

# OMRON PC BOARD-USE RELAY

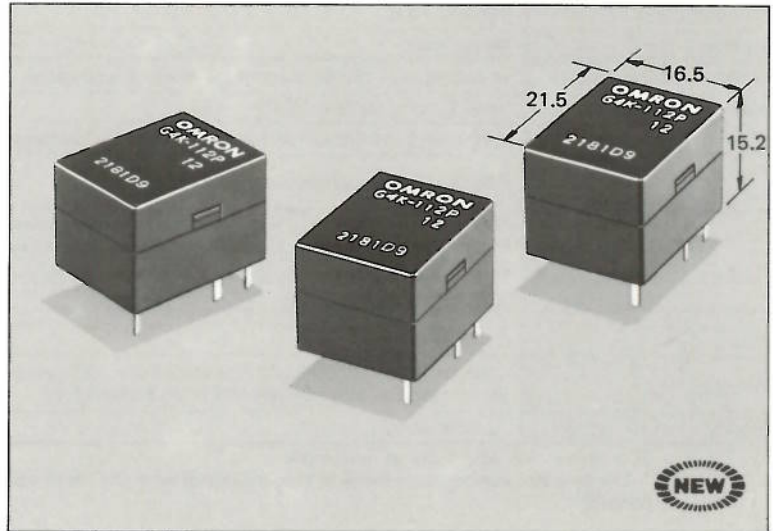
Cat. No. K35-E1-1

Model **G4K**

**High Impulse Withstand Voltage (6kv) — Ideal for Applications Requiring Resistance to Voltage Surges**

## ■ FEATURES

- Contact section located opposite the terminal section provides a greater creepage distance, and is resistant to solder flux wicking.
- High sensitivity type with low power consumption (330mW) also available.
- International 2.54mm terminal pitch.
- Pending UL and CSA approvals.



## ■ AVAILABLE TYPES

Contact form	Type	General purpose	High-sensitivity
SPDT		G4K-112P	G4K-112P-H
SPST-NO		G4K-1112P	G4K-1112P-H

## ■ SPECIFICATIONS

### ● COIL RATINGS

Type	Item Rated voltage (VDC)	Rated current (mA)	Coil resistance (Ω)	Coil inductance (ref. value) (H)		Must operate voltage	Must dropout voltage	Maximum voltage	Power consumption (mW)
				Armature OFF	Armature ON				
General purpose	5	89.3	56	0.15	0.18	70 max.	10 min.	165	Approx. 0.45
	6	75	80	0.23	0.27				
	9	50	180	0.51	0.63				
	12	37.5	320	0.88	1.10				
	24	18.8	1,280	3.68	4.65				
High-sensitivity	5	62.5	80	0.25	0.29			195	Approx. 0.33
	6	54.5	110	0.33	0.39				
	9	36	250	0.78	0.91				
	12	27.3	440	1.37	1.61				
	24	13.5	1,780	5.53	6.37				

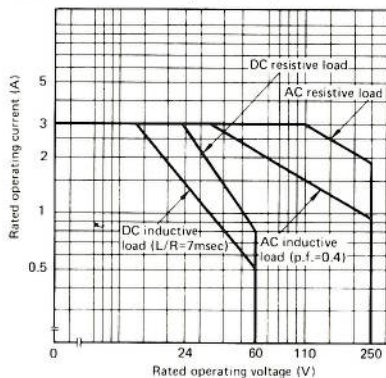
NOTES: 1. The rated current and coil resistance are measured at a coil temperature of 20°C with tolerances of ±10%.  
2. Performance characteristic data are measured at a coil temperature of 20°C.

### ● CONTACT RATINGS

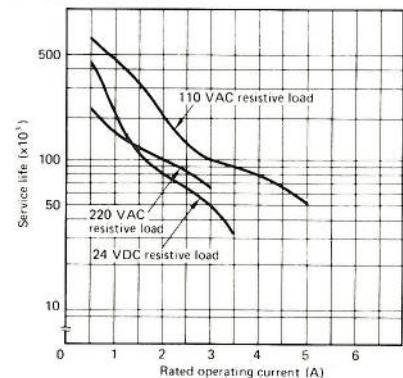
Item	Load Resistive load (p.f.=1)
Rated load	110 VAC/24 VDC 3A, 220 VAC 2A
Carry current	3A
Max. operating voltage	250 VAC/60 VDC
Max. operating current	3A
Max. switching capacity	440VA/75W
Minimum permissible load (reference value)	5 VDC 100mA

### ● CHARACTERISTIC DATA

#### Maximum switching capacity



#### Electrical service life



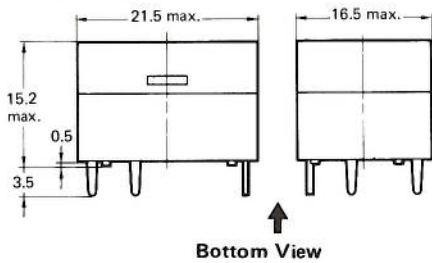
● CHARACTERISTICS

Contact resistance	100mΩ max.
Operate time	10msec max.
Release time	5msec max.
Operating frequency	Mechanically: 18,000 operations/hour Electrically: 1,800 operations/hour (under rated load)
Insulation resistance	100MΩ min. (at 500 VDC)
Dielectric strength	2,000 VAC, 50/60Hz for 1 minute (750 VAC between the same poles)
Impulse withstand voltage	6,000V (1x40μsec) between coil and contact
Vibration	Mechanical durability: 10 to 55Hz; 3.3mm double amplitude Malfunction durability: 10 to 55Hz; 3.3mm double amplitude
Shock	Mechanical durability: 1,000m/sec <sup>2</sup> (approx. 100G's) Malfunction durability: 100m/sec <sup>2</sup> (approx. 10G's)
Ambient temperature*	Operating: -30 to +70° C (General purpose type), -30 to +80° C (High-sensitivity type)
Humidity	45 to 85% RH
Service life	Mechanically: 20,000,000 operations min. (at operating frequency of 18,000 operations/hour) Electrically: See "CHARACTERISTIC DATA."
Weight	Approx. 9.1g

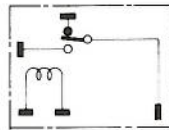
NOTES: 1. The data shown above are of initial value.  
2. \* The ambient temperature range is that measured with the rated voltage applied to the relay coil but without energizing the relay contacts.

■ DIMENSIONS

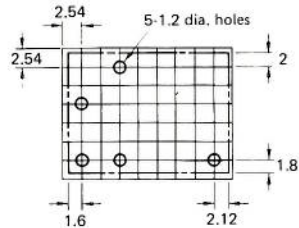
● G4K-112P, G4K-1112P



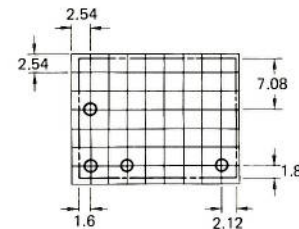
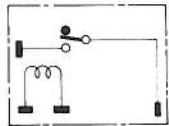
Terminal arrangement/  
Internal connections  
(Bottom view)  
G4K-112P



Mounting holes  
(Bottom view)



G4K-1112P



NOTE: ALL DIMENSIONS SHOWN IN THIS CATALOG ARE IN UNITS OF MILLIMETERS.  
To convert millimeters into inches multiply by 0.03937. To convert grams into ounces multiply by 0.03527.

NOTE: Specifications subject to change without notice.



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