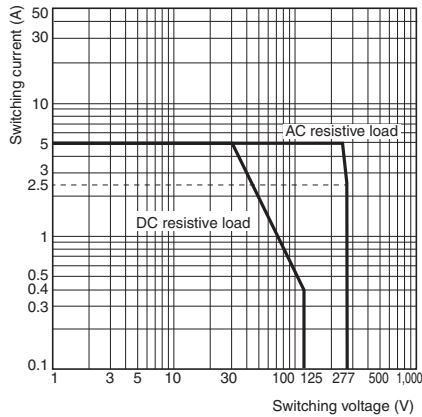


## Engineering Data

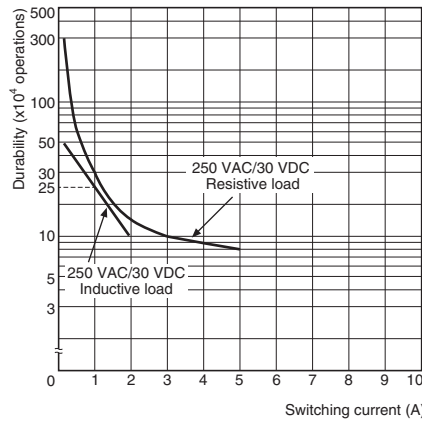
### Maximum Switching Capacity

#### G6DN-1A, G6DN-1A-L



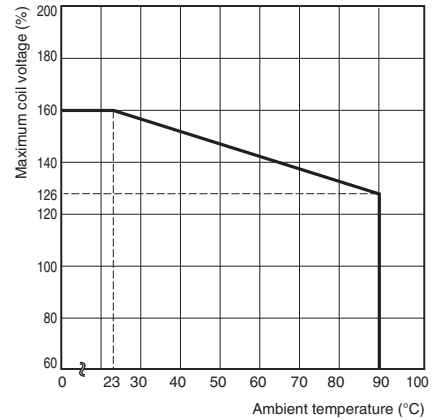
### Durability

#### G6DN-1A



### Ambient Temperature vs. Maximum Coil Voltage

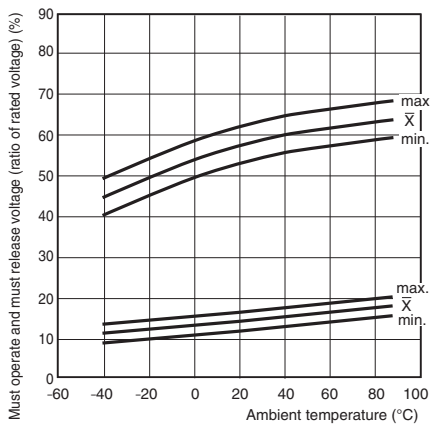
#### G6DN-1A, G6DN-1A-L



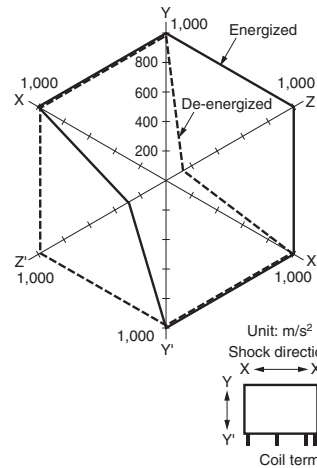
Note. The maximum coil voltage refers to the maximum voltage in a varying range of operating power voltage, not a continuous voltage.

### Ambient Temperature vs. Must Operate and Must Release Voltages

#### G6DN-1A, G6DN-1A-L



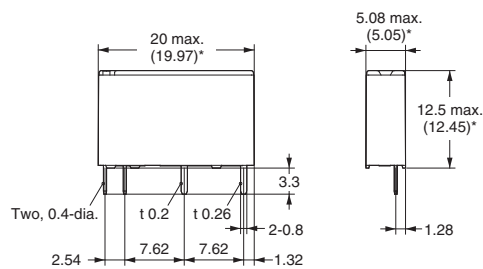
### Shock Malfunction



Sample: G6DN-1A  
 Number of Relays: 5 pcs  
 Test conditions: Impose a shock in the  $\pm X$ ,  $\pm Y$ , and  $\pm Z$  directions three times each with the Relay energized to check the shock values that cause the Relay to malfunction.  
 Standard: 100  $\text{m/s}^2$

