



»» 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.
- Complies with RoHS-Directive 2011/65/EU, and ELV-Directive 2000/53/EC.

»» Type List

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

»» Ordering Information

812 H M - 1C - C
 1 2 3 4 5 6

- | | |
|---|--|
| 1. 812 -- Basic series designation
2. H -- High power type
3. M -- Automotive relay
4. 1A -- Single pole normally open
1C -- Single pole double throw | 5. C -- Flux tight
V -- Sealed type
S -- Sealed type washable
6. <input type="checkbox"/> -- Coil voltage (please refer to the coil rating data for the availability) |
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»» Contact Rating

Resistive load	15A 14VDC	Motor load	5A 14VDC Inrush 25A
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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	71.4	126	133 % of rated voltage	65 % of rated voltage	5 % of rated voltage	approx. 0.64W
12	53.3	225		rated voltage	rated voltage	
24	26.7	900		rated voltage	rated voltage	

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

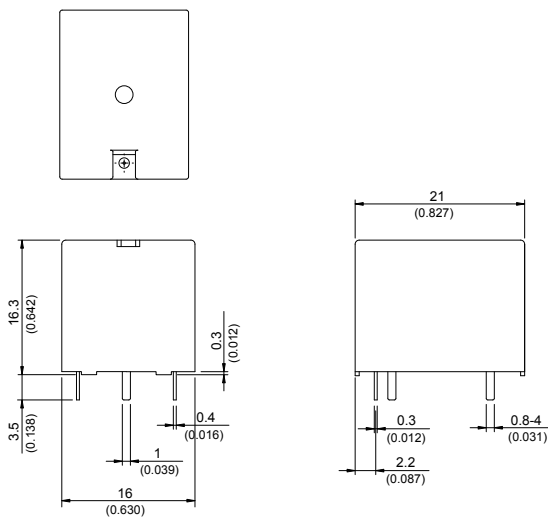
812HM

»» 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	10~500Hz , 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	100,000 operations (frequency 1,200 operations/hr)
Operating ambient temperature	-40~+85°C (no freezing)	
Weight	Approx. 10 g	

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

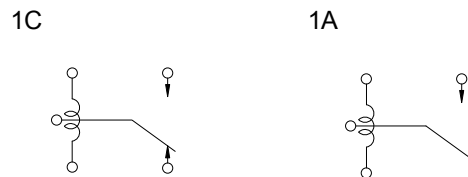
»» Outline Dimensions



TOLERANCE:
 LESS THAN: 1(0.039) ±0.1(0.004)
 5(0.197) ±0.3(0.012)
 20(0.787) ±0.5(0.020)
 MORE THAN: 20(0.787) ±1(0.039)

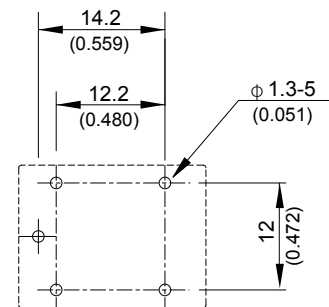
»» Wiring Diagram

BOTTOM VIEW



»» PC Board Layout

BOTTOM VIEW



»» Engineering Data

