

Relay G5V-2-H1, 24V DC/125V AC 2A

Reference: AM4727

EAN13: -

HS code: 85364190



Product attributes:

Product features:

Voltage: 24 V DC

Waterproof grade: IP65

Number of pins: 6-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 with high coil sensitivity (High-sensitivity) designed for switching low to medium power in control and measurement circuits. Thanks to the DPDT (2c) configuration, it allows simultaneous switching of two independent contact branches in a compact design.

Technical specifications

- Model series: G5V-2
- Version: G5V-2-H1
- Nominal coil voltage: 24 V DC
- Rated coil current: 8.33 mA
- Coil resistance: 2,880 Ω
- Coil consumption: approximately 200 mW
- Contacts: DPDT (2c)
- Contact type: bifurcated crossbar
- Contact material: Ag + Au-alloy
- Rated load (resistive): 0.5 A at 125 VAC; 1 A at 24 VDC
- Rated continuous current (rated carry current): 2 A
- Maximum switching voltage: 125 VAC, 125 VDC
- Maximum switching current: 1 A
- Contact resistance: max. 100 m Ω
- Switching time: max. 7 ms
- Opening time: max. 3 ms
- Insulation resistance: min. 1,000 M Ω (at 500 VDC)
- Dielectric strength between coil and contacts: 1,000 VAC, 50/60 Hz for 1 min
- Dielectric strength between contacts of the same polarity (High-sensitivity): 500 VAC, 50/60 Hz for 1 min
- Dielectric strength between contacts of different polarity: 1,000 VAC, 50/60 Hz for 1 min
- Impulse withstand voltage: 1,500 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 with reduced coil consumption for energy-efficient control circuits
- DPDT (2c) configuration for switching two signal branches
- Contacts with bifurcated crossbar design for reliable signal switching
- Defined switching times suitable for fast control applications
- High insulation resistance and proven dielectric parameters for safe circuit separation

Ideal for

- Control and automation modules
- Measuring instruments and test fixtures
- Signal switching in industrial and laboratory electronics
- Interface between logic and power section with requirement for galvanic isolation

Package contents

- 1x Omron G5V-2-H1 relay, 24 V DC coil

Why choose this product?

- Proven range of signal relays with defined electrical and insulation parameters
- High-sensitivity option for applications with limited coil power consumption
- DPDT contacts allow flexible wiring (switching of two branches)
- Contact and insulation parameters suitable for a wide range of control applications

Installation and operating instructions

- When designing, consider the type of load (resistive/inductive) and, if necessary, use interference suppression elements to limit surge voltage during expansion.
- Observe the 24 V DC coil ratings and ensure a stable power supply including correct polarity.
- For long-term reliability, verify the switching currents and voltages under real operating conditions.

Safety notice

- The relay can switch voltages up to 125 VAC / 125 VDC; working with hazardous voltages requires professional qualifications and compliance with relevant standards.
- Before handling, disconnect the device from the power supply and verify that there is no voltage.

