Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!
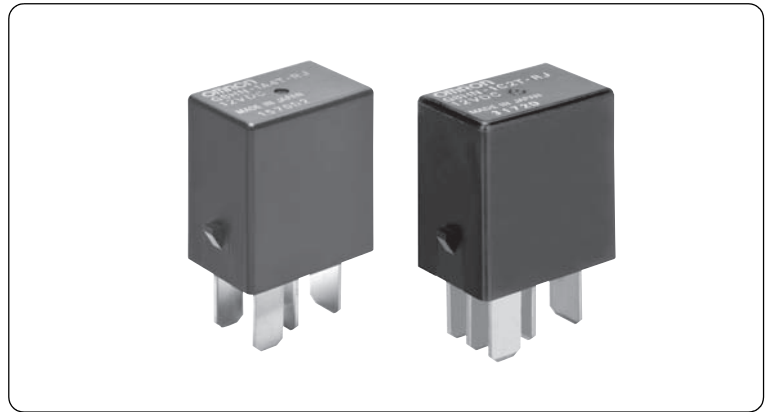

Contact us

G8HN

Automotive Micro ISO relay

General, multi-purpose relay

- 12VDC, 24VDC coil
- High-wattage
- Surge suppression, diode type available
- Fully sealed type (Protective structure)
- Bracket and rubber suspension type available
- High wattage type meets mini ISO wattage specification
- High contact reliability due to low terminal temperature rise.

■ Type standard

G8HN-☐☐☐☐-☐☐
①②③④ ⑤⑥

	Classification	Symbol	Meaning of the symbol
①	Number of contact poles	1	Number of contact poles
②	Contact structure	A	1a contact
		C	1c contact
③	Protective structure	2	Unsealed (In a case)
		4	Simple plastic seal
④	Terminal form	T	Plug-in terminal
⑤	Surge suppressor	D	Built-in diode
		R	Built-in resistor
⑥	Kind	J	Standard spec
		H	High current spec

Note: Built-in diode available

■ Classification

Classification	Terminal form	Contact structure	Protective structure	Rated coil		Type	Characteristics
				Voltage (V)	Resistance (Ω)		
Micro ISO	Plug-in ISO terminal	SPST(1a)	Unsealed (In a case)	DC24	315.1	G8HN-1A2T-RJ	Standard
				DC12	95.9		
					124.2	G8HN-1A2T-RH	High-current
			Simple plastic seal	DC24	315.1	G8HN-1A4T-RJ	Standard
				DC12	95.9		
					124.2	G8HN-1A4T-RH	High-current
		SPDT(1c)	Unsealed (In a case)	DC24	315.1	G8HN-1C2T-RJ	Standard
				DC12	95.9		
					124.2	G8HN-1C2T-RH	High-current
			Simple plastic seal	DC24	315.1	G8HN-1C4T-RJ	Standard
				DC12	95.9		
					124.2	G8HN-1C4T-RH	High-current

ISO Relay

Please confirm Omron Safety Precautions for all automotive relays first.
Omron can not guarantee automotive relays before finish making a contract with product specifications.

■ Ratings

● Operation coil

Rated voltage (V)		Coil resistance(Ω)		Rated current (mA)	Operating voltage (V)	Release voltage (V)	Service voltage range (V)	Rated power consumption (mW)
		Between terminals	(Surge suppression)					
DC	12	95.9	(1.1k, 1/4W)	125	8.0 or less	1.2 or more	DC10 to 16	1502
	12	124.2		97	8.0 or less	1.2 or more	DC10 to 16	1159
	24	315.1	(4.3k, 1/4W)	76	16.0 or less	2.4 or more	DC20 to 32	1828

● Switching area

Item		Performance		
Contact material		Silver alloy		
Kinds		Standard		High-current
Rated voltage		DC12V	DC24V	DC12V
Rated load	N.O. side	Resistance load, 20A	Resistance load, 10A	Resistance load, 35A
	N.C. side	Resistance load, 10A	Resistance load, 5A	Resistance load, 20A
Inrush current	N.O. side	100A	50A	120A
	N.C. side	60A	30A	60A
Continuous carry current*1	N.O. side	20A	10A	35A
	N.C. side	10A	5A	20A
Min. Carry / Switching Current		DC12V 1A		(Reference)

■ Performance

Item		Standard value		
		Standard		High-current
	Rated voltage	DC12V	DC24V	DC12V
Voltage drop between terminals	N.O. side	200 mV or less, 20A	200 mV or less, 10A	200 mV or less, 35A
	N.C. side	200 mV or less, 10A	200 mV or less, 5A	200 mV or less, 20A
Operating time*2		10ms or less		
Release time*2		15ms or less		
Insulation resistance*3	Between coil and terminal	10MΩ or more		
	Between homopolar contacts	10MΩ or more		
Withstand voltage*4	Between coil and terminal	AC500V for 1minute		
	Between homopolar contacts	AC500V for 1minute		
Vibration tolerance	Durability	33Hz 43.1m/s^2		
	Malfunction (Detection:1ms)	20 to 500Hz 43.1m/s^2		
Shock resistance	Durability	1000m/s^2(Operation time:6ms)		
	Malfunction (Detection:1ms)	100m/s^2(Operation time:11ms)		
Mechanical endurance		1,000,000 times or more		
Electrical endurance		100,000 times		
Ambient temperature		−40 to +100°C		
Ambient humidity		35 to 85%RH		
Weight		Approx. 20.0 g		

