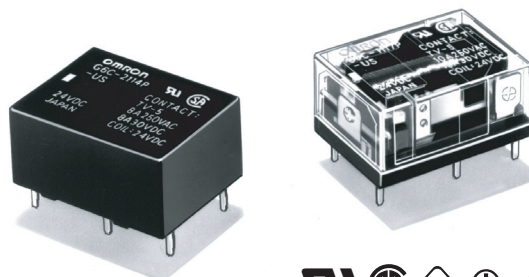


# Power PCB Relay

## G6C

### SPST-NO Type Breaks 10-A Loads; SPST-NO + SPST-NC Breaks 8-A Load

- Compact: 20 x 15 x 10 mm (L x W x H).
- Low power consumption: 200 mW.
- Semi-sealed or fully sealed construction available.
- Unique moving loop armature reduces relay size, magnetic interference, and contact bounce.
- Single and Dual coil latching types also available
- RoHS Compliant



## Ordering Information

| Classification       | Contact form      | Straight Through-hole PCB |               | Self-clinching Through-hole PCB |               |
|----------------------|-------------------|---------------------------|---------------|---------------------------------|---------------|
|                      |                   | Semi-sealed               | Fully sealed  | Semi-sealed                     | Fully sealed  |
| Non-latching         | SPST-NO           | G6C-1117P-US              | G6C-1114P-US  | G6C-1117C-US                    | G6C-1114C-US  |
|                      | SPST-NO + SPST-NC | G6C-2117P-US              | G6C-2114P-US  | G6C-2117C-US                    | G6C-2114C-US  |
| Single coil latching | SPST-NO           | G6CU-1117P-US             | G6CU-1114P-US | G6CU-1117C-US                   | G6CU-1114C-US |
|                      | SPST-NO + SPST-NC | G6CU-2117P-US             | G6CU-2114P-US | G6CU-2117C-US                   | G6CU-2114C-US |
| Dual coil latching   | SPST-NO           | G6CK-1117P-US             | G6CK-1114P-US | G6CK-1117C-US                   | G6CK-1114C-US |
|                      | SPST-NO + SPST-NC | G6CK-2117P-US             | G6CK-2114P-US | G6CK-2117C-US                   | G6CK-2114C-US |

**Note:** When ordering, add the rated coil voltage to the model number.

Example: G6C-1117P-US DC12

Rated coil voltage

### Model Number Legend

G6C   -         -   -   DC  

1    2    3    4    5    6    7    8

#### 1. Relay Function

None: Non-latching  
U: Single coil latching  
K: Dual coil latching

#### 2. Contact Form

11: SPST-NO  
21: SPST-NO + SPST-NC

#### 3. Contact Type

1: Standard

#### 4. Enclosure Ratings

4: Fully sealed  
7: Semi-sealed

#### 5. Terminals

P: Straight Through-hole PCB  
C: Self-clinching Through-hole PCB

#### 6. Approved Standards

US: UL/CSA certified

#### 7. Mounting Method

None: Mount directly to PCB  
P6C: Mount to Socket

#### 8. Rated Coil Voltage

3, 5, 6, 12, or 24 VDC

## ■ Accessories (Order Separately)

### Back Connecting Sockets

| Applicable Relay                                                                         | Back Connecting Socket (See note 1.) |
|------------------------------------------------------------------------------------------|--------------------------------------|
| G6C(U)-1114P-US-P6C<br>G6C(U)-1117P-US-P6C<br>G6C(U)-2114P-US-P6C<br>G6C(U)-2117P-US-P6C | P6C-06P                              |
| G6CK-1114P-US-P6C<br>G6CK-1117P-US-P6C<br>G6CK-2114P-US-P6C<br>G6CK-2117P-US-P6C         | P6C-08P                              |

- Note:** 1. Not applicable to the self-clinching versions.  
The operating current for the socket is 5 A max.  
2. Use the G6C(U)-□□□□P-US-**P6C** if mounting relays in a P6C Socket.

|                 |        |
|-----------------|--------|
| Removal Tool    | P6B-Y1 |
| Hold-down Clips | P6B-C2 |

## Specifications

### ■ Contact Ratings

| Item                                                  | SPST-NO                                                  |                                            | SPST-NO+SPST-NC                 |                                            |
|-------------------------------------------------------|----------------------------------------------------------|--------------------------------------------|---------------------------------|--------------------------------------------|
| Load                                                  | Resistive load<br>(cosφ = 1)                             | Inductive load<br>(cosφ = 0.4; L/R = 7 ms) | Resistive load<br>(cosφ = 1)    | Inductive load<br>(cosφ = 0.4; L/R = 7 ms) |
| Rated load                                            | 10 A at 250 VAC;<br>10A at 30 VDC                        | 5 A at 250 VAC;<br>5 A at 30 VDC           | 8 A at 250 VAC;<br>8A at 30 VDC | 3.5 A at 250 VAC;<br>3.5 A at 30 VDC       |
| Contact material                                      | Ag Alloy (Cd free)                                       |                                            |                                 |                                            |
| Rated carry current                                   | 10 A                                                     |                                            | 8 A                             |                                            |
| Max. switching voltage                                | 380 VAC, 125 VDC (the case of latching 250 VAC, 125 VDC) |                                            |                                 |                                            |
| Max. switching current                                | 10 A                                                     |                                            | 8 A                             |                                            |
| Max. switching capacity                               | 2,500 VA, 300 W                                          | 1,250 VA, 220 W                            | 2,000 VA, 240 W                 | 875 VA, 170 W                              |
| Min. permissible load<br>(reference value - see note) | 10 mA at 5 VDC                                           |                                            |                                 |                                            |

**Note:** P level:  $\lambda_{60} = 0.1 \times 10^{-6}$  operations

### ■ Coil Data

#### Non-latching

| Rated voltage<br>(VDC) | Rated current<br>(mA) | Coil resistance<br>( $\Omega$ ) | Coil inductance<br>(ref. value) (H) |             | Pick-up voltage | Dropout voltage | Maximum voltage      | Power consumption<br>(mW) |
|------------------------|-----------------------|---------------------------------|-------------------------------------|-------------|-----------------|-----------------|----------------------|---------------------------|
|                        |                       |                                 | Armature OFF                        | Armature ON |                 |                 |                      |                           |
| 3                      | 67                    | 45                              | 0.078                               | 0.067       | 70% max.        | 10% min.        | 160% max.<br>at 23°C | Approx. 200               |
| 5                      | 40                    | 125                             | 0.22                                | 0.18        |                 |                 |                      |                           |
| 6                      | 33.30                 | 180                             | 0.36                                | 0.29        |                 |                 |                      |                           |
| 12                     | 16.70                 | 720                             | 1.32                                | 1.13        |                 |                 |                      |                           |
| 24                     | 8.30                  | 2,880                           | 4.96                                | 4.19        |                 |                 |                      |                           |

- Note:** 1. The rated current and coil resistance are measured at a coil temperature of 23°C with a tolerance of  $\pm 10\%$ .  
2. Operating characteristics are measured at a coil temperature of 23°C.