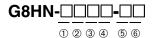
# **G8HN**Automotive Micro ISO relay

# 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



	Classification	Symbol	Meaning of the symbol
1	Number of contact poles	1	Number of contact poles
(2)	Contact structure	Α	1a contact
2	Contact Structure	С	1c contact
(3)	Protective structure	2	Unsealed (In a case)
9	Fiolective Structure	4	Simple plastic seal
4	Terminal form	Т	Plug-in terminal
(5)	Curao cuparocor	D	Built-in diode
9	Surge suppressor	R	Built-in resistor
<b>6</b>	Kind	J	Standard spec
0	Miliu	Н	High current spec

Note: Built-in diode available

# **■** Classification

Classification	Terminal form	Contact structure	Protective structure	Rated coil		Туре	Characteristics
Classification				Voltage (V)	Resistance (Ω)	туре	Characteristics
	Plug-in ISO terminal	SPST(1a)	Unsealed (In a case)	DC24	315.1	G8HN-1A2T-RJ	Standard
				DC12 95.9 124.2	95.9		
					124.2	G8HN-1A2T-RH	High-current
			Simple plastic seal	DC24	315.1	G8HN-1A4T-RJ	Standard
				DC12	95.9		
Micro ISO					124.2	G8HN-1A4T-RH	High-current
WIICIO ISO		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
					95.9	GOIIN-1041-NJ	Staridard
			p.act.o coar		124.2	G8HN-1C4T-RH	High-current

Please confirm Omron Safety Precautions for all automotive relays first.

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# ■ Ratings

#### Operation coil

	ted	Coil resistance(Ω)		Rated	Operating	Release	Service voltage	Rated power
	age /)	Between terminals	(Surge suppression)	current (mA)	voltage (V)	voltage (V)	range (V)	consumption (mW)
	12	95.9	(1.1k, 1/4W)	125	8.0 or less	1.2 or more	DC10 to 16	1502
DC	12	124.2	(1.1K, 1/4VV)	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		Star	High-current				
Rated voltage		DC12V	DC24V	DC12V			
Rated load	N.O. side	Resistance load, 20A	Resistance load, 10A	Resistance load, 35A			
naleu loau	N.C. side	Resistance load, 10A	Resistance load, 5A	Resistance load, 20A			
Inrush cur-	N.O. side	100A	50A	120A			
rent	N.C. side	60A	30A	60A			
Continu-	N.O. side	20A	10A	35A			
ous carry current*1	N.C. side	10A	5A	20A			
Min. Carry / Switching Current		DC12V 1A					

(Reference)

#### ■ Performance

Item			Standard value					
		Stan	High-current					
		Rated voltage	DC12V DC24V		DC12V			
Voltage drop		N.O. side	200 mV or less, 20A	200 mV or less, 10A	200 mV or less, 35A			
between terr	minals	N.C. side	200 mV or less, 10A	200 mV or less, 5A	200 mV or less, 20A			
Operating tir	ne*2			10ms or less				
Release time	e*2			15ms or less				
Insulation	Between co	il and terminal	10MΩ or more					
resistance*3	Between ho	mopolar contacts	10M $\Omega$ or more					
Withstand	Between coil and terminal		AC500V for 1 minute					
voltage*4	Between homopolar contacts		AC500V for 1minute					
Vibration	Durability		33Hz 43.1m/s <sup>2</sup>					
tolerance	Malfunction (Detection:1ms)		20 to 500Hz 43.1m/s <sup>2</sup>					
Shock re-	Durability		1000m/s²(Operation time:6ms)					
sistance Malfunction (Detection:1m			100m/s²(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 <sup>*5</sup>	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.

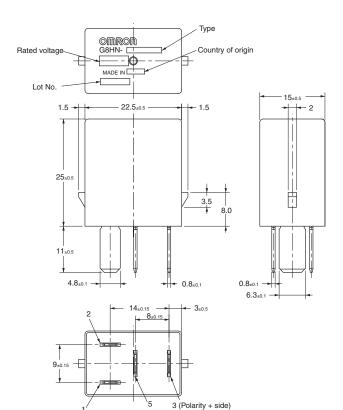
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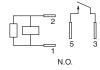
# ■ Dimensions (Unit: mm)

#### **G8HN(SPST)**



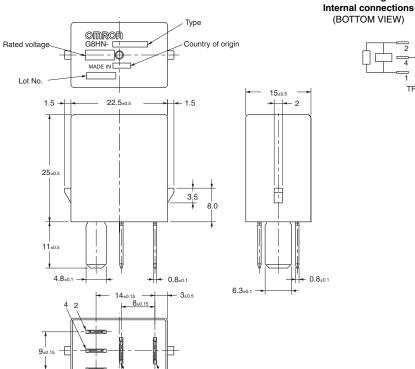


Terminal arrangement / Internal connections (BOTTOM VIEW)



# **G8HN(SPDT)**





Terminal arrangement /

 $^{\star}$  Tolerance unless otherwise specified Less than 1 mm:  $\pm 0.1$  mm Less than 1 to 3 mm: ±0.2 mm

3 mm or more: ±0.3 mm

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3 (Polarity + side)