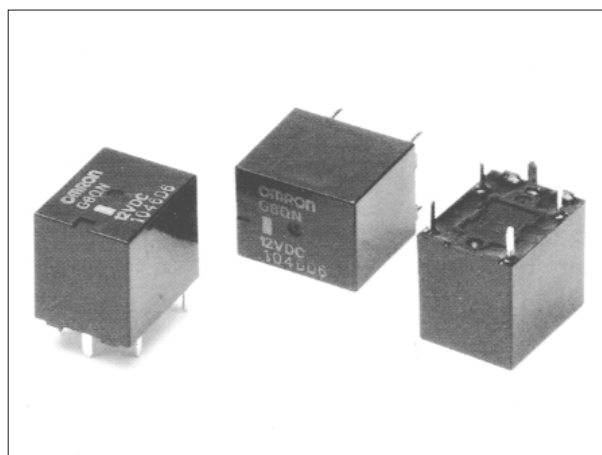


### Sub-Miniature Automotive PCB Relay

- Compact size
- High performance PCB relay
- Fully sealed construction
- Next generation general purpose automotive PCB relay
- Fully automated assembly



### Available Types

Type	Contact form	Recommended loads
G8QN-1C4 12DC	SPDT	Motor, Resistive

### Contact Data

Continuous carry current (max.)	5A
Inrush current (L/R=7ms; 15ms max.)	20A
Contact voltage drop (Initial value at 23°C) (max.)	100mΩ

### Ratings/Specifications

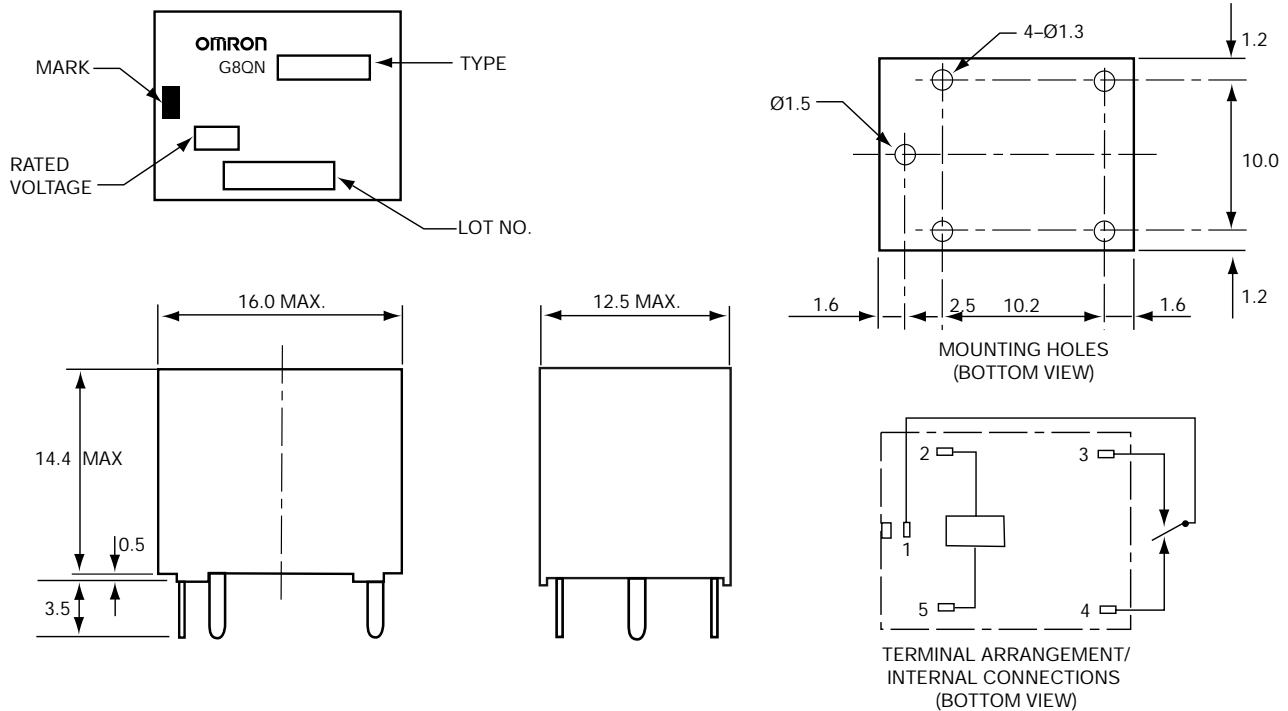
Rated voltage	12VDC	
Operating voltage (max.)	16VDC	
Coil resistance	210Ω± 10%	
Pull in voltage (cold start)	at +20°C (max.)	7.3VDC
	at +80°C (max.)	9.0VDC
Drop-out voltage at +20°C (min.)	0.9VDC	
Max. Continuous carry current flow time (16V at 80°C) (max.)	15 min	
Operating time (max.)	10 ms	
Release time (max.)	5 ms	
Operating ambient temperature	-40°C to +85°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	5.5g	

## Application Examples

- Power window
- Electric sunroof
- Intermittent Windshield wiper
- Power door lock
- Power seat
- Electric wing mirror
- Power radio aerial
- Washer pump

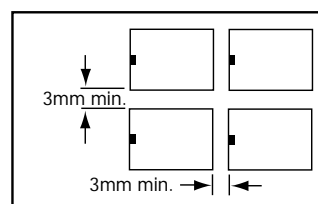
## Dimensions

(All dimensions in mm)



- Omron PCB relays may be mounted in any convenient location that is dry and not exposed to excessive dust,  $\text{SO}_2$ ,  $\text{H}_2\text{S}$  or organic gases.
- 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.

Cat. No. C-G8QN-001 In the interest of product improvement, specifications are subject to change without notice.

# OMRON