



812HM



»» Features

- High performance sugar cube automotive relay.
- Heavy duty suitable for wiper motor control, flashing lamp control, adjustable driver seat motor control, etc.
- Optional for flux-free type or sealed washable type.
- Comply with RoHS-Directive 2002/95/EC, and ELV-Directive 2000/53/EC.

»» Type List

Terminal style	Contact form	Designation (provided with)	
		Flux tight	Sealed type washable
PCB terminal	1A (SPNO)	812HM-1A-C	812HM-1A-S
	1C (SPDT)	812HM-1C-C	812HM-1C-S

»» Ordering Information

812 H M - 1C - C
 1 2 3 4 5

- | | |
|------------------------------------|------------------------------------|
| 1. 812 -- Basic series designation | 4. 1A -- Single pole normally open |
| 2. H -- High power type | 1C -- Single pole double throw |
| 3. M -- Automotive relay | 5. C -- Flux tight |
| | S -- Sealed type washable |

»» Contact Rating

Resistive load	15A 14VDC	Motor load	5A 14VDC Inrush 25A
----------------	-----------	------------	---------------------

»» Coil Rating (DC)

Rated voltage (V)	Rated current $\pm 10\%$ at 23°C (mA)	Coil resistance $\pm 10\%$ 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	71.4	126	133% of rated voltage	65% of rated voltage	5% of rated voltage	approx. 0.64W
12	53.3	225				
24	26.7	900				

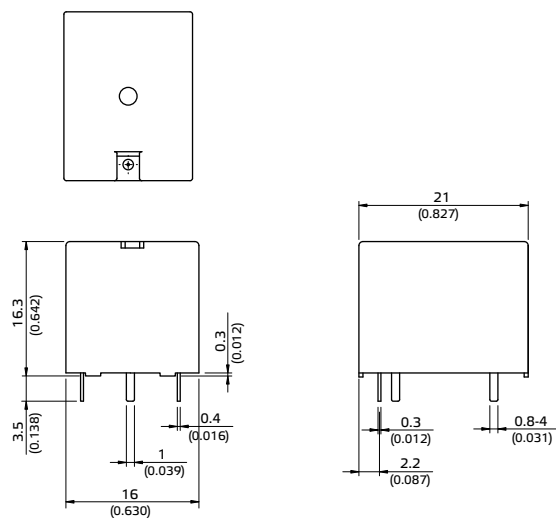
Note: (1) Continuous contact current at 10A.

»» Specification

Contact material	AgSnO alloy	
Contact voltage drop ⁽¹⁾	Typ. 50mV at 10A	
Operate time ⁽¹⁾	15ms Max.	
Release time ⁽¹⁾	10ms Max.	
Insulation resistance ⁽¹⁾	100 MΩ Min. (DC 500V)	
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	10~50Hz , amplitude 1.0 mm
	Damage limits	10~50Hz , amplitude 1.0 mm
Shock resistance	Operating extremes	10G
	Damage limits	100G
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. 10 g	

