

# Automotive Relay

# G8JN

## General Purpose Automotive Power Relay

- Wide temperature range: -40° C to 125° C.
- Standard ISO terminal footprint.
- Handles heavy automotive load; inrush current 100 A.
- High current path fully welded; reduces heat buildup at full load.
- Made in North America.



## Ordering Information

Terminal type	Contact form	Cover	Resistor	Bracket	Model	
Plug in	SPDT	Standard	---	---	G8JN-1C7T-DC12	
			---	Molded plastic	G8JN-1C7T-MF-DC12	
			680 Ω	---	G8JN-1C7T-R-DC12	
			680 Ω	Molded plastic	G8JN-1C7T-MF-R-DC12	
		Weatherproof	---	---	---	G8JN-1C6T-DC12
			680 Ω	---	---	G8JN-1C6T-R-DC12
			680 Ω	Metal	---	G8JN-1C6T-F-R-DC12
			---	Metal	---	G8JN-1C6T-F-DC12
			---	---	---	---

## Specifications

### ■ Contact Data

Max. resistive load	SPDT	35 A (NO) / 20 A (NC)
Contact voltage drop (Initial value at 23° C)		≤200 mV (NO) / ≤100 mV (NC)
Max. inrush current	Inductive load	100 A (NO) / 40 A (NC)

### ■ Coil Data

Rated voltage	12 VDC
Operating voltage	10-16 VDC
Coil resistance (see note)	74 Ω ± 15%
Pick-up voltage	8 V (23°)
Dropout voltage	1 V at 23° C

**Note:** Coil resistance specified is without the suppression resistor.

## ■ Characteristics

Operate time at 23° C	20 ms max @ 12 VDC
Release time at 23° C	10 ms max @ 12 VDC
Insulation resistance	> 20 MΩ @500 VDC
Shock resistance	10G min.
Vibration resistance	9G min.
Duty cycle at rated load [16V at 80° C]	Up to 100%
Mechanical life	1,000,000 operations min.
Electrical life (resistive load)	100,000 operations minimum (14V / 35A)
Operating ambient temperature	-40° to 125° C
Weight	Approx. 34g

Note: Data shown are of initial value.

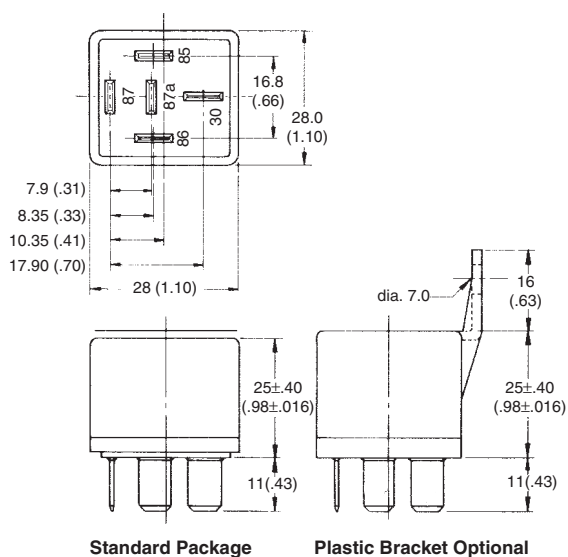
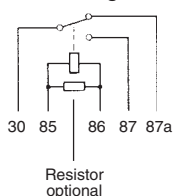
## Dimensions

Unit: mm (inch)

### ■ SPDT Plug-in Type

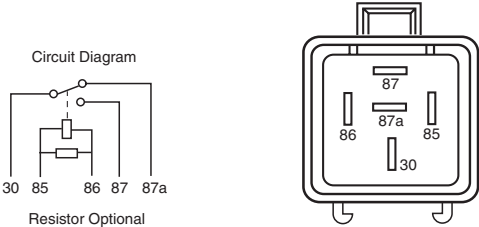
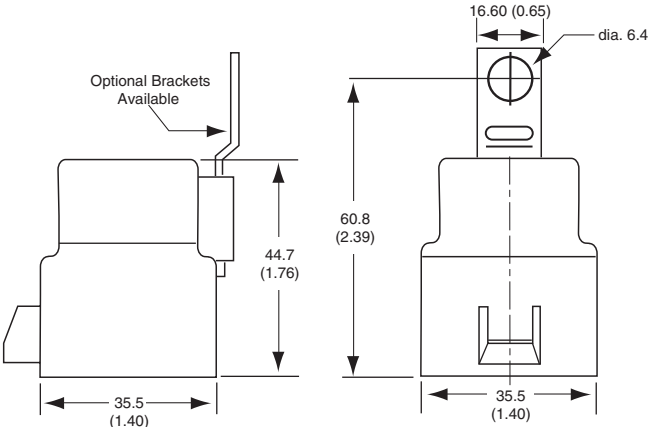
G8JN-1C7T- □□□

Circuit Diagram



# SPDT Plug-in Weatherproof Type

G8JN-1C6T- □□□



**Note:** In the interest of product improvement, specifications are subject to change.

# Omron Electronic Components, LLC

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To convert millimeters into inches, multiply by 0.03937. To convert grams into ounces, multiply by 0.03527.

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