

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

Reference: AM2572

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:

The OMRON G5V-2 is a miniature PCB signal relay with a 5 V DC coil and two changeover contacts (DPDT, 2 Form C). It is suitable for switching low to medium loads in control and signal circuits where defined electrical strength and repeatable switching parameters are required.

Technical specifications

- Model series: G5V-2 (standard version)
- Coil voltage: 5 V DC
- Contact arrangement: DPDT (2c, 2 Form C)
- Contact type: bifurcated cross contact
- Contact material: Ag + Au alloy
- Rated load (resistive): 0.5 A at 125 VAC; 2 A at 30 VDC
- Rated continuous contact current: 2 A
- Maximum switching voltage: 125 VAC, 125 VDC
- Maximum switching current: 2 A
- Contact resistance: max. 50 mΩ
- Switching time: max. 7 ms
- Opening time: max. 3 ms
- Insulation resistance: min. 1000 MΩ (at 500 VDC)
- Dielectric strength: between coil and contacts 1000 VAC (50/60 Hz, 1 min); between contacts 750 VAC (50/60 Hz, 1 min); between contacts of different polarity 1000 VAC (50/60 Hz, 1 min)
- Impulse withstand voltage: 1500 V (10 x 160 μs)
- Mechanical life: min. 15,000,000 switching cycles
- Electrical life: min. 100,000 switching operations (at 1800 switching operations/h)
- Ambient operating temperature: -25°C to 65°C (no icing or condensation)
- Operating ambient humidity: 5% to 85%
- Weight: approximately 5 g

Functions and features

- Two changeover contacts for simultaneous switching of two independent branches
- Suitable for signal and control applications requiring stable insulation parameters
- Fast response (typically in the order of milliseconds) for common switching tasks
- Au-doped contacts for more reliable switching of low signal levels within specifications

Ideal for

- Control and signal circuits in industrial electronics
- Switching signal paths, logic levels and low-voltage loads
- Automation, measuring technology and laboratory products
- Switching DC loads up to 30 VDC within rated values

Package contents

- OMRON G5V-2 relay, 5 V DC coil

Why choose this product?

- Proven DPDT (2 Form C) design for universal use in signal and control circuits
 - Clearly defined switching and insulation parameters for the design of reliable devices
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- Standard version suitable for common applications with 5 V DC coil

Installation and operating instructions

- When designing a printed circuit board, observe the recommended insulation distances and track widths according to the switching voltage and current.
- To achieve the declared service life, use the relay within the rated values for the given load type (resistive/inductive)
- For inductive loads, consider using appropriate suppression (e.g. RC element, diode, varistor) depending on the type of power supply and load.

Safety notice

- The relay is capable of switching voltages up to 125 VAC / 125 VDC; when working with hazardous voltages, ensure adequate shielding, protection and compliance with safety standards
- Only perform installation and service when the power supply is disconnected.

