

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 G6C(U)-1117P-US-P6C G6C(U)-2114P-US-P6C G6C(U)-2117P-US-P6C	P6C-06P
G6CK-1114P-US-P6C G6CK-1117P-US-P6C G6CK-2114P-US-P6C 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 (cosφ = 1)	Inductive load (cosφ = 0.4; L/R = 7 ms)	Resistive load (cosφ = 1)	Inductive load (cosφ = 0.4; L/R = 7 ms)
Rated load	10 A at 250 VAC; 10A at 30 VDC	5 A at 250 VAC; 5 A at 30 VDC	8 A at 250 VAC; 8A at 30 VDC	3.5 A at 250 VAC; 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 (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 (VDC)	Rated current (mA)	Coil resistance (Ω)	Coil inductance (ref. value) (H)		Pick-up voltage	Dropout voltage	Maximum voltage	Power consumption (mW)
			Armature OFF	Armature ON				
3	67	45	0.078	0.067	70% max.	10% min.	160% max. 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.