

G8SN

Small PCB relay for automobile use

High-wattage general purpose relay

- Capable of switching loads up to 35A.



■ Purpose

- DC motor control for automobile parts (Door lock motor, power window motor, sunroof motor, etc.)

■ Type standard

G8SN-□□□-□-□

① ②③④ ⑤ ⑥

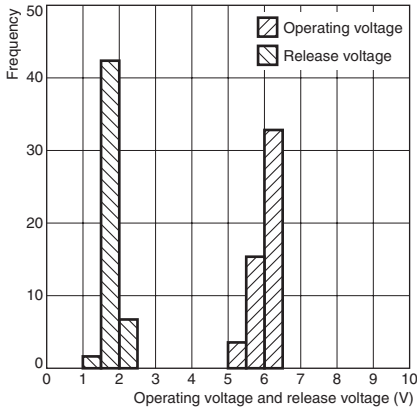
	Classification	Symbol	Meaning of the symbol
①	Basic type	G8SN	Mini-power relay for automobile use
②	Number of contact poles	1	Number of contact poles
③	Contact configuration	C	Standard contact configuration 1c
④	Protective construction	4	Simple plastic seal
⑤	Contact Spec	FD	Standard Spec
⑥	Appropriate specifications	Blank	Standard Spec
		English character	Appropriate Spec (set individually)
		Number: 2 digits	

■ Ratings/Performance

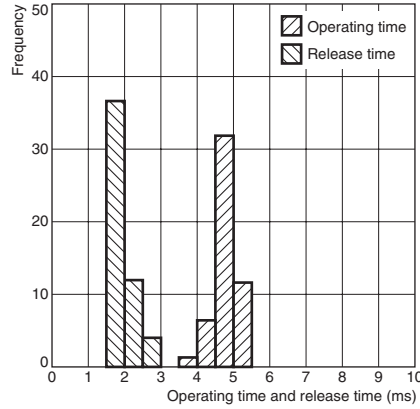
Item		Type	G8SN-1C4-FD	
			Standard	Low operating voltage
Coil	Rated coil voltage		12 VDC	
	Coil resistance (at 20°C)		320 Ω	210 Ω
	Service voltage range		10 to 16 VDC	
	Operating voltage (at 20°C)		8.0 V or less	6.5 V or less
	Release voltage (at 20°C)		1.0 V or more	0.9 V or more
Contact	Contact configuration		1c (SPDT)	
	Contact material		AgSn type (non-cadmium)	
	Rated load		14 VDC 30 A Motor load	
	Max switching current		35 A	
	Continuous switching current		10 A	
Endurance (Lifetime)	Mechanical		1,000,000 times	
	Electrical (Rated load)		100,000 times	
Mechanical	Impact resistance	Malfunction	100 m/s ²	
		Destruction	1,000 m/s ²	
	Vibration resistance	Malfunction	10~55 Hz, Peak to peak: 1.5 mm	
		Destruction	10~55 Hz, Peak to peak: 1.5 mm	
Ambient temperature range			-40~+85°C	
Weight			About 12.5 g	

Reference data

● **Operating voltage/Release voltage**
 Sample: G8SN-1C4-FD 12 VDC 210 Ω
 50 pcs

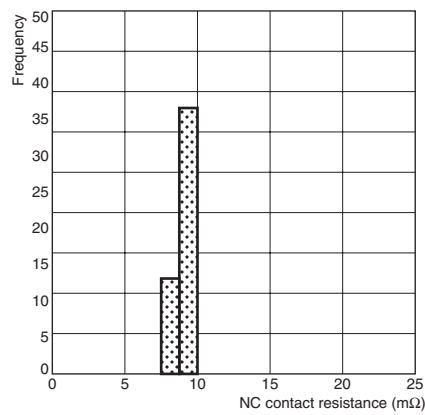
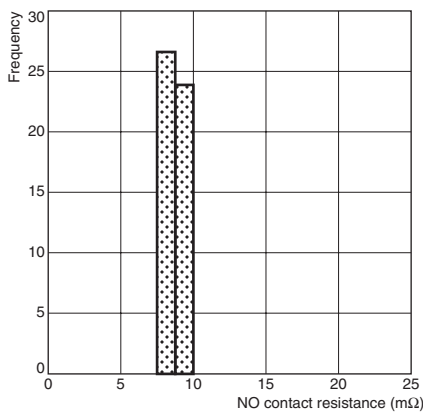


