

Relay G5V-2-H1, 5V DC/125V AC 2A

Reference: AM3776

EAN13: -

HS code: 85364190



Product attributes:

Product features:

Voltage: 5 V DC

Waterproof grade: IP65

Number of pins: 8-pin

Max. switching current: 2 A

Max. switching voltage: 125V AC/125V DC

Contact type: DPDT

Product description:

Omron G5V-2-H1 is a miniature signal relay for PCB mounting with a 5 V DC coil in the High-sensitivity version. Thanks to the DPDT (2c) contacts, it is suitable for switching two independent circuits in control, measurement and communication applications where low coil power consumption is required.

Technical specifications

- Model: G5V-2-H1
- Relay type: signal relay for PCB
- Contact arrangement: DPDT (2c)
- Coil voltage rating: 5 V DC
- Coil rated current: 30 mA
- Coil resistance: 166.7 Ω
- Coil power consumption: approximately 150 mW
- Contact material: Ag + Au-alloy
- Contact type: bifurcated crossbar
- Rated load (resistive load): 0.5 A at 125 VAC; 1 A at 24 VDC
- Rated continuous contact current: 2 A
- Max. switching voltage: 125 VAC, 125 VDC
- Max. switching current: 1 A
- Switching time: max. 7 ms
- Opening time: max. 3 ms
- Contact resistance: max. 100 m Ω
- Insulation resistance: min. 1000 M Ω (at 500 VDC)
- Dielectric strength (coil-contacts): 1000 VAC, 50/60 Hz for 1 min
- Dielectric strength (same polarity contacts): 500 VAC, 50/60 Hz for 1 min
- Dielectric strength (contacts of different polarity): 1000 VAC, 50/60 Hz for 1 min
- Impulse withstand voltage: 1500 V (10 x 160 μ s)
- Ambient operating temperature: -25 $^{\circ}$ C to +70 $^{\circ}$ C (without icing and condensation)
- Operating ambient humidity: 5% to 85%
- Weight: approximately 5 g

Functions and features

- High-sensitivity version for reduced coil power consumption while maintaining relay functional parameters
- DPDT contacts allow simultaneous switching of two circuits
- Au alloy contacts for reliable signal switching at low levels
- Defined insulation and dielectric parameters for use in control circuits

Ideal for

- Control and logic circuits in industrial electronics
- Measuring and testing equipment
- Communication and signaling modules
- Switching of low-voltage DC circuits and resistive AC loads within rated values

Package contents

- Relay Omron G5V-2-H1, 5 V DC (High-sensitivity)

Why choose this product?

- Verified relay type with defined coil and contact parameters
- DPDT design for universal use in signal and control applications
- High-sensitivity variant with lower coil power consumption
- Contact material Ag + Au-alloy suitable for signal switching

Installation and operating instructions

- Observe the nominal coil voltage of 5 V DC and the correct polarity according to the wiring of your board.
- For switching inductive loads, use appropriate surge suppression (e.g. diode for DC, RC element/varistor for AC)
- Respect the nominal values for resistive loads and verify suitability for the specific switched load under real-world conditions.

Safety notice

- There is a risk of electric shock when switching 125 VAC/125 VDC and higher currents; installation should only be performed by a qualified person
- Ensure sufficient insulation distances on the PCB and follow safe design principles for working with hazardous voltages

