

PCB Relay G5T

**Slim Relay capable of switching up to 5 A,
Ideal for use In Air Conditioners, Water
Heaters, and Small Electrical Appliances**

- Economical slim relay ideal for high density mounting
- Low power consumption (200mW)
- 10-kV impulse withstand voltage (between coil and contacts)
- UL recognized / CSA certified. VDE Approved.
- Tracking Resistance: CTI $\geq$ 250 V
- RoHS compliant



Ordering Information

List of Models

Models	Enclosure rating	Contact form
G5T-1A	Flux protection	SPST-NO

Note: When ordering, add the rated coil voltage to the model number.

Example: G5T-1A DC 24
Rated coil voltage

Model Number Legend

G5T- DC
1 2 3

- 1. Number of Poles**
1: 1pole
- 2. Contact Form**
A: SPST-NO
- 3. Rated Coil Voltage**
5, 12, 24

Specifications @ 23°C (coil resistance $\pm$ 10%)

Coil Ratings

Rated voltage (VDC)	Rated current (mA)	Coil resistance (Ω)	Pick-up voltage	Dropout voltage	Maximum voltage	Power consumption (mW)
5	40	125	75% max.	5% min.	110%	Approx. 200
12	16.7	720				
24	8.3	2880				

■ Contact Ratings

Rated load (resistive)	5 A at 250 VAC 5 A at 30 VDC
Rated carry current	5 A
Max. switching voltage	250 VAC, 30 VDC
Max. switching current	5 A
Max. switching capacity	1250 VA, 150 W
Minimum Permissible Load*	10 mA at 5 VDC

*P level: $\lambda_{60} = 0.1 \times 10^{-6}/\text{operation}$

■ Characteristics

Contact resistance		100 mΩ max. (measured by voltage drop method using 1 A @ 5 VDC)
Operate time		10 ms max.
Release time		10 ms max.
Insulation resistance		1,000 MΩ min. (at 500 VDC)
Dielectric strength		4,000 VAC, 50/60 Hz for 1 min. between coil and contacts 750 VAC, 50/60 Hz for 1 min. between contacts of same polarity
Vibration resistance	Destruction	10 to 55 Hz, 1.5 mm double amplitude
	Malfunction	10 to 55 Hz, 1.5 mm double amplitude
Shock resistance	Destruction	1,000 m/s ² (approx. 100 G)
	Malfunction	100 m/s ² (approx. 10 G)
Service Life	Mechanical	2,000,000 operations min. (at 18,000 operations/hr)
	Electrical (resistive load)	100,000 operations min. (3 A at 250 VAC, 30 VDC) 30,000 operations min. (5 A at 250 VAC, 30 VDC) (at 1,800 operations/hr)
Ambient operating temperature		-40°C to 70°C (with no icing or condensation)
Ambient operating humidity		5% to 85%
Weight		Approx. 3 g

Note: 1. Data shown above are of initial value.
2. Please avoid ultrasonic cleaning this relay.

■ Approvals

UL Recognized  (File No. E41515) / CSA Certified  (File No. 1527954) - - Ambient Temp. = 40°C

Model	Coil rating	Contact rating
G5T-1A	5, 12, 24 VDC	5 A, 250 VAC (resistive), 6,000 cycles 5 A, 30 VDC (resistive), 6,000 cycles

VDE0435  (EN61810-1)

Model	Coil rating	Contact rating
G5T-1A	5, 12, 24 VDC	5 A, 250 VAC ($\cos\phi = 1$) 10,000 cycles 5 A, 30 VDC (L/R = 0 ms) 10,000 cycles 3 A, 250 VAC ($\cos\phi = 1$) 100,000 cycles

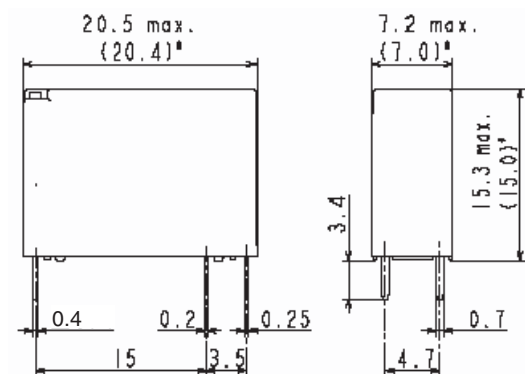
CQC (license No. 04001010419)

Model	Coil rating	Contact rating
G5T-1A	5, 12, 24 VDC	5 A, 250 VAC resistive, 10,000 cycles 5 A, 30 VAC resistive, 10,000 cycles

Dimensions

Note: All units are in millimeters unless otherwise indicated.

G5T-1A

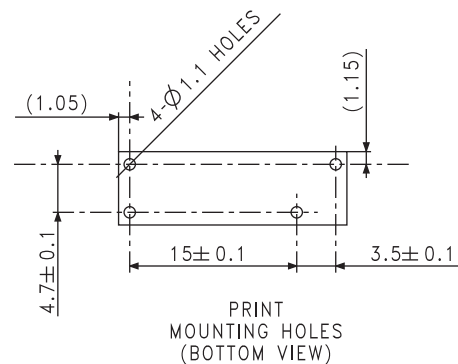


*Typical value

Terminal
Arrangement/Internal
Connections (Bottom View)



Mounting Holes
(Bottom View)
Tolerance: ± 0.1 mm
Unless specified



MEMO

A large grid of 20x20 squares. Each square contains a small geometric pattern of lines. The pattern consists of a central square with lines extending from its sides, forming a cross-like shape. The lines are thin and gray, and the background is white. The grid is composed of 20 columns and 20 rows of these squares.

Omron Electronic Components, LLC

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ALL DIMENSIONS SHOWN ARE IN MILLIMETERS.

To convert millimeters into inches, multiply by 0.03937. To convert grams into ounces, multiply by 0.03527.

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