● **Operating time/Release time**
 Sample: G8SN-1C4-FD 12 VDC 210 Ω
 50 pcs
 Diode to absorb coil surge,
 without resistor



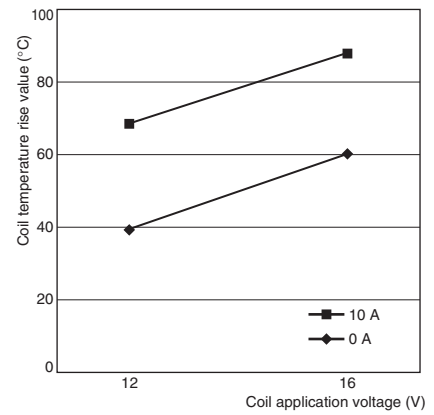
● **Contact resistance (Voltage drop method at 5 VDC, 1 A)**

Sample: G8SN-1C4-FD 12 VDC 210 Ω
 50 pcs



● **Coil temperature rise**

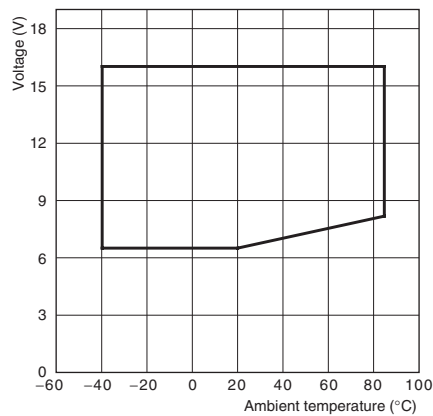
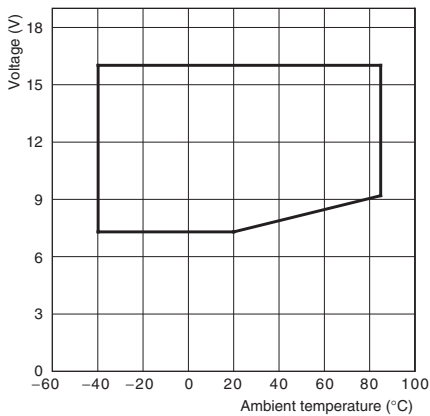
Sample: G8SN-1C4-FD 12 VDC 210 Ω
 5 pcs



● **Ambient temperature and service voltage range (Cold start)**

G8SN-1C4-FD (Coil resistance 320 Ω)

G8SN-1C4-FD (Coil resistance 210 Ω)



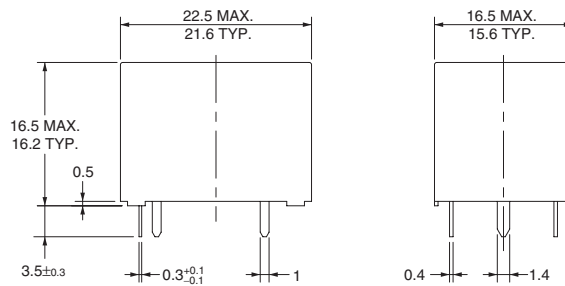
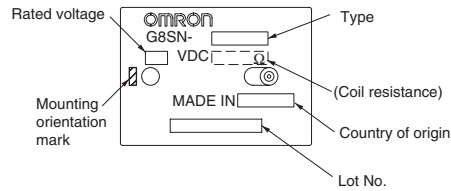
Reference data

Electrical endurance (Lifetime)

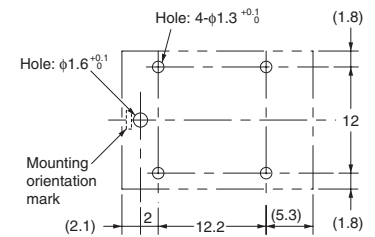
Spec	Application/Load	Load current	Switching frequency	Switching time
G8SN-1C4-FD	Door lock motor	Motor lock current (28 A)	On0.25 s/Off10 s	200,000
G8SN-1C4-FD	Electromagnetic clutch	Input 3.8 A	On2 s/Off2 s	300,000

Contour dimension (Unit: mm)

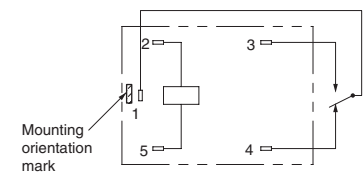
G8SN



PWB processing dimension (BOTTOM VIEW)



Internal connection (BOTTOM VIEW)



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

Relay for PCB