

»» 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 2002/95/EC, 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

- | | | | |
|--------|-----------------------------|-------|-------------------------------|
| 1. 833 | -- Basic series designation | 4. 1A | -- Single pole normally open |
| | | 1B | -- Single pole normally close |
| 2. H | -- High power type | 1C | -- Single pole double throw |
| 3. M | -- Automotive relay | 5. C | -- Flux tight |
| | | V | -- Sealed type |
| | | S | -- Sealed type washable |

»» 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	75 % of	10 % of	approx. : 0.45W
12	37.5	320	rated	rated	rated	
24	18.8	1,280	voltage	voltage	voltage	

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

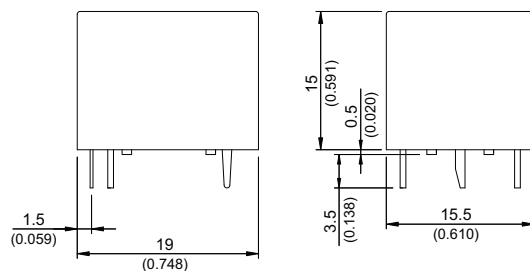
833HM

»» 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⁾	100M Ω 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	

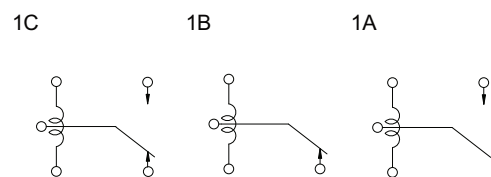
Note : (1) Initial value

»» Outline Dimensions



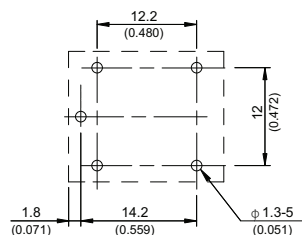
»» Wiring Diagram

BOTTOM VIEW



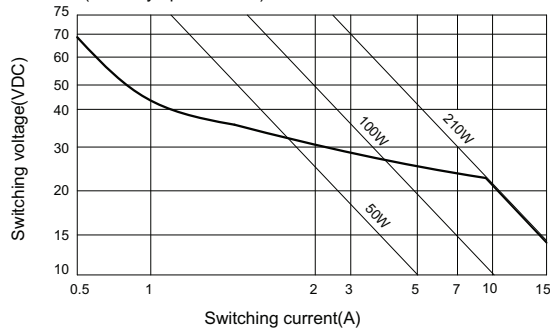
»» PC Board Layout

BOTTOM VIEW

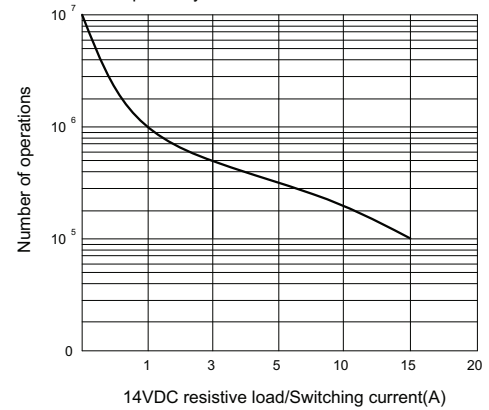


»» Engineering Data

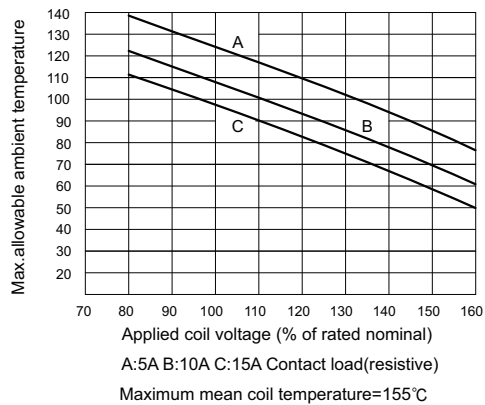
Safe breaking, arc extinguished
(normally open contact) for resistive loads.



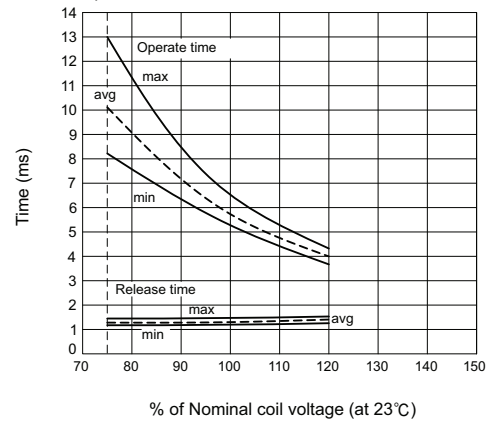
Life expectancy



Ambient temperature vs coil voltage for continuous duty



Operate time/Release time



Max. DC load breaking capacity

