

## Automotive Relay

## G8H

### Automotive Relay

- General purpose automotive relay.
- Handles heavy loads for various automotive applications.
- Plug-in and PCB types available.
- Wide temperature range:  $-40^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$ .
- High current capacity.



### Available Types

Plug-in Type	PCB Terminal Type		Contact form	Notes
	Standard	Sealed		
G8H-1A7T	G8H-1A7P	G8H-1A4P	SPST	Standard
G8H-1A7T-R	G8H-1A7P-R	G8H-1A4P-R	SPST	W/Suppression Resistor
G8H-1C7T	G8H-1C7P	G8H-1C4P	SPDT	Standard
G8H-1C7T-R	G8H-1C7P-R	G8H-1C4P-R	SPDT	W/Suppression Resistor

### Contact Data

Continuous carry current (max.)	20A(NO)/10A(NC)
Contact value drop (Initial value at $23^{\circ}\text{C}$ ) (max.)	200mV(NO)/200mV/(NC)
Inrush current (L/R=7ms; 15ms max.) (max.)	60A(NO)/30A(NC)

### Ratings/Specifications

Rated voltage	12 VDC	
Operating voltage (max.)	16 VDC	
Coil resistance	$80\ \Omega \pm 10\%$ (100 $\Omega$ available plug-in types)	
Pull in voltage (cold start)	at $+20^{\circ}\text{C}$ (max.)	7.0 VDC
	at $+80^{\circ}\text{C}$ (max.)	8.7 VDC
Drop-out voltage at $+20^{\circ}\text{C}$ (min.)	1.2 VDC	
Continuous carry current flow time (16V at $80^{\circ}\text{C}$ ) (max.)	Unlimited	
Operate time	10 ms	
Release time	5 ms	
Operating ambient temperature	$-40^{\circ}\text{C}$ to $125^{\circ}\text{C}$ *	
Mechanical life (min.)	10,000,000 cycles (at frequency of 18,000 operations/hour)	
Electrical life (resistive load) (min.)	100,000 cycles (14V; continuous carry current)	
Weight	20g	

\*Inquire before using this relay in any application at  $100^{\circ}\text{C}$  or higher.

## Application Examples

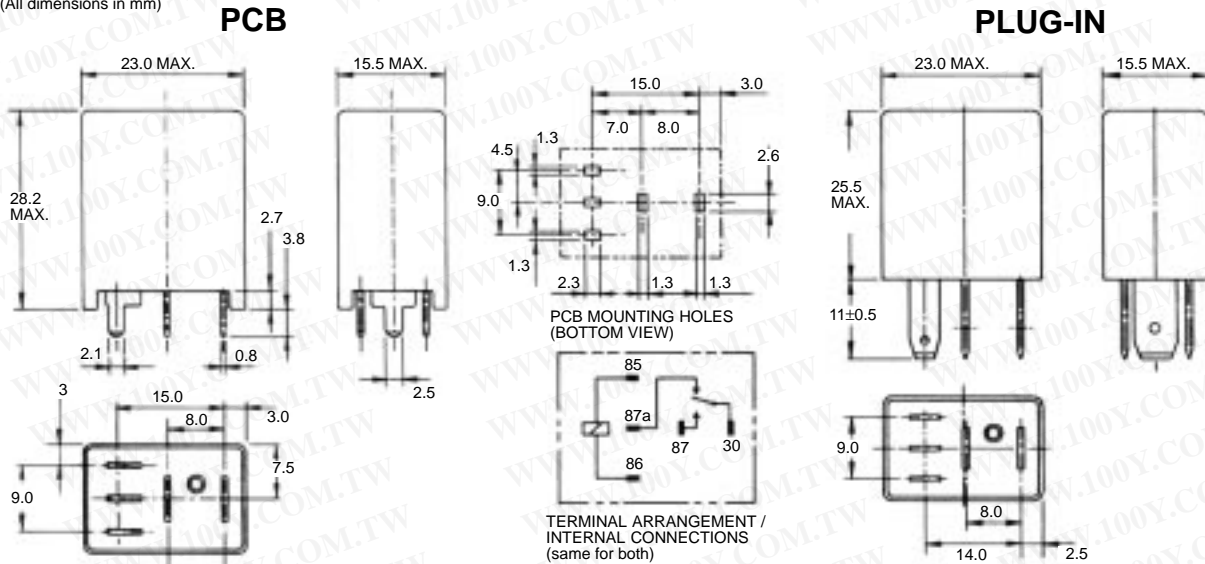
- Electric sunroof
- Retractable headlight
- Blower fan motor
- Head lamps
- Fuel pump

- ABS
- ATMs
- Fuel pump control
- Vending Machines
- Electronic Purse Systems

勝特力材料 886-3-5753170  
 勝特力电子(上海) 86-21-54151736  
 勝特力电子(深圳) 86-755-83298787  
[Http://www.100y.com.tw](http://www.100y.com.tw)

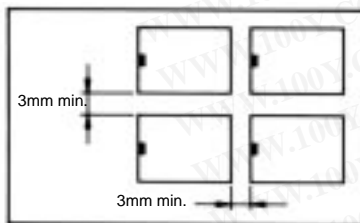
## Dimensions

(All dimensions in mm)



- Omron PCB relays may be mounted in any convenient location that is dry and not exposed to excessive dust, SO<sub>2</sub>, H<sub>2</sub>S or organic gases.
- All Omron PCB relays may be oriented in any desired direction. Whenever possible, however, care should be taken that they are not subjected to vibration along the direction of contact movement.

- If several relays are to be mounted on a single printed circuit board, they should be given at least 3mm clearance on all sides as shown in the diagram below.



**Note:** Proper spacing is necessary to dissipate heat build-up from individual relays. Other than this, there are normally no restrictions depending on application. Please contact Omron for details.