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[G8W-1A6T-F-R-DC12](#)

For any questions, you can email us directly:

sales@integrated-circuit.com

Mini-280 Automotive Relay G8W

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

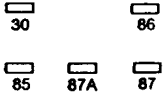
- Note:**
1. Coil resistance specified is without the suppression resistor.
 2. In the interest of product improvement, specifications are subject to change without notice.

Dimensions

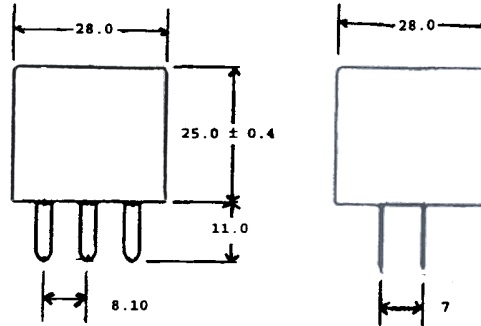
Unit: mm

■ G8W

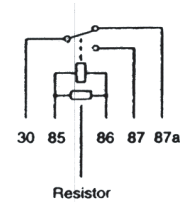
Terminal Configuration



Dimensions (standard plug-in)



Circuit Diagram



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

Omron Electronic Components, LLC

Terms and Conditions of Sales

I. GENERAL

1. **Definitions:** The words used herein are defined as follows.
 - (a) **Terms:** These terms and conditions
 - (b) **Seller:** Omron Electronic Components LLC and its subsidiaries
 - (c) **Buyer:** The buyer of Products, including any end user in section III through VI
 - (d) **Products:** Products and/or services of Seller
 - (e) **Including:** Including without limitation
2. **Offer/Acceptance:** These Terms are deemed part of all quotations, acknowledgments, invoices, purchase orders and other documents, whether electronic or in writing, relating to the sale of Products by Seller. Seller hereby objects to any Terms proposed in Buyer's purchase order or other documents which are inconsistent with, or in addition to, these Terms.
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 - (b) Delivery and shipping dates are estimates only; and
 - (c) Seller will package Products as it deems proper for protection against normal handling and extra charges apply to special conditions.
12. **Claims:** Any claim by Buyer against Seller for shortage or damage to the Products occurring before delivery to the carrier must be presented in detail in writing to Seller within 30 days of receipt of shipment.

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1. **Suitability:** IT IS THE BUYER'S SOLE RESPONSIBILITY TO ENSURE THAT ANY OMRON PRODUCT IS FIT AND SUFFICIENT FOR USE IN A MOTORIZED VEHICLE APPLICATION. BUYER SHALL BE SOLELY RESPONSIBLE FOR DETERMINING APPROPRIATENESS OF THE PARTICULAR PRODUCT WITH RESPECT TO THE BUYER'S APPLICATION INCLUDING (A) ELECTRICAL OR ELECTRONIC COMPONENTS, (B) CIRCUITS, (C) SYSTEM ASSEMBLIES, (D) END PRODUCT, (E) SYSTEM, (F) MATERIALS OR SUBSTANCES OR (G) OPERATING ENVIRONMENT. Buyer acknowledges that it alone has determined that the Products will meet their requirements of the intended use in all cases. Buyer must know and observe all prohibitions of use applicable to the Product/s.
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 - (b) Use in consumer Products or any use in significant quantities.

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ALL DIMENSIONS SHOWN ARE IN MILLIMETERS.

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



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