

### General Purpose Automotive Power Relay

- Standard ISO terminal footprint
- Handles heavy automotive load; inrush current 100A
- High current path fully welded; reduces heat buildup at full load
- Made in North America



### Ordering Information

| Terminal type | Contact form | Cover        | Resistor | Bracket        | Part number               |
|---------------|--------------|--------------|----------|----------------|---------------------------|
| PCB           | SPST-NO      | Standard     | —        | —              | <b>G8J-1A7P-DC12</b>      |
| PCB           | SPST-NO      | Standard     | 680Ω     | —              | <b>G8J-1A7P-R-DC12</b>    |
| Plug In       | SPDT         | Standard     | —        | —              | <b>G8J-1C7T-DC12</b>      |
| Plug In       | SPDT         | Standard     | —        | Molded Plastic | <b>G8J-1C7T-MF-DC12</b>   |
| Plug in       | SPDT         | Standard     | 680Ω     | —              | <b>G8J-1C7T-R-DC12</b>    |
| Plug In       | SPDT         | Standard     | 680Ω     | Molded Plastic | <b>G8J-1C7T-MF-R-DC12</b> |
| Plug In       | SPDT         | Weatherproof | —        | —              | <b>G8J-1C6T-DC12</b>      |
| Plug In       | SPDT         | Weatherproof | 680Ω     | —              | <b>G8J-1C6T-R-DC12</b>    |
| Plug In       | SPDT         | Weatherproof | 680Ω     | Metal          | <b>G8J-1C6T-F-R-DC12</b>  |
| Plug In       | SPDT         | Weatherproof | —        | Metal          | <b>G8J-1C6T-F-DC12</b>    |

### Specifications

#### ■ CONTACT DATA

|                                                        |                 |                             |
|--------------------------------------------------------|-----------------|-----------------------------|
| Max. resistive load                                    | SPST            | 40A                         |
|                                                        | SPDT            | 40A(NO) / 20A(NC)           |
| Contact voltage drop<br>[Initial value at 23°C (73°F)] |                 | ≤150mV(NO) / ≤175mV(NC)     |
| Max. inrush current                                    | Inductive load  | 100A inrush / 20A break(NO) |
|                                                        | Capacitive load | 300A inrush(NO)             |

#### ■ COIL DATA

|                   |                                           |
|-------------------|-------------------------------------------|
| Rated voltage     | 12 VDC                                    |
| Operating voltage | 10-16 VDC                                 |
| Coil resistance   | 78Ω ± 10%                                 |
| Pick-up voltage   | 8V at 23°C (73°F)<br>11V at 125°C (257°F) |
| Dropout voltage   | 1V at 23°C (73°F)                         |

## ■ CHARACTERISTICS

|                                                   |                                                         |
|---------------------------------------------------|---------------------------------------------------------|
| Operate time at 23°C (73°F)                       | 5 ms max.                                               |
| Release time at 23°C (73°F)                       | 4 ms max.                                               |
| Duty cycle at rated load<br>[16V at 80°C (176°F)] | Up to 100%                                              |
| Mechanical life                                   | 10,000,000 operations minimum at 18,000 operations/hour |
| Electrical life (resistive load)                  | 100,000 operations minimum (14V / 35A)                  |
| Operating ambient temperature                     | -40° to 125°C (-40° to 257°F)                           |
| Weight                                            | Approx. 40g                                             |

Note: Data shown are of initial value.

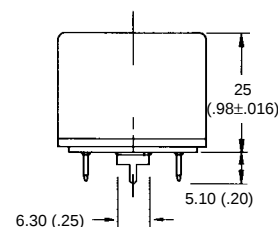
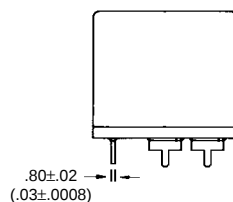
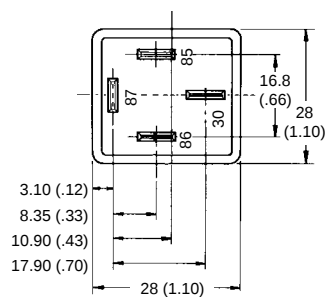
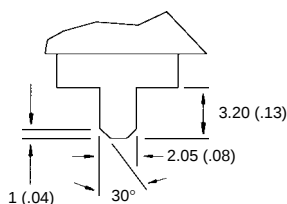
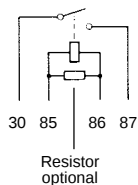
## Dimensions

Unit: mm (inch)

### ■ SPST PCB TYPE

G8J-1A7P-\_\_

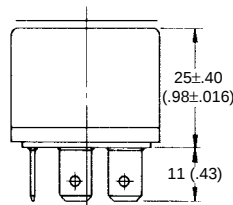
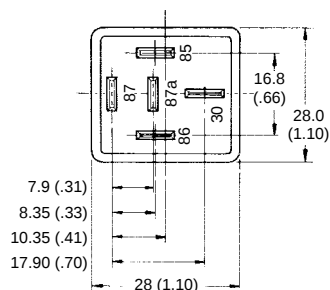
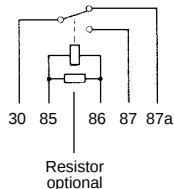
Circuit Diagram



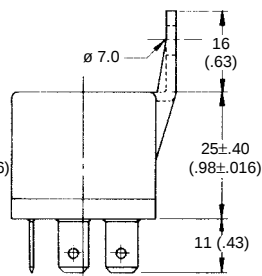
### ■ SPDT PLUG-IN TYPE

G8J-1C7T-\_\_

Circuit Diagram



Standard Package

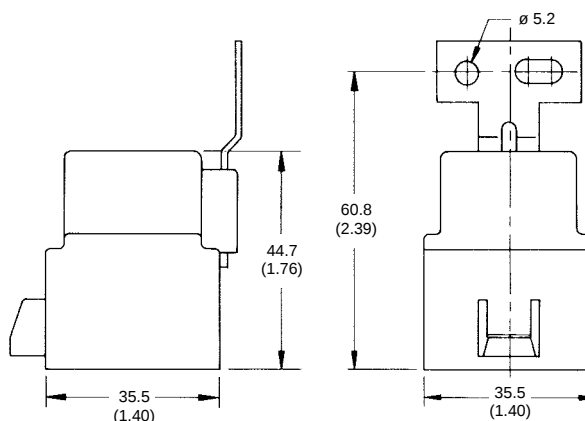
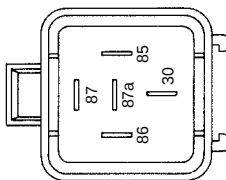
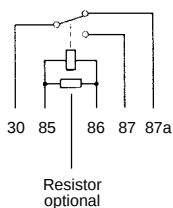


Plastic Bracket Optional

# ■ SPDT PLUG-IN WEATHERPROOF TYPE

G8J-1C6T-\_\_\_

Circuit Diagram



Metal Bracket  
Optional

Note: In the interest of product improvement, specifications are subject to change.

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