# PCB Relay

## 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 ≥ 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-
$$\square$$
 DC $\square$ 

1. Number of Poles

1: 1pole

2. 2. Contact Form

A: SPST-NO

3. 3. Rated Coil Voltage

5, 12, 24

### Specifications @ 23°C (coil resistance ± 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

<sup>\*</sup>P level:  $\lambda_{60}$  = 0.1 X 10<sup>-6</sup>/operation

### **■** Characteristics

Contact resistance		100 m $\Omega$ 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 M $\Omega$ 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 <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) 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)		-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 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	, ,	$5$ 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 A, 250 VAC resistive,10,000 cycles 5 A, 30 VAC resistive,10,000 cycles

(1.15)

 $3.5 \pm 0.1$ 

Mounting Holes

Tolerance: ±0.1mm

Unless specified

(Bottom View)

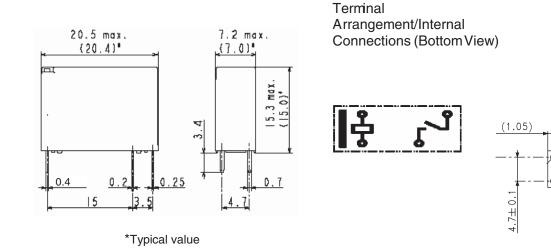
 $15 \pm 0.1$ 

PRINT MOUNTING HOLES (BOTTOM VIEW)

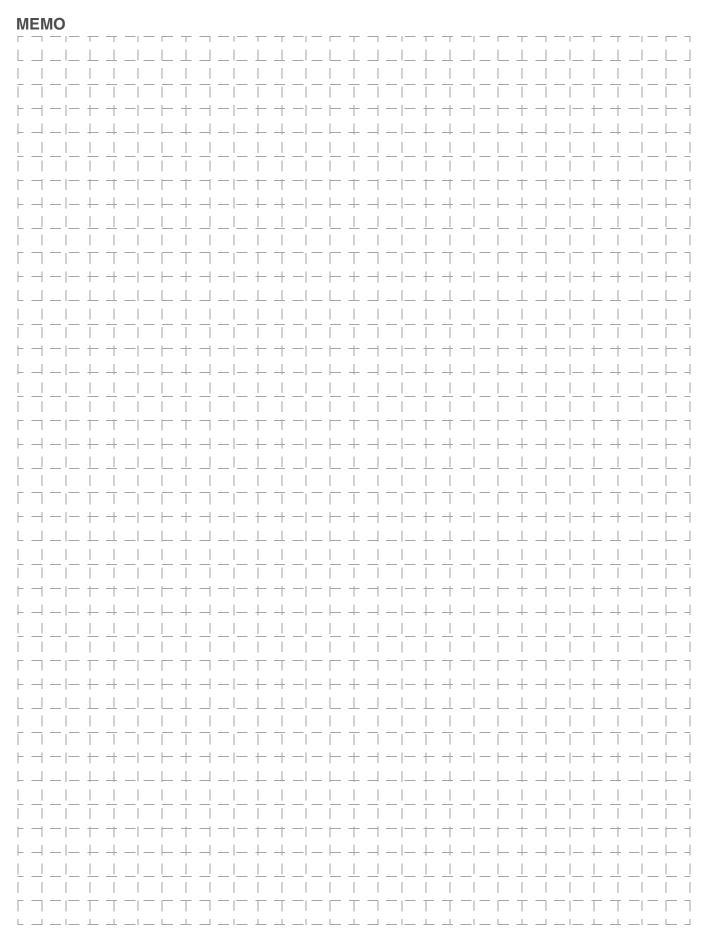
### **Dimensions**

Note: All units are in millimeters unless otherwise indicated.

### **G5T-1A**







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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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