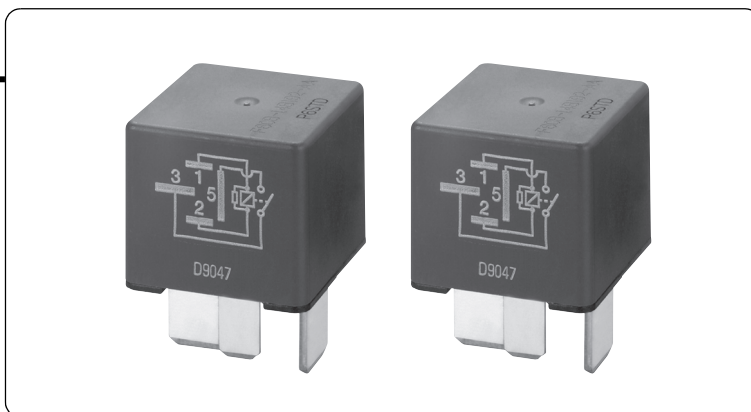


# G8JR

Automotive High-current ISO relay

## High-current switching (inrush current 150A) relay for automotive use

- Wide operating temperature range; -40 to +125°C
- Terminal layout based on ISO



### ■ Type standard

G8JR-□□□□-□

① ② ③ ④ ⑤

	Classification	Symbol	Meaning of the symbol
①	Number of contact poles	1	Number of contact poles
②	Contact structure	A	1a contact
③	Protective structure	7	Unsealed (In a case)
④	Terminal form	T	Plug-in type
⑤	Surge suppressor	R	Built-in resistor

### ■ Classification

Classification	Terminal form	Contact structure	Protective structure	Rated coil voltage		Type
				Voltage (V)	Resistance (Ω)	
High current ISO	Plug-in ISO terminal	SPST (1a)	Unsealed (In a case)	DC12	78	<b>G8JR-1A7T-R</b>

### ■ Ratings

#### ● Operation coil

Rated voltage (V)	Coil resistance (Ω)			Rated current (mA)	Operating voltage (V)	Release voltage (V)	Service voltage range (V)	Rated power consumption (mW)
	Between terminals	Internal coil	Surge suppressor resistance					
DC12	78	88	1/2W 680	154	8.0 or less	1.0 or more	DC10 to 16	1846

#### ● Switching area

	Performance
Contact material	Silver alloy
Rated voltage	DC12V
Rated load	Resistance load, 50A
Inrush current	150A
Continuous carry current*1	50A
Min. Carry / Switching Current	DC12V 1A

Please confirm Omron Safety Precautions for all automotive relays first.  
Omron can not guarantee automotive relays before finish making a contract with product specifications.

## Performance

Item	Standard value	
Voltage drop between terminals	50 mV or less, 10A	
Operating time <sup>*2</sup>	20 ms at longest at 14V (Normally 5.7 ms)	
Release time <sup>*2</sup>	10 ms at longest at 14V (Normally 2.3 ms)	
Insulation resistance <sup>*3</sup>	Between coil and terminal	20MΩ or more
	Between homopolar contacts	20MΩ or more
Withstand voltage <sup>*4</sup>	Between coil and terminal	AC500V for 1minute
	Between homopolar contacts	AC500V for 1minute
Vibration tolerance	Durability	33Hz 43.1m/s <sup>2</sup>
	Malfunction	20 to 500Hz 43.1m/s <sup>2</sup>
Mechanical endurance	1,000,000 times	
Electrical endurance	100,000 times or more (load dependent)	
Ambient temperature	-40 to +125°C	
Ambient humidity	35 to 95%RH	
Weight	Approx. 39.0g	

## Packing

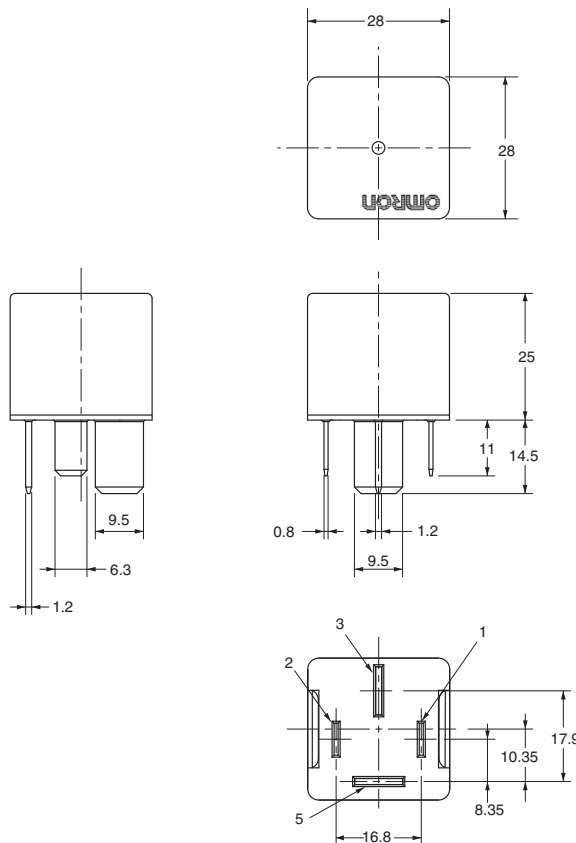
Packing form	Tray
MOQ <sup>*5</sup>	336pcs (48pcs to 7 trays)

Note: All values above are measured in early time under an ambient temperature of +20°C and humidity of 65% unless stated.

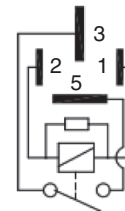
- \*1. The value stated is at maximum temperature in a guaranteed ambient temperature.
- \*2. It changes depend on how a rated voltage is operated, but bounce-time is not included.
- \*3. Measured at DC500V.
- \*4. Measured under 1mA of leak current, 50/60Hz for 1minute.
- \*5. Minimum Order Quantity is subject to change, please feel free to contact our sales representatives.

## Dimensions (Unit: mm)

### G8JR-1A7T-R



Terminal arrangement / Internal connections (BOTTOM VIEW)



\* Tolerance unless otherwise specified  
 Less than 1 mm: ±0.1 mm  
 Less than 1 to 3 mm: ±0.2 mm  
 3 mm or more: ±0.3 mm

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