# Power Mini ISO Automotive Relay **G8JR**

- 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<br>±15% | Coil resistance w/ 680Ω suppression ±15% | Nominal power consumption | Pull in voltage | Dropout<br>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 | ct voltage drop | 50 mV @ 10 A / 5 mΩ                      |
|--------------------|-----------------|--|
| NO activation tim  | ne              | 20 ms max. (5.7 ms typical) @ 14 V       |
| NO deactivation t  | time            | 20 ms max. (2.3 ms typical) @ 14 V       |
| Insulation resista | ance            | 20 MΩ min.                               |
| Dielectric strengt | th              | 0.5 mA max. leakage at 900 VDC for 1s    |
| Ambient operating  | 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.)                           |

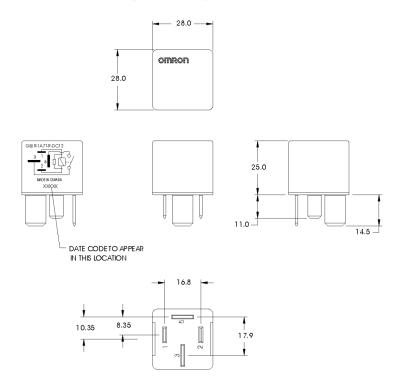
#### **Characteristic Reference Data**

#### **■** Durability Data

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

#### **Dimensions**

## Plugin type



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