

833HM



»» Features

- ☐ Sugar cube automotive relay.
- ☐ General purpose applications for automotive & car alarm system.
- ☐ Optional for flux-free or sealed washable type.
- ☐ Comply 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
PCB terminal	1C (SPDT)	833HM-1C-C	833HM-1C-V	833HM-1C-S
	1A (SPNO)	833HM-1A-C	833HM-1A-V	833HM-1A-S
	1B (SPNC)	833HM-1B-C	833HM-1B-V	833HM-1B-S

»» Ordering Information

833 H M - 1C - C ☐
 1 2 3 4 5 6

- | | | | |
|--------|-------------------------------|-----------------------------|---|
| 1. 833 | -- Basic series designation | 5. C | -- Flux tight |
| 2. H | -- High power type | V | -- Sealed type |
| 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) |
| 1B | -- Single pole normally close | | |
| 1C | -- Single pole double throw | | |

»» Contact Rating

Resistive load	15A 14VDC
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»» Coil Rating (DC)

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
9	50.0	180	120 % of rated voltage	75 % of rated voltage	10 % of rated voltage	approx. : 0.45W
12	37.5	320		rated voltage	rated voltage	
24	18.8	1,280		rated voltage	rated voltage	

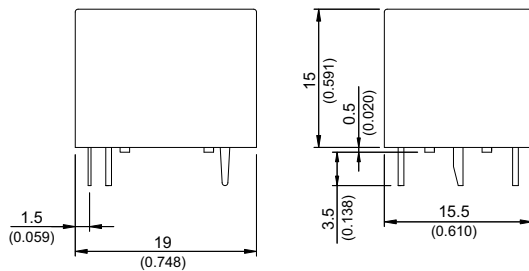
Note : (1) Continuous contact current at 10A.

» Specification

Contact material	AgSnO alloy	
Contact voltage drop ⁽¹⁾	Typ. 100mV at 10A	
Operate time ⁽¹⁾	10ms Max.	
Release time ⁽¹⁾	5ms Max.	
Insulation resistance ⁽¹⁾	100MΩ Min. (DC 500V)	
Dielectric strength ⁽¹⁾	Between open contact	: AC 500V , 50/60Hz 1 minute.
	Between contact and coil	: AC 500V , 50/60Hz 1 minute.
Vibration resistance	Operating extremes	10~500Hz , 4.4G
	Damage limits	10~500Hz , 4.4G
Shock resistance	Operating extremes	10G
	Damage limits	100G
Life expectancy	Mechanical	10,000,000 operations (frequency 18,000 operations/hr)
	Electrical	30,000 operations (frequency 1,200 operations/hr)
Operating ambient temperature	-40~+85°C (no freezing)	
Weight	approx. 10g	

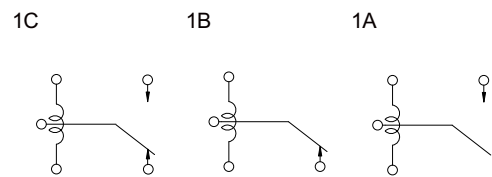
Note : (1) Initial value

» Outline Dimensions



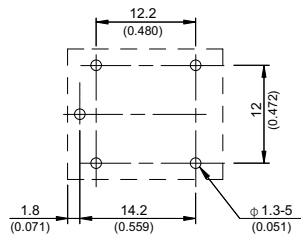
» Wiring Diagram

BOTTOM VIEW



» PC Board Layout

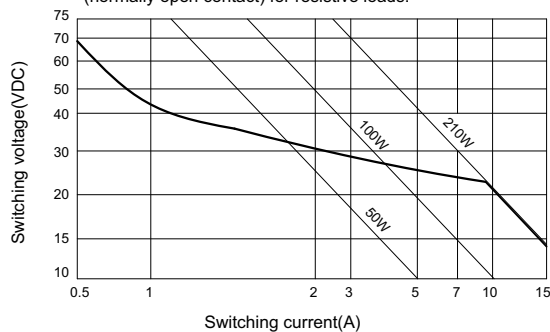
BOTTOM VIEW



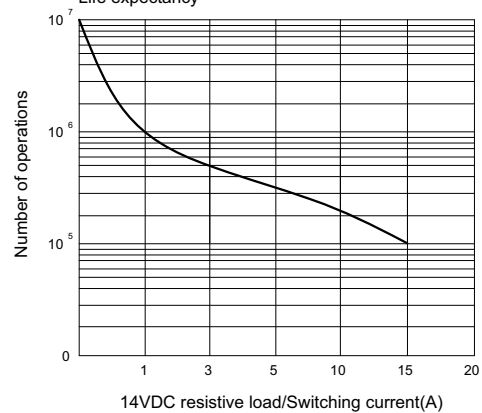
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»» Engineering Data

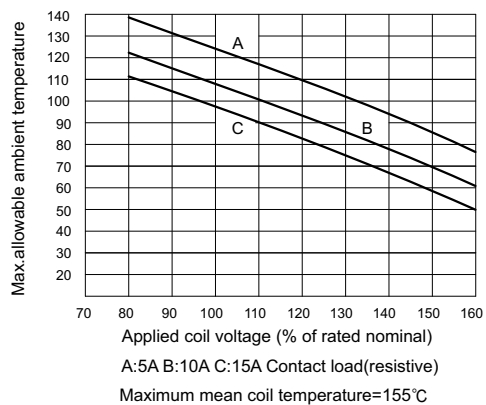
Safe breaking, arc extinguished
(normally open contact) for resistive loads.



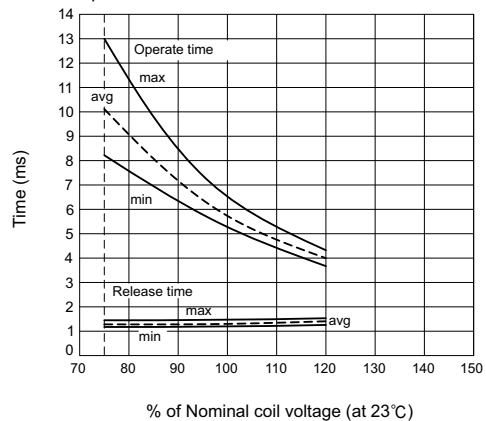
Life expectancy



Ambient temperature vs coil voltage for continuous duty



Operate time/Release time



Max. DC load breaking capacity

