

A Miniature Relay with 1-pole 5 A Switching Capability and 10 kV Impulse Withstand Voltage

- Highly efficient magnetic circuit for high sensitivity (200 mW).
- Compact slim, yet provides 10 kV impulse withstand voltage (between coil and contacts).
- Standard model conforms to UL, CSA and VDE standards.
- Tracking resistance: $CTI \geq 250$
- Contains no lead inside and features cadmium-free contacts ensuring environment-friendly use.



Ordering Information

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

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

Example: G5T-1A 12VDC

Rated coil voltage

Model Number Legend

G5T - VDC

1 2 3

1. Number of Poles

1: 1pole

2. Contact Form

A: SPST-NO

3. Rated Coil Voltage

5, 9, 12, 18, 24 VDC

Specifications

■ Coil Ratings

Rated Voltage (V)	Rated current (mA)	Coil resistance (Ω)	Must operate voltage	Must release voltage	Rated power consumption (W)	Max voltage
DC5	40	125	75%max. of rated voltage	5%min. of rated voltage	Approx. 200mW	90~110%
DC9	22.2	405				
DC12	16.7	720				
DC18	11.1	1620				
DC24	8.3	2880				

(1) The value of above list is measured at ambient temperature 23°C with the tolerances of coil resistance $\pm 10\%$.

(2) The other items are value at 23°C .

- Note:** 1. Please avoid to do the ultrasonic cleaning, for this relay
Because there are afraid of open coil by the vibration of ultrasonic.
2. Please pay attention to the drop of relay
if you dropped the product on the floor, please avoid to use it on your unit

■ Contact Ratings

Load	Resistive load($\cos\Phi=1$)
Rated load	3A at 250VAC 3A at 30VDC 5A at 250VAC 5A at 30VDC
Rated carry current	5A
Max. switching voltage	250VAC 30VDC
Max. switching current	AC 5A DC5A
Max. switching power	AC1250VA DC150W
Failure rate(reference value)	10mA at DC5V

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

■ Characteristics

Contact resistance	100 m Ω max.
Operation time	10 ms max.
Release time	10 ms max.
Insulation resistance	1,000 M Ω min. (at 500 VDC)
Dielectric strength	4,000 VAC. 1mA 50/60Hz for 1 min between coil and contacts 750 VAC .1mA 50/60Hz for 1 min between contacts of same polarity
Vibration resistance	Destruction: 10 ~55~10 Hz, 0.75mm single amplitude(1.5-mm double amplitude) Malfunction: 10 ~55~10 Hz, 0.75mm single amplitude(1.5-mm double amplitude)
Shock resistance	Destruction: 1,000 m/s ² (approx.100G) Malfunction: 100 m/s ² when energized ; 100 m/s ² when no energized
Endurance	Mechanical: 2,000,000 operations min; at 18,000 operations/hr under no load Electrical: 100,000 operations min. (AC250V/DC30V, 3A); 30,000 operations min. (AC250V/DC30V, 5A); at 1,800 operations/hr under rated load
Ambient temperature	-40°C to 70°C (with no icing)
Ambient humidity	5% to 85%
Weight	Approx. 3g

Note: Values in the above table are the initial values.

■ Approved standards

OMRON

UL (File NO. E41515) & CSA C22.2 No. 14 (File No. 1527954)

Model	Coil rating	Contact rating
G5T-1A	5 to 24VDC	5A,250VAC Resistive, 6,000 cycles 5A,30VDC Resistive, 6,000 cycles

VDE0435(EN61810-1)

Model	Coil rating	Contact rating
G5T-1A	5, 12, 24 VDC	5A 250VAC(cosΦ=1) 10,000 cycles 5A 30VDC(0ms) 10,000 cycles 3A 250VAC(cosΦ=1) 100,000 cycles

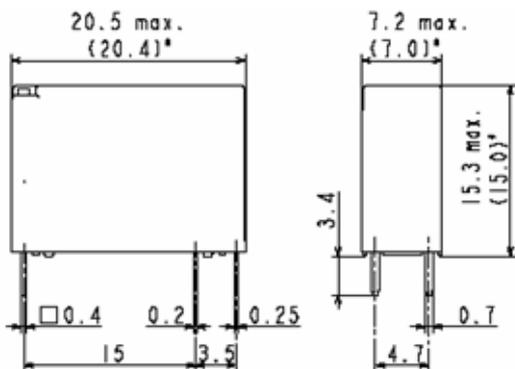
CQC (license No. 04001010419)

Model	Coil rating	Contact rating
G5T-1A-*	5, 12, 18, 24 VDC	5A, 250 VAC resistive, 10,000 cycles 5 A, 30 VAC resistive, 10,000 cycles

Dimensions

Note: All units are in millimeters unless otherwise indicated.

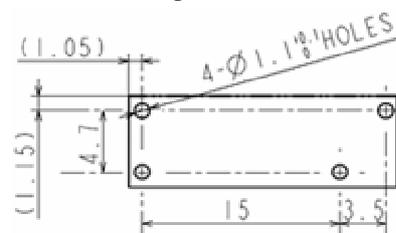
G5T-1A



Terminal Arrangement/Internal Connections (Bottom View)



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



*Average value