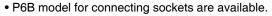
PCB Power Relay

High Capacity and High Dielectric Strength Miniature Relay with Fully Sealed Construction in 5 A (8 A) SPST-NO(1a), SPST-NO+SPST-NC(1a1b), DPST-NO(2a), DPST-NC(2b) Types



- High insulation with dielectric strength of 3,000VAC between coil and contacts (impulse withstand voltage of 6 kV).
- Standard model conforms to UL/CSA standards.
- AgSnIn contacts suitable for loads that generate surge voltage (inductive load, capacity load, etc.) are available. (-FD type)
- Ultrasonic cleanable models are available. (-U type)
- Operation indicator & built-in surge absorption diode models are available. (-ND type)
- 2-Pole type available.
- High-reliability models are available. G6B-1184P-US model (The relay used in Terminal Relay G6B-48BND)

RoHS Compliant

■Application Examples

· Ideal for output applications of control equipments

■Model Number Legend



1. Relay Function

None: Single-side stable

U : Single-winding latching (G6B□-1114 models only)

K : Double-winding latching (G6B□-1114 models only)

2. Contact Form

21: SPST-NO + SPST-NC

22: DPST-NO

20: DPST-NC

11: SPST-NO

3. Classification

1: Standard

7: High-capacity

8: Single crossbar

4. Enclosure rating

4: Fully sealed

7: Flux protection

5. Terminal Shape

P: Straight PCB terminals Socket mounting terminals

C: Self-clinching PCB

6. Contact material

None: Standard (Ag-alloy (Cd free))

FD: AgSnIn contact

(Suitable for DC inductive load with high inrush current)

7. Coil Polarity

None: 5, 6 Terminal (+), 1, 2 Terminal (-)

1 : 5, 6 Terminal (-), 1, 2 Terminal (+)

8. Operation Indicator Diode Availability

A B LR

None: Standard

ND: Operation indicator & coil surge

absorption diode (for -1177 type only)

9. Approved Standards

US: UL/CSA

10. Washability

None: Standard

U : For ultrasonically cleanable

11. Mounting

None: Mounted directly to PCB

■Ordering Information

● Standard Models (UL, CSA certified)

Number		Contact material		Standard (Ag-alloy (Cd free))		AgSnIn contact		Minimum
of poles	Relay Function	Contact form	Terminals	Model	Rated coil voltage	Model	Rated coil voltage	packing unit
	Single-side stable	SPST-NO (1a) (Standard)	Straight PCB	G6B-1114P-US	5, 6, 12, 24 VDC	G6B-1114P-FD-US	5, 6, 12, 24 VDC	100
			Self-clinching PCB	G6B-1114C-US	5, 6, 12, 24 VDC	G6B-1114C-FD-US	12, 24 VDC	pcs/tray
		SPST-NO (1a) (High-capacity)	Straight PCB	G6B-1174P-US	5, 6, 12, 24 VDC	G6B-1174P-FD-US	5, 6, 12, 24 VDC	20
			Self-clinching PCB	G6B-1174C-US	5, 12, 24 VDC	G6B-1174C-FD-US	5, 12, 24 VDC	pcs/tube
		SPST-NO (1a) (High-reliability)	Straight PCB	G6B-1184P-US	5, 12, 24 VDC			100 pcs/tray
			Self-clinching PCB					
1-pole	Single-winding latching	SPST-NO (1a) (Standard)	Straight PCB	G6BU-1114P-US	5, 6, 12, 24 VDC	G6BU-1114P-FD-US	5, 12, 24 VDC	
			Self-clinching PCB	G6BU-1114C-US	12 VDC			
	Double-winding latching	SPST-NO (1a) (Standard)	Straight PCB	G6BK-1114P-US	5, 6, 12, 24 VDC	G6BK-1114P-FD-US	5, 6, 12, 24 VDC	
			Self-clinching PCB	G6BK-1114C-US	5, 6, 12, 24 VDC	G6BK-1114C-FD-US	24 VDC	
	Single-side stable	SPST-NO (1a) (Built-in high- capacity operation indicator & diode)	Straight PCB	G6B-1177P-ND-US	5, 12, 24 VDC	G6B-1177P-FD-ND-US	5, 12, 24 VDC	
			Self-clinching PCB	G6B-1177C-ND-US	5, 12, 24 VDC	G6B-1177C-FD-ND-US	12, 24 VDC	
	Single-side stable	SPST-NO (1a)+ SPST-NC (1b) (Standard)	Straight PCB	G6B-2114P-US	5, 6, 12, 24 VDC	G6B-2114P-FD-US	5, 6, 12, 24 VDC	
			Self-clinching PCB	G6B-2114C-US	5, 12, 24 VDC	G6B-2114C-FD-US	5, 12 VDC	
		DPST-NO (2a) (Standard)	Straight PCB	G6B-2214P-US	5, 6, 12, 24 VDC	G6B-2214P-FD-US	5, 6, 12, 24 VDC	
2-pole			Self-clinching PCB	G6B-2214C-US	5, 12, 24 VDC	G6B-2214C-FD-US	5, 12, 24 VDC	
		DPST-NC (2b) (Standard)	Straight PCB	G6B-2014P-US	5, 6, 12, 24 VDC	G6B-2014P-FD-US	5, 6, 12, 24 VDC	
			Self-clinching PCB	G6B-2014C-US	5, 6, 12, 24 VDC	G6B-2014C-FD-US	12, 24 VDC	

Note: AgSnIn contact models are highly welding-resistant, and roughening of contacts due to inrush current and inductive load is lessened.

