OMRON

Power Mini ISO Automotive Relay

- SPST contacts
- Plug-in
- Fully automated assembly
- L x W x H = 28 x 28 x 25.5 mm nominal
- ISO footprint and terminals
- Terminals: Load 9.5 X 1.2 mm, and Coil 6.3 x 0.8 mm
- Made in Canada



Available Types

Description	Model	
Standard type SPST PI with resistor	G8JR-1A7T-R-DC12	
PI = Plug-in	* Other special models also available	

Contact Data

Typical switching current	Inrush 150 A, Steady 50 A
Max switching voltage	16 V
Carry / switching current	1 A
Contact material	Silver tin oxide (cadmium free)

Coil Ratings (at 20°C)

Туре	Rated voltage	Coil resistance ±15%	Coil resistance w/ 680Ω suppression ±15%	Nominal power consumption	Pull in voltage	Dropout voltage
G8JR-1A7T-R-DC12	12 VDC	71 Ω	64.5 Ω	2.03 W	< 8.0 V	> 1.0 V

Typical Applications

- Engine cooling fan
- Air pump
- Glow plug
- Resistive load

Characteristics

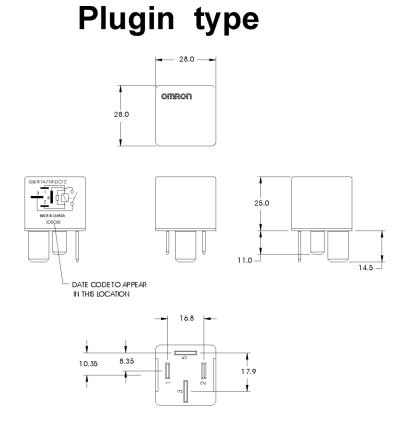
Max. initial conta	act voltage drop	50 mV @ 10 A / 5 mΩ	
NO activation tin	ne	20 ms max. (5.7 ms typical) @ 14 V	
NO deactivation	time	20 ms max. (2.3 ms typical) @ 14 V	
Insulation resist	ance	20 MΩmin.	
Dielectric streng	th	0.5 mA max. leakage at 900 VDC for 1s	
Ambient operation	ng temperature	-40° C to 125° C	
Humidity		95% RH @ 45°C	
Service life Mechanical		1,000,000 operations min.	
	Electrical	100,000 operations min. (load dependent)	
Weight	•	39 g (approx.)	

Characteristic Reference Data

■ Durability Data

Relay	Load type	Current	Cycles tested
G8JR	Cooling fan motor load	150 A in-rush 50 A steady state	150,000 8s on, 7s off
	Glow plug load	72 A in-rush 28 A steady state	60,000 30s on, 90s off
	Resistive load	50 A steady state	100,000 2s on, 2s off

Dimensions



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