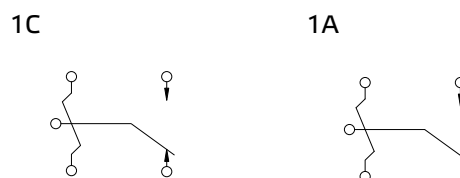
Note : (1) initial value

»» Outline Dimensions



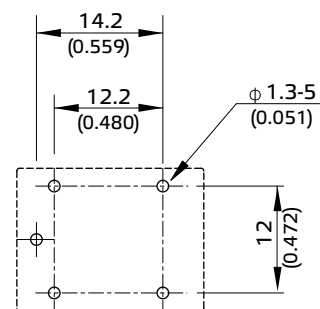
»» Wiring Diagram

BOTTOM VIEW



»» PC Board Layout

BOTTOM VIEW

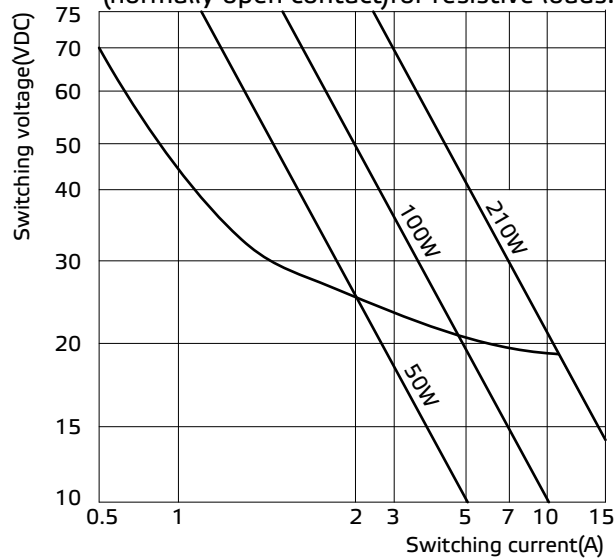




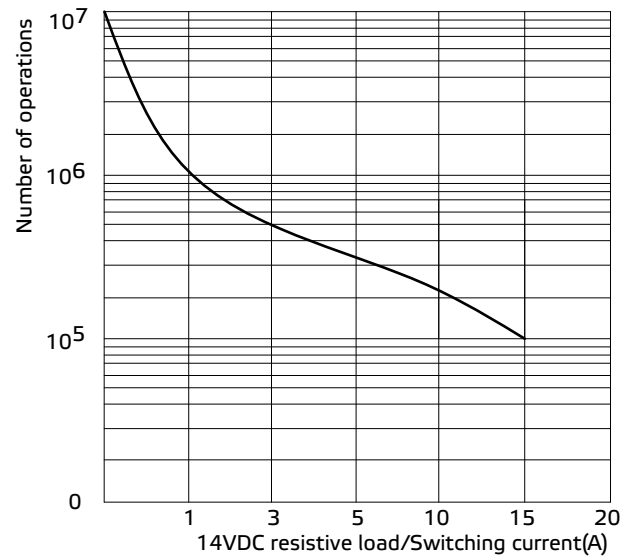
812HM

» Engineering Data

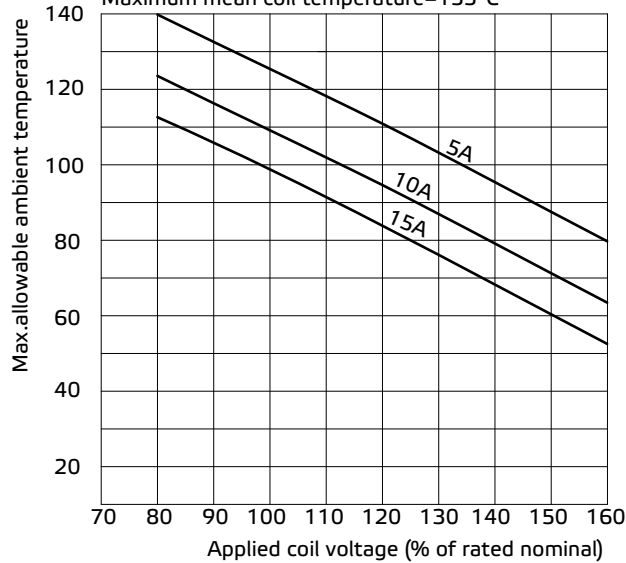
Safe breaking, arc extinguished
(normally open contact) for resistive loads.



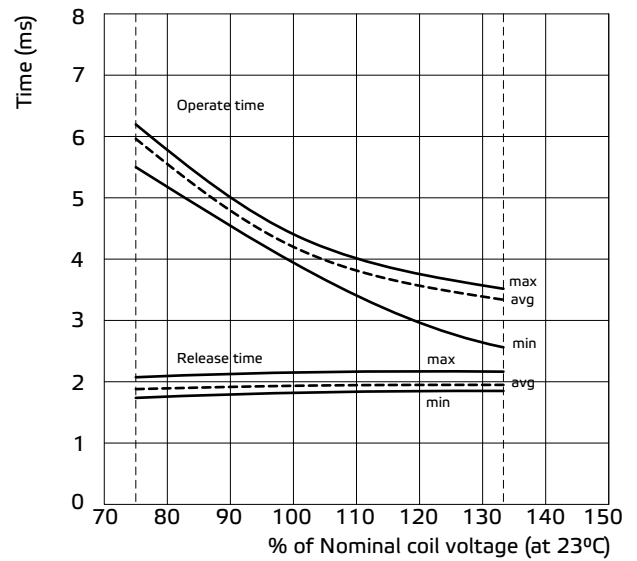
Life expectancy



Ambient temperature vs coil voltage for continuous duty
Maximum mean coil temperature=155°C



Operate time/Release time



Max. DC load breaking capacity