● Models for Reverse Coil Polarity

Number			Contact material Standard (Ag-alloy (Cd free))		AgSnIn contact		Minimum	
of poles	Relay Function	Contact form	Terminals	Model	Rated coil voltage	Model	Rated coil voltage	packing unit
1-pole	Single-side stable	SPST-NO (1a) (Standard)	Straight PCB	G6B-1114P-1-US	5, 6, 12, 24 VDC	G6B-1114P-FD-1-US	24 VDC	100 pcs/tray
			Self-clinching PCB					
		SPST-NO (1a) (High-capacity)	Straight PCB	G6B-1174P-1-US	5, 12, 24 VDC			20 pcs/tube
			Self-clinching PCB					
	Single-winding latching	SPST-NO (1a) (Standard)	Straight PCB	G6BU-1114P-1-US	5, 12 VDC			
			Self-clinching PCB					
	Double-winding latching	SPST-NO (1a) (Standard)	Straight PCB	G6BK-1114P-1-US	5, 6, 12, 24 VDC			
			Self-clinching PCB					100
2-pole	Single-side stable	SPST-NO (1a)+ SPST-NC (1b) (Standard)	Straight PCB	G6B-2114P-1-US	5, 6, 12, 24 VDC	G6B-2114P-FD-1-US	12, 24 VDC	pcs/tray
			Self-clinching PCB					
		DPST-NO (2a) (Standard)	Straight PCB	G6B-2214P-1-US	5, 12, 24 VDC			
			Self-clinching PCB					

Note: AgSnIn contact models are highly welding-resistant, and roughening of contacts due to inrush current and inductive load is lessened.

● Models for Ultrasonically Cleanable

Number	lumber Contact material		Standard (Ag-alloy (Cd free))		AgSnIn contact		Minimum	
of poles	Relay Function	Contact form	Terminals	Model	Rated coil voltage	Model	Rated coil voltage	packing unit
1-pole	Single-side stable	SPST-NO (1a)	Straight PCB	G6B-1114P-US-U	5, 6, 12, 24 VDC	G6B-1114P-FD-US-U	6, 12, 24 VDC	
		(Standard)	Self-clinching PCB	G6B-1114C-US-U	5, 12, 24 VDC			
	Single-winding latching	SPST-NO (1a) (Standard)	Straight PCB	G6BU-1114P-US-U	24 VDC			
			Self-clinching PCB					
	Double-winding latching	SPST-NO (1a) (Standard)	Straight PCB	G6BK-1114P-US-U	5, 6, 12, 24 VDC	G6BK-1114P-FD-US-U	12, 24 VDC	
			Self-clinching PCB	G6BK-1114C-US-U	24 VDC			100
	Single-side stable	SPST-NO (1a)+ SPST-NC (1b) (Standard)	Straight PCB	G6B-2114P-US-U	5, 12, 24 VDC	G6B-2114P-FD-US-U	5, 12, 24 VDC	pcs/tray
			Self-clinching PCB					
		DPST-NO (2a) (Standard)	Straight PCB	G6B-2214P-US-U	5, 6, 12, 24 VDC	G6B-2214P-FD-US-U	5, 12, 24 VDC	
2-pole			Self-clinching PCB	G6B-2214C-US-U	12, 24 VDC			
		DPST-NC (2b) (Standard)	Straight PCB	G6B-2014P-US-U	5, 12, 24 VDC	G6B-2014P-FD-US-U	5, 12, 24 VDC	1
			Self-clinching PCB					

Note: When ordering, add the rated coil voltage to the model number. When ordering, and the Example: G6B-1114P-US DC5

-Rated coil voltage

However, the notation of the coil voltage on the product case as well as on the packing will be marked as $\square\square$ VDC.

Connecting Sockets (Sold Separately)

Applicable relay	Model	Minimum ordering unit		
G6B-1114P(-FD)-US-P6B G6B-1174P(-FD)-US-P6B G6B-1177P(-FD)-ND-US-P6B G6BU-1114P-US-P6B	P6B-04P	00		
G6BK-1114P-US-P6B	P6B-06P	20 pcs		
G6B-2114P-US-P6B G6B-2214P-US-P6B G6B-2014P-US-P6B	P6B-26P			
Removal Tool	Removal Tool P6B-Y1			
Hold-down Clips	P6B-C2	1 pcs		

- Note 1. G6B-1174P-US-P6B and G6B-1177P-ND-US-P6B are rated for 8 A when mounted on a PCB. However, when used with the P6B-04P socket models, the allowable current is derated to 5 A.
 - that include "-P6B" in their model numbers with the sockets. Do not use standard G6B's that omit "-P6B" from their model numbers with the sockets.
 - 3. The hold-down clips of the P6B-C2 model are not suitable for the G6B-1174P and G6B-1177P models since they have different heights.
 - 4. Products with UL/CSA certification marks will be supplied for orders of standard models.