OMRON

Automotive Relay

General Purpose Automotive Power Relay

- \bullet 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)	$74 \Omega \pm 15\%$	
Pick-up voltage	8 V (23°)	
Dropout voltage	1 V at 23° C	

Note: Coil resistance specified is without the suppression resistor.

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■ 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	

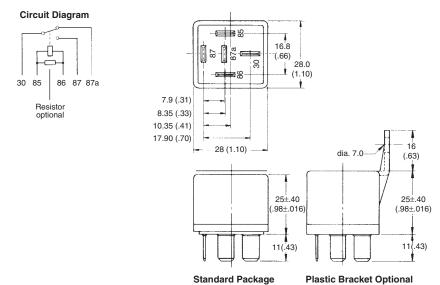
Note: Data shown are of initial value.

Dimensions

Unit: mm (inch)

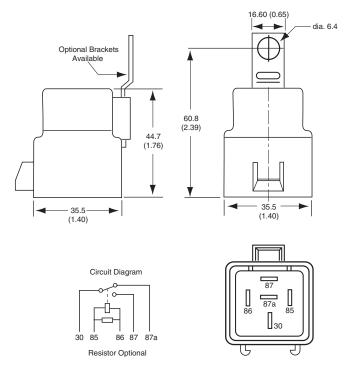
SPDT Plug-in Type

G8JN-1C7T-



■ SPDT Plug-in Weatherproof Type

G8JN-1C6T-



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

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Omron Electronic Components, LLC

Terms and Conditions of Sales

I. GENERAL

- Definitions: The words used herein are defined as follows.
- Terms: These terms and conditions (a)
- Seller: Omron Electronic Components LLC and its subsidiaries (b)
- The buyer of Products, including any end user in section III through VI Products and/or services of Seller Buyer: (c)
- Products: (d)
- Including without limitation Including: (e)
- Offer: Acceptance: These Terms are deemed part of all quotations, acknowledgments, 2 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
- 3. Distributor: Any distributor shall inform its customer of the contents after and including section III of these Terms.

II. SALES

- Prices: Payment: All prices stated are current, subject to change without notice by Seller. 1. Buyer agrees to pay the price in effect at time of shipment. Payments for Products received are due net 30 days unless otherwise stated in the invoice. Buyer shall have no right to set off any amounts against the amount owing in respect of this invoice.
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- Taxes: All taxes, duties and other governmental charges (other than general real property 7. and income taxes), including any interest or penalties thereon, imposed directly or indirectly on Seller or required to be collected directly or indirectly by Seller for the manufacture, production, sale, delivery, importation, consumption or use of the Products sold hereunder (including customs duties and sales, excise, use, turnover and license taxes) shall be charged to and remitted by Buyer to Seller.
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- Cancellation: Etc: Orders are not subject to rescheduling or cancellation unless Buyer 9 indemnifies Seller fully against all costs or expenses arising in connection therewith.
- Force Majeure: Seller shall not be liable for any delay or failure in delivery resulting from 10 causes beyond its control, including earthquakes, fires, floods, strikes or other labor disputes, shortage of labor or materials, accidents to machinery, acts of sabotage, riots, delay in or lack of transportation or the requirements of any government authority.
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 - Delivery and shipping dates are estimates only; and
- Seller will package Products as it deems proper for protection against normal (c) handling and extra charges apply to special conditions. 12. <u>Claims:</u> 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.

III. PRECAUTIONS

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- Suitability: IT IS THE BUYER'S SOLE RESPONSSIBILITY TO ENSURE THAT ANY OMRON PRODUCT IS FIT AND SUFFICIENT FOR USE IN A MOTORIZED VEHICLE APPLICATION. BUYER SHALL BE SOLELY RESPONSIBLE FOR DETERMINING APPRICATION: BUTER 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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- Use in consumer Products or any use in significant quantities. (b)

- (c) Energy control systems, combustion systems, railroad systems, aviation systems, medical equipment, amusement machines, vehicles, safety equipment, and installations subject to separate industry or government regulations.
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- AS A WHOLE HAS BEEN DESIGNED TO ADDRESS THE RISKS, AND THAT THE PRODUCT IS PROPERLY RATED AND INSTALLED FOR THE INTENDED USE WITHIN THE OVERALL EQUIPMENT OR SYSTEM.
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- 5 Errors And Omissions: The information on Seller's website or in other documentation has been carefully checked and is believed to be accurate; however, no responsibility is assumed for clerical, typographical or proofreading errors or omissions.
- Export Controls: Buyer shall comply with all applicable laws, regulations and licenses 6 regarding (a) export of the Products or information provided by Seller; (b) sale of Products to forbidden or other proscribed persons or organizations; (c)disclosure to non-citizens of regulated technology or information.

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- Waiver: No failure or delay by Seller in exercising any right and no course of dealing 1 between Buyer and Seller shall operate as a waiver of rights by Seller.
- Assignment: Buyer may not assign its rights hereunder without Seller's written consent. Law: These Terms are governed by Illinois law (without regard to conflict of laws). Federal
- and state courts in Illinois have exclusive jurisdiction for any dispute hereunder. 4 Amendment: These Terms constitute the entire agreement between Buyer and Seller relating to the Products, and no provision may be changed or waived unless in writing
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 - Energy control systems, combustion systems, railroad systems, aviation systems, medical equipment, amusement machines, vehicles, safety (ii) equipment, and installations subject to separate industry or government regulations. (iii) Use in consumer products or any use in significant quantities.

 - (iv) Systems, machines and equipment that could present a risk to life or property. Please know and observe all prohibitions of use applicable to this

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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.



55 E. Commerce Drive, Suite B Schaumburg, IL 60173

OMRON ON-LINE

Global - http://www.omron.com USA - http://www.components.omron.com

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Cat. No. J01C-E-01

01/07

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Printed in USA