

# 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 ( $\Omega$ ) | 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<br>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:  $\lambda_{60} = 0.1 \times 10^{-6}$ /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<br>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 <sup>2</sup> (approx. 100 G)  |
|                               | Malfunction                 | 100 m/s <sup>2</sup> (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)<br>30,000 operations min. (5 A at 250 VAC, 30 VDC)<br>(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<br>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 (cosφ = 1) 10,000 cycles<br>5 A, 30 VDC (L/R = 0 ms) 10,000 cycles<br>3 A, 250 VAC (cosφ = 1) 100,000 cycles |

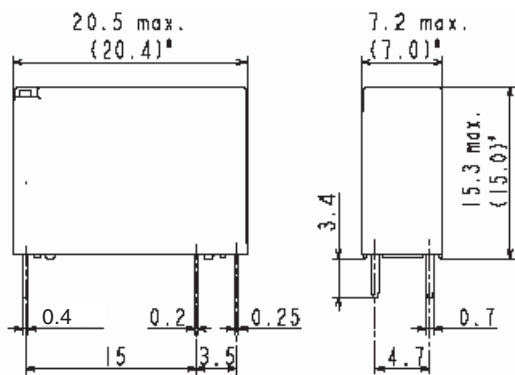
CQC (license No. 04001010419)

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

# Dimensions

Note: All units are in millimeters unless otherwise indicated.

## G5T-1A

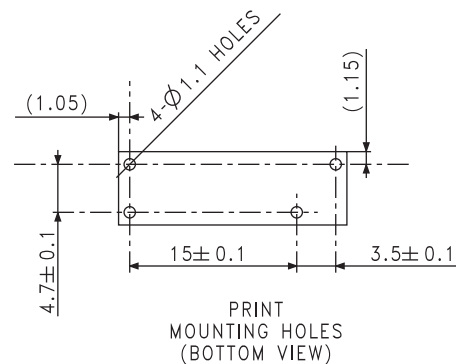


\*Typical value

Terminal Arrangement/Internal Connections (Bottom View)



Mounting Holes (Bottom View)  
Tolerance:  $\pm 0.1$  mm  
Unless specified



MEMO

A large grid of dashed lines for taking notes, consisting of 20 columns and 30 rows of small squares.

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

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