

# **Sub-Miniature PCB Relay**

**G8SN** 

- SPDT version.
- 10A Continuous Contact Rating @85°C.
- 10A, 16VDC Switching Rating.
- 30A Inrush on N.O. at 16VDC.
- Fully automated assembly.
- Dimensions (Max) 22.5 x 16.5 x 16.5 mm
- Made in Canada.

#### Available Types ———

Type	Description	
G8SN-1C4P-DC12	Sub-Miniature, SPDT, PCB Mount	

#### Contact Data -

Max Switching Current	Inrush 30A, Steady 10A
Max Switching Voltage	16V
Min. Carry / Switching Current	1A
Contact Material	Silver Tin Oxide (Cadmium Free)

## Coil Ratings (at 20°C)

Туре	Rated Voltage	Coil Resistance ±10%	Nominal Power Consumption	Pull in Voltage	Dropout Voltage
G8SN-1C4P- DC12	12VDC	180 Ω	0.8 W	7.3 V max @ 23°C	0.6 V min. @ 23°C

### **Typical Applications**

Car Audio	Courtesy Lamp
Power Window	Electric Sunroof
Power Door Lock	Power Seat

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### Characteristics

Max. Initial Contact Voltage Drop		25mV @ 1A	
NO Activation Time		10 ms max. (4.3 ms typical) @ 14 V	
NO Deactivation Time		10 ms max. (2.6 ms typical*) @ 14 V	
Insulation resistance		20 MΩ min (at 500 VDC)	
Dielectric strength		1.0 mA max. leakage at 900 VAC, 50-60 Hz for 1 sec between coil and contacts and between contacts.	
Ambient Operating T	emperature	-40°C to 85°C	
Humidity		Up to 97%	
Service life	Mechanical	1,000,000 operations min.	
Service ille	Electrical	100,000 operations min (load dependent).	
Weight		13g	

<sup>\*</sup> Typical data includes coil suppression. Release times may decrease without coil suppression.

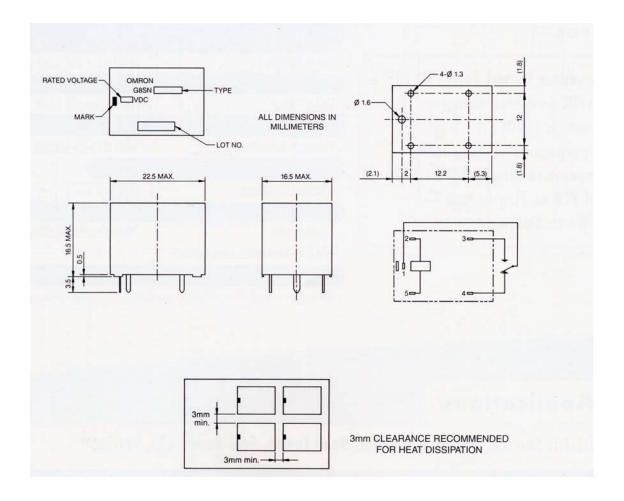
### Characteristic Reference Data ———

### **Durability Data**

Relay	Load Type	Current	Cycles Tested	
	N.O./N.C. Reversing Motor Load	20 A Inrush	100,000 + 100,000	
	N.O./N.O. Reversing Wotor Load	6 A Steady State	3s on, 3s off	
	N.O. /N.O. Book Wines Meter Load		200,000	
	N.O./N.C. Rear Wiper Motor Load	1 A Steady State	1s on, 4s off	
G8SN		N/A Inrush	300,000	
N.O. Starter Load	N.O. Starter Load	26 – 38 A Steady State	0.8s on, 9.2s off	
	N.O. Magnet Clutch Load	N/A Inrush	300,000	
N.O. Magnet Clutch Load	3.8 A Steady State	2s on, 2s off		
	N.O. Door Lock Motor Load	N/A Inrush	200,000	
N.O. Door Lock Motor Load		25 A Steady State	0.2s on, 19.8s off	

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### **Dimensions**



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