

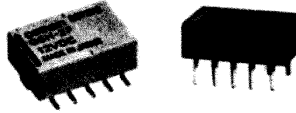
G6H

Low Signal Relay

7 RELAYS

Features

- Compact, with low 5 mm (.197 in.) profile
- Low power consumption (140mW)
- Low thermoelectromotive force
- Low magnetic interference enables high-density mounting
- Utilizes OMRON's moving loop design
- Highly stable magnetic circuit for latching endurance and excellent resistance to vibration and shock
- High sensitivity with low nominal power consumption
- UL listed, CSA certified



Contact Data

Contact ratings 125 VAC, 0.5 A; 30 VDC, 1 A
Contact material Ag (Au clad)
Carry current 1 A
Maximum operating voltage 125 VAC, 110 VDC
Maximum operating current 1 A
Maximum switching capacity 62.5 VA, 33 W
Minimum permissible load 10µA, 10mVDC

Coil Data (% of rated voltage)

Pickup voltage 75% max.
Dropout voltage 10% min.
Set voltage 75% max.
Reset voltage 75% max.
Maximum voltage 200% max.

Characteristic Data

Initial contact resistance 50mΩ max.
Operate time 3ms max. (mean value: approx. 2.0ms)
Release time 2ms max. (mean value: approx. 1.0ms)
Set time - latching 3ms max. (mean value: approx. 2.0ms)
Reset time - latching 2ms max. (mean value: approx. 1.0ms)
Insulation resistance 1,000MΩ max. (at 500 VDC)
Dielectric strength
Between coil and contacts, and between contacts of different polarity:
 1,000 VAC, 50/60 Hz for 1 minute
Between contacts of same polarity: 750 VAC, 50/60 Hz for 1 minute
Surge withstand voltage 1,500 V 10 x 160µs (conforms to FCC Part 68)
Ambient temperature -40° to 70°C
Service life
Mechanical: 100 million operations min.
Electrical: 100,000 operations min. at 1 A, 30 VDC

Construction Data

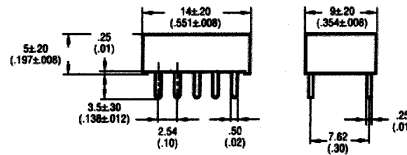
Termination PCB terminals
Construction Fully-sealed
Weight .05 oz. (1.5 g)
Packaging method Tubes; tape and reel (surface mount only)

Ordering Information

Part number	Rated voltage (VDC)	Coil res. (Ω)	Power (mW)	Contact form	Type	
G6H-2	-DC5	5 DC	178	140	DPDT	Non-Latching
	-DC12	12 DC	1,028	140	DPDT	Non-Latching
	-DC24	24 DC	2,880	200	DPDT	Sealed
G6HK-2	-DC5	5 DC	125	200	DPDT	Dual
	-DC12	12 DC	720	200	DPDT	Coil
	-DC24	24 DC	1,920	300	DPDT	Latching Sealed
G6H-2-F	-DC5	5 DC	178	140	DPDT	Surface Mount
	-DC12	12 DC	1,028	140	DPDT	Surface Mount
	-DC24	24 DC	2,880	200	DPDT	Surface Mount

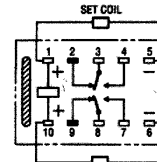
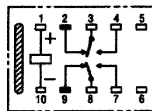
Note: 1. For high ambient (+85°C) version, replace "-2-" with "-2-100-" in part number.
 2. Single coil latching versions also available.

Dimensions [Unit: mm (inch)]

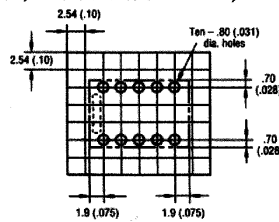


Non-Latching Terminal arrangement/ Internal connections (bottom view)

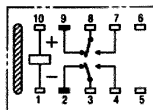
Dual Coil-Latching Terminal arrangement/ Internal connections (bottom view)



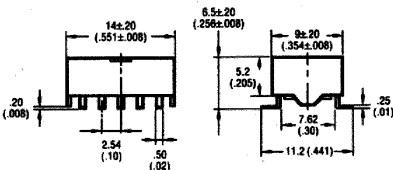
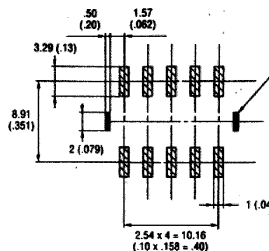
Mounting holes (bottom view, dimensional tolerance ±0.1)



Terminal arrangement/ Internal connections (bottom view)



Mounting pads (bottom view, dimensional tolerance ±0.1)



Note: 1. A tolerance of ±4mm applies to all dimensions shown.
 2. ■ and □ indicate mounting orientation marks.