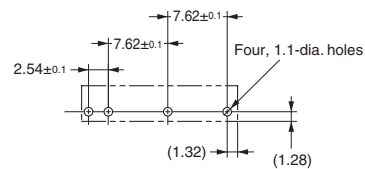
## Dimensions

### G6DN-1A(-L)

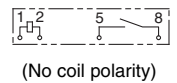


\* Average value

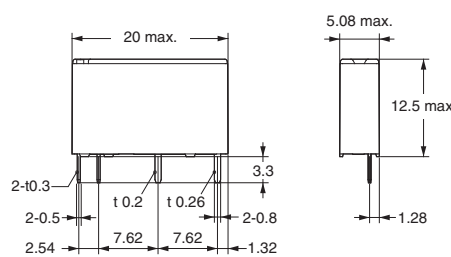
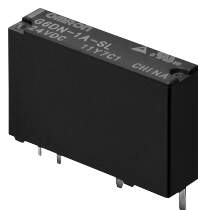
### PCB Mounting Holes (Bottom View)



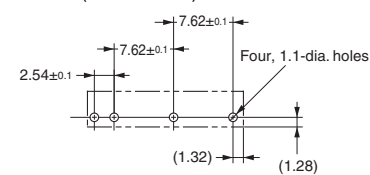
### Terminal Arrangement/ Internal Connections (Bottom View)



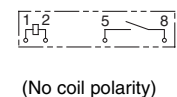
### G6DN-1A-SL



### PCB Mounting Holes (Bottom View)



### Terminal Arrangement/ Internal Connections (Bottom View)




## Approved Standards

●The rated values approved by each of the safety standards may be different from the performance characteristics individually defined in this datasheet.

**UL/C-UL-approved models**  (File No. E41515)

Model	Contact form	Coil ratings	Contact ratings	Operations
G6DN-1A(-SL)	SPST-NO	4.5 to 24 VDC	5 A at 277 VAC (Resistive) 95°C	6,000
			5 A at 30 VDC (Resistive) 90°C	6,000
			3A, 250V ac, Resistive 85°C	100,000
			1/10 hp 125 VAC 95°C	1,000
			1/10 hp 277 VAC 95°C	1,000
			D300 120 VAC/240 VAC 95°C	6,000
			C300 120 VAC/240 VAC 95°C	6,000
			R300 125 VDC/250 VDC 95°C	6,000
G6DN-1A-L	SPST-NO	5 to 24 VDC	5 A 250 VAC (Resistive) 95°C	100,000
			2 A 250 VAC (General Use) 95°C	100,000
			2 A 30 VDC (General Use) 95°C	100,000
			1/10 hp 120 VAC 40°C	6,000
			C300 120 VAC/240 VAC 95°C	6,000
			D150 120 VAC 95°C	6,000
			R150 125 VDC 95°C	6,000

Note. CSA certification CSA 22.2 No.14 can be recognized by C-UL.

**VDE (EN61810-1)**  (Certificate No. 40042696)

Model	Contact form	Coil ratings	Contact ratings	Operations
G6DN-1A	SPST-NO	4.5, 5, 12, 24 VDC	5 A at 250 VAC (cosφ= 1.0) 90°C	10,000
			5 A at 30 VDC (L/R = 0 ms) 90°C	10,000
G6DN-1A-L	SPST-NO	5, 12, 24 VDC	5 A 250 VAC (cosφ= 1.0) 90°C	100,000
			2 A 250 VAC (cosφ= 0.4) 90°C	100,000
			2 A 250 VAC (cosφ= 0.6) 90°C	100,000
			5 A 30 VDC (L/R = 0 ms) 90°C	100,000
			2 A 30 VDC (L/R = 7 ms) 90°C	100,000

**TÜV (EN61810-1)**  (Registration No. R 50396359)

Model	Contact form	Coil ratings	Contact ratings	Operations
G6DN-1A-SL	SPST-NO	5, 12, 24 VDC	5 A at 250 VAC (cosφ= 1.0) 90°C	10,000
			5 A at 30 VDC (L/R = 0 ms) 90°C	10,000

Clearance distance	3.5 mm min.
Creepage distance	3.6 mm min.
Type of insulation coil-contact circuit	Basic (PD.2)
open contact circuit	Micro disconnection
Rated Insulation voltage	300 V
Pollution degree	2
Rated voltage system	250 V
Over voltage category	II
Category of protection according to IEC 61810-1	RT III (Sealed)
Insulation material group	I
Tracking resistance according to IEC 60112	CTI 600 V min.
Flammability class according to UL94	V-0
Coil insulation system according to UL	Class B

## Precautions

●Please refer to “PCB Relays Common Precautions” for correct use.