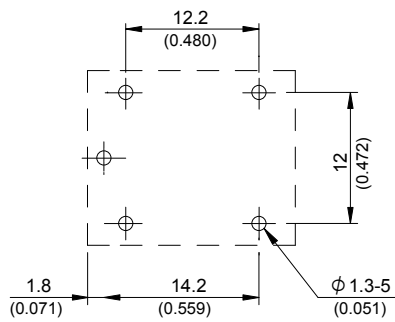
1B



1A



## »» PC Board Layout BOTTOM VIEW



## »» Engineering Data

