#### OMRON

# Mini-280 Automotive Relay

#### **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	Description	Model
Plug in 280	SPST-NO	Standard with resistor	G8W-1A7T-R-DC12
	SPDT	Standard with resistor	G8W-1C7T-R-DC12
	SPST-NO	Weatherproof with resistor	G8W-1A6T-R-DC12
	SPDT	Weatherproof with resistor	G8W-1C6T-R-DC12
	SPST-NO	Weatherproof with straight metal bracket with resistor	G8W-1A6T-F-R-DC12
	SPDT	Weatherproof with straight metal bracket with resistor	G8W-1C6T-F-R-DC12

# **Specifications**

## Contact Data

Max. resistive load	35 A/20 A (NO/NC)
Contact voltage drop (initial value @23°C)	≤ 175 mV (NO)/≤ 100 mV (NC)
Max. inrush current	Inductive load: 100 A inrush/20 A break (NO)

## ■ Ratings

Rated voltage	DC 12 V
Operating voltage	DC 10 to 16 V
Coil resistance (see note 1)	91 Ω ±15%
Pick up voltage	8.0 at +23°C
Drop-out voltage	1 V at 23°C
Duty cycle at rated load (16 V at 80°C)	Up to 100%
Operate time (at 23°C)	20 ms @ 12 VDC
Release time (at 23°C)	10 ms @ 12 VDC
Operating ambient temperature	-40°C to +125°C
Mechanical life	1,000,000 operations min.
Electrical life (resistive load)	Min. 100,000 operations (14 V; 35 A)
Weight	Approx. 34 g

Note: 1. Coil resistance specified is without the suppression resistor.

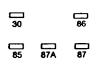
2. In the interest of product improvement, specifications are subject to change without notice.

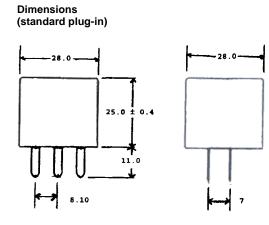
## **Dimensions**

Unit: mm

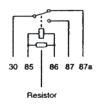
#### **■ G8W**

**Terminal Configuration** 





Circuit Diagram



Note: Omit terminal 87a in the SPST-NO version.

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