OMRON

Sub-Miniature Automotive PCB Relay

G8QN

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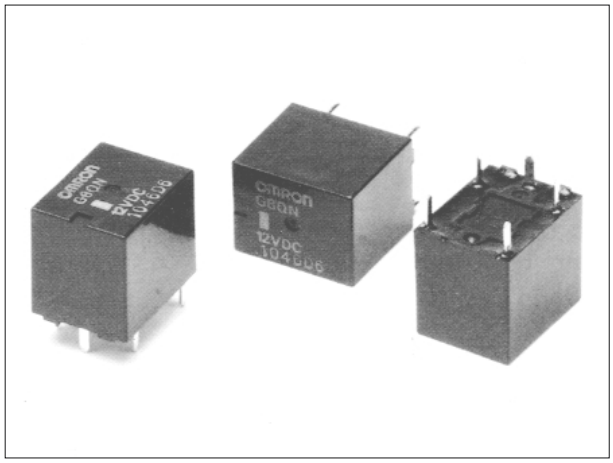
- Compact size
- High performance PCB relay
- Fully sealed construction
- Next generation general purpose automotive PCB relay
- Fully automated assembly



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

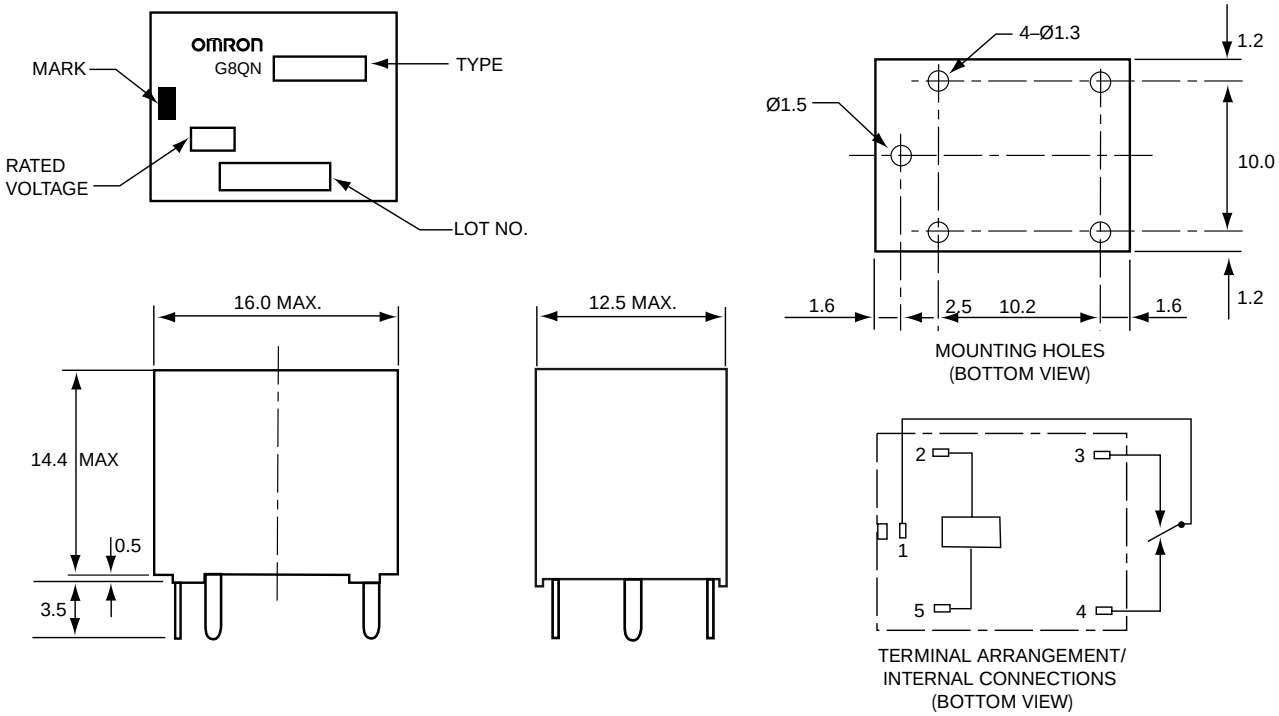
Rated voltage		12VDC
Operating voltage (max.)		16VDC
Coil resistance		210Ω± 10%
Pull in voltage (cold start)	at +20°C (max.)	7.3VDC
	at +80°C (max.)	9.0VDC
Drop-out voltage at +20°C (min.)		0.9VDC
Max. Continuous carry current flow time (16V at 80°C) (max.)		15 min
Operating time (max.)		10 ms
Release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

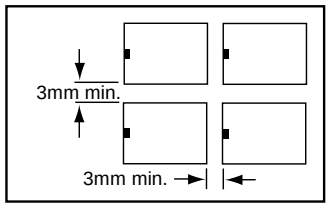
- Power window
- Electric sunroof
- Intermittent Windshield wiper
- Power door lock
- Power seat
- Electric wing mirror
- Power radio aerial
- Washer pump

Dimensions

(All dimensions in mm)



- Omron PCB relays may be mounted in any convenient location that is dry and not exposed to excessive dust, $S0_2$, H_2S 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 neccessary to dissapate heat build-up from individual relays. Other than this, there are normally no restrictions depending on application. Please contact Omron for details.