■ Packing

Packing form	Tray
MOQ*5	500pcs(50pcs × 10 trays)

Note: All values above are measured in early time under an ambient temperature of +20°C and humidity of 65% unless stated.
 *1. The value stated is at maximum temperature in a guaranteed ambient temperature.
 *2. It changes depend on how the rated voltage is operated, but bounce-time is not included.
 *3. Measured at DC500V.
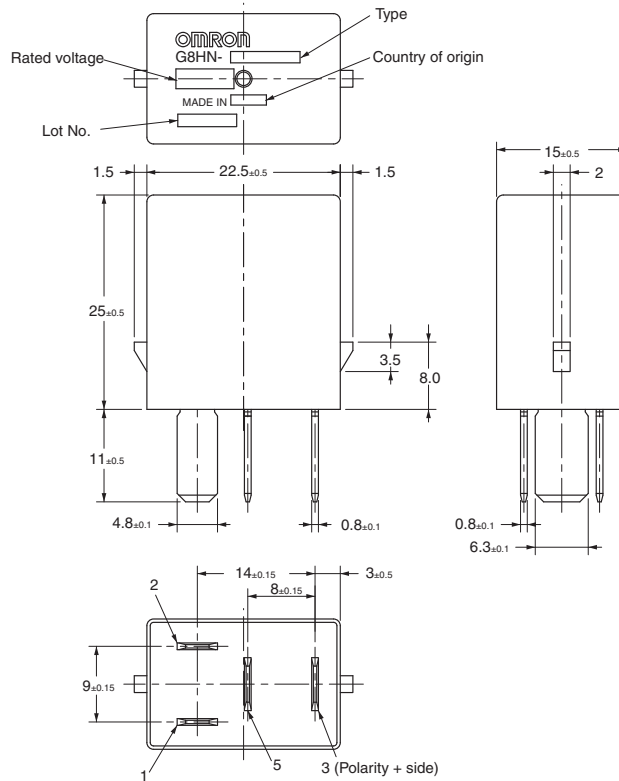 *4. Measured under 1mA of leak current, 50/60Hz for 1minute.
 *5. Minimum Order Quantity is subject to change, please feel free to contact our sales representatives.

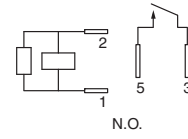Please confirm Omron Safety Precautions for all automotive relays first.
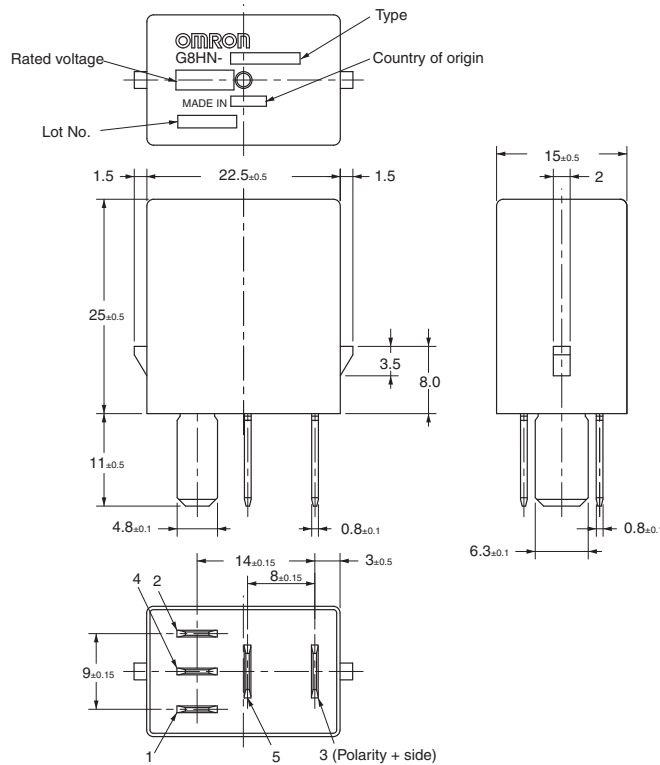Omron can not guarantee automotive relays before finish making a contract with product specifications.
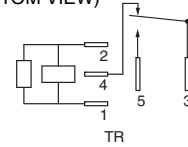
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■ Dimensions (Unit: mm)

G8HN(SPST)

Terminal arrangement / Internal connections (BOTTOM VIEW)

N.O.

G8HN(SPDT)

Terminal arrangement / Internal connections (BOTTOM VIEW)

TR

* Tolerance unless otherwise specified Less than 1 mm: ±0.1 mm
Less than 1 to 3 mm: ±0.2 mm
3 mm or more: ±0.3 mm

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ISO Relay