

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	А	1a contact
3	Protective structure	7	Unsealed (In a case)
4	Terminal form	Т	Plug-in type
5	Surge suppressor	R	Built-in resistor

Classification

Classification Terminal form		Contact structure Protective structure	Rated co	Tuno		
Classification	Classification reminal form Contact structure		FIOLECTIVE STRUCTURE	Voltage (V)	Resistance (Ω)	Туре
High current ISO	Plug-in ISO terminal	SPST (1a)	Unsealed (In a case)	DC12	78	G8JR-1A7T-R

Ratings

Operation coil

Rated		Coil resistance (Ω)		Rated	Operating	Release	Service voltage	Rated power
voltage (V)	Between terminals	Internal coil	Surge suppressor resistance	current (mA)	voltage (V)	voltage (V)	range (V)	consumption (mW)
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.



I 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	Between coil and terminal	$20M\Omega$ or more	
resistance*3	Between homopolar contacts	$20M\Omega$ or more	
Withstand	Between coil and terminal	AC500V for 1 minute	
voltage*4	Between homopolar contacts	AC500V for 1minute	
Vibration	Durability	33Hz 43.1m/s ²	
tolerance	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.

Measured at DC500V.

*3. *4. *5.

Measured under 1mA of leak current, 50/60Hz for 1minute. Minimum Order Quantity is subject to change, please feel free to contact our sales representatives.

■ Dimensions (Unit: mm)



* 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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ISO Relay

