

High current switching (inrush current 100A) relay for automotive use

- Both SPST and SPDT available
- Plug in and Weatherproof type
- L x W x H = 28 x 28 x 25.5 mm nominal
- ISO footprint and terminals 6.3 x 0.82 mm
- Full automated Assembly



Type standard

G8JN-____

1234 56

	Classification	Symbol	Meaning of the symbol
1	Number of contact poles	1	Number of contact poles
2	Contact structure	А	1a contact
		С	1c contact
3	Protective structure	6	Unsealed (Weather proof type)
		7	Unsealed (In a case)
4	Terminal form	Т	Plug-in type
5	Blacket type	-	Standard case
		F	Metal blacket + Connector guide
		MF	Plastic blacket case
6	Surge suppressor	R	Built-in resistor

Classification

	Terminal form	Contact structure	Protective structure	Rated coil voltage			
Classification				Voltage (V)	Resistance (Ω)	Туре	Bracket
	Plug-in ISO terminal	SPST (1a)	Unsealed (Weather proof type)	DC12	68	G8JN-1A6T-F-R	Metal bracket + Connector guide
			Unsealed (In a case)			G8JN-1A7T-R	Standard plug-in
Mini ISO						G8JN-1A7T-MF-R	Plastic bracket
MINI ISO		(W SPDT (1c) Un	Unsealed (Weather proof type)			G8JN-1C6T-F-R	Metal bracket + Connector guide
			Unsealed			G8JN-1C7T-R	Standard plug-in
			(In a case)			G8JN-1C7T-MF-R	Plastic bracket

Please confirm Omron Safety Precautions for all automotive relays first.

Omron can not guarantee automotive relays before finish making a contract with product specifications.



Ratings

• Operation coil

Rated	Coil resistance (Ω)			Rated	Operating	Release	Sorvice veltage	Potod power
voltage (V)	Between terminals	Internal coil	Surge suppressor resistance	current (mA)	Operating voltage (V)	voltage (V)	Service voltage range (V)	Rated power consumption (mW)
DC12	68	76	1/2W 680	176	8.0 or less	1.0 or more	DC10 to 16	2118

Switching area •

Item		Performance		
Contact material		Silver alloy		
Rated voltage		DC12V		
Rated load	N.O. side	Resistance load, 35A		
naleu loau	N.C. side	Resistance load, 20A		
Inrush current	N.O. side	120A		
III usii cuirent	N.C. side	40A		
Continuous carry	N.O. side	35A		
current*1	N.C. side	20A		
Min. Carry / Switching Current		DC12V 1A		

Performance

Item		Standard value		
Voltage drop	N.O. side	50 mV or less, 10A		
terminals	N.C. side	50 mV or less, 10A		
Operating time*2		Max. 10ms at 13.5V (Normally 5.4 ms)		
Release time*2		Max. 10ms at 13.5V (Normally 1.6 m		
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 1minute		
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 endu	rance	1,000,000 times		
Electrical endurar	nce	100,000 times		
Ambient temperat	ture	–40 to +125°C		
Ambient humidity		35 to 95%RH		
Weight		Approx. 34.0 g		

I Packing

Packing form	Tray
MOQ*5	336pcs (48pcs×7 trays)

Note: All values above are 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. Bounce time is not included.
*3. Measured at DC500V.
*4. Measured under 1mA of leak current, 50/60Hz for 1 minute.
*5. Minimum Order Current to include a place feel fee to contact our calco contact our calc

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

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ISO Relay



Dimensions (Unit: mm)

G8JN-1A7T-R





10.35

Δ

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0



Terminal arrangement /

G8JN-1C7T-R





87

8.4

30









* 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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G8JN-1A7T-MF-R G8JN-1C7T-MF-R



Internal connections (BOTTOM VIEW)



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* 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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