



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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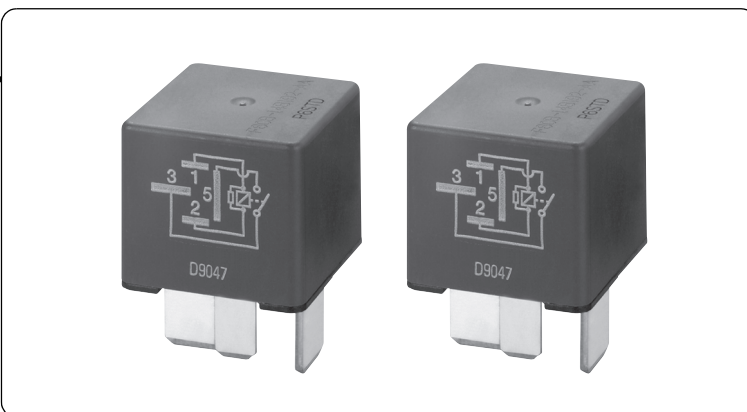


G8JR

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 | G8JR-1A7T-R |

■ 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 ^{*2} | 20 ms at longest at 14V (Normally 5.7 ms) | |
| Release time ^{*2} | 10 ms at longest at 14V (Normally 2.3 ms) | |
| Insulation resistance ^{*3} | Between coil and terminal | 20MΩ or more |
| | Between homopolar contacts | 20MΩ or more |
| Withstand voltage ^{*4} | Between coil and terminal | AC500V for 1minute |
| | Between homopolar contacts | AC500V for 1minute |
| Vibration tolerance | Durability | 33Hz 43.1m/s ² |
| | Malfunction | 20 to 500Hz 43.1m/s ² |
| 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 ^{*5} | 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.

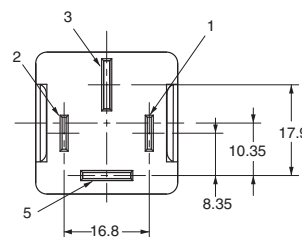
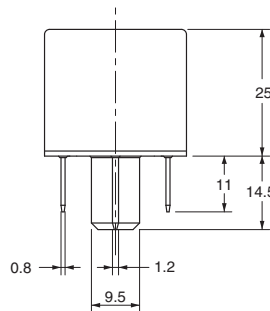
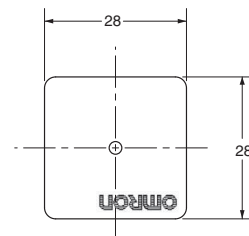
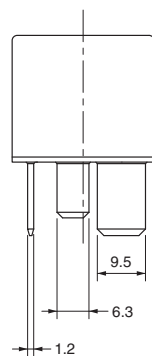
*3. Measured at DC500V.

*4. Measured under 1mA of leak current, 50/60Hz for 1minute.

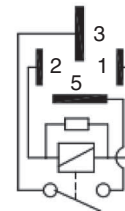
*5. Minimum Order Quantity is subject to change, please feel free to contact our sales representatives.

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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