

G5Q

PCB Power Relay

A Miniature Power Relay with 1-pole 10A Switching Capacity

- Compact single pole relay.
- Excellent switching performance for a variety of loads.
- Small, yet provide 8-kV impulse withstand voltage (between coil and contacts).
- Low coil power consumption (SPST-NO: 200 mW, SPDT: 400 mW)
- Coil insulation system: Class F (UL1446).
- IEC/EN 60335-1 conformed. (-HA Model)



RoHS Compliant

Model Number Legend

G5Q-□□□-□□-□□

1 2 3 4 5 6

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| <p>1. Number of Poles
1 : 1-pole</p> <p>2. Contact Form
None : SPDT (1c)
A : SPST-NO (1a)</p> <p>3. Enclosure rating
None : Flux protection
4 : Sealed</p> | <p>4. Classification
None : Standard
EU : High-capacity</p> <p>5. Market Code
None : General purpose
HA : Home Appliance according to IEC/EN60335-1</p> <p>6. Coil Holding Voltage
None : Not supported
PW : Supported</p> |
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Application Examples

- Ideal for output applications of control equipments.

Ordering Information

Terminal Shape	Market Code	Classification	Contact form	Enclosure rating	Model	Rated coil voltage	Minimum packing unit
PCB terminals	General purpose	Standard	SPST-NO(1a)	Flux protection	G5Q-1A	5VDC 9VDC 12VDC 24VDC	100 pcs/tray
				Sealed	G5Q-1A4		
			SPDT(1c)	Flux protection	G5Q-1		
				Sealed	G5Q-14		
		High-capacity	SPST-NO(1a)	Flux protection	G5Q-1A-EU	5VDC 12VDC 24VDC	
				Sealed	G5Q-1A4-EU		
		SPDT(1c)	Flux protection	G5Q-1-EU			
			Sealed	G5Q-14-EU			
	Home Appliance	Standard	SPST-NO(1a)	Flux protection	G5Q-1A-HA	12VDC 24VDC	
					G5Q-1A-EU-HA		
					G5Q-1-HA		
					G5Q-1-HA-PW		
		High-capacity	SPDT(1c)	Flux protection	G5Q-1-EU-HA	12VDC 24VDC	
					G5Q-1-HA		
					G5Q-1-HA-PW		
					G5Q-1-EU-HA		

Note 1. When ordering, add the rated coil voltage to the model number.

Example: G5Q-1A DC5

Rated coil voltage

Note 2. Contact your OMRON sales representative for tube packing models (40 pcs/tube).

■ Ratings

● Coil

Contact form	Rated voltage	Rated current (mA)	Coil resistance (Ω)	Must operate voltage (V)	Must release voltage (V)	Max. voltage (V)	Power consumption (mW)
SPST-NO (1a)	5 VDC	40	125	75% max.	5% min.	190% (at 23°C)	Approx. 200
	9 VDC	22.2	405				
	12 VDC	16.7	720				
	24 VDC	8.3	2880				
SPDT (1c)	5 VDC	80	63		5% min. 5 to 25%*		Approx. 400 Approx. 36*
	9 VDC	44.4	202				
	12 VDC	33.3	360				
	24 VDC	16.7	1440				

Note 1. The rated current and coil resistance are measured at a coil temperature of 23°C with a tolerance of ±10%.

Note 2. The operating characteristics are measured at a coil temperature of 23°C.

Note 3. The "Max. voltage" is the maximum voltage that can be applied to the relay coil.

* Power consumption with Holding Voltage is 36mW. Please confirm the detail in page 6 Coil Voltage Reduction (Holding Voltage).

● Contacts

Item	Load	Resistive load			
		SPST-NO (1a)		SPDT (1c)	
		Standard	High-capacity	Standard	High-capacity
Contact Type	Single				
Contact material	Ag-Alloy (Cd free)				
Rated load (resistive)	10 A at 125 VAC	10 A at 250 VAC		10 A at 125 VAC (NO)	10 A at 250 VAC (NO)
	3 A at 125 VAC	3 A at 125 VAC		3 A at 125 VAC (NO)	3 A at 125 VAC (NO)
	5 A at 250 VAC	5 A at 250 VAC		5 A at 250 VAC (NO)	5 A at 250 VAC (NO)
	3 A at 250 VAC	3 A at 250 VAC		3 A at 250 VAC (NO)	3 A at 250 VAC (NO)
	5 A at 30 VDC	5 A at 30 VDC		5 A at 30 VDC (NO)	5 A at 30 VDC (NO)
Rated carry current	10 A (NO)/3 A (NC)				
Max. switching voltage	277 VAC, 30 VDC				
Max. switching current	AC: 10 A (NO)/3 A (NC) DC: 5 A (NO)/3 A (NC)				