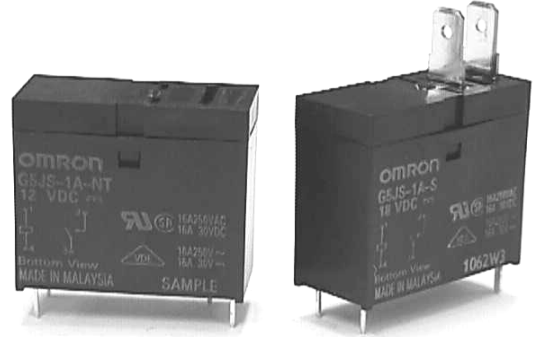


# PCB Relay

# G5JS

## Ideal for Microwave Oven Magnetrons and Heater Switching

- Clearance/Creepage distance of 8mm min. Confirmed to VDE0700
- High Impulse Withstand Voltage .( 10kV ) High Dielectric Strength ( 5kV)
- Approved by UL,CSA and VDE
- Environment Friendly Contact Material.
- Quick-Connect Terminal ( #187) and PCB terminal available



## Ordering Information

Enclosing rating	Contact Foam	Model
Unsealed	SPDT-NO	G5JS-1A

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

Examples : G5JS-1A 12 VDC  
└──────────┘ Rated coil voltage

### Model Number Legend

G5JS -    -        
1    2    3

#### 1. Number of Poles

1A: 1pole (SPST-NO contact)

#### 2. Terminals

None: Relays with #187, Tab and PCB  
 NT: Relays without #187, Tab

#### 3. Rated Coil Voltage

12, 18, 24 VDC

## Specifications

### Coil Ratings

	12 VDC	18 VDC	24 VDC
<b>Rated voltage</b>	12 VDC	18 VDC	24 VDC
<b>Rated current</b>	44.2 mA	29.4 mA	22.1 mA
<b>Coil resistance</b>	271.7 Ω	611.3 Ω	1086.8 Ω
<b>Must operate voltage</b>	70% max. of rated voltage		
<b>Must release voltage</b>	5% min. of rated voltage		
<b>Max. voltage</b>	110% of rated voltage		
<b>Power consumption</b>	Approx. 530 mW		

### Contact Ratings

<b>Rated load</b>	16 A at 250 VAC ( cosØ = 1 )
<b>Rated carry current</b>	16 A
<b>Max. switching voltage</b>	250 VAC

**Note:** 1. The rated current and coil resistance are measured at a coil temperature of 23°C with a tolerance of ±10%.  
 2. --- indicates DC (IEC 417 publications).

## ■ Characteristics

<b>Contact Resistance</b>	100m Ω max.
<b>Operation time</b>	15ms max.
<b>Release time</b>	5 ms max.
<b>Insulation resistance</b>	1,000 MΩ min. ( at 500 VDC )
<b>Dielectric strength</b>	5,000 VAC between coil and contacts ( 1 min. ) 1,000 VAC between contact to contact ( 1 min. )
<b>Impulse withstand voltage</b>	10 kV ( 1.2 x 50 μs ) between coil and contacts
<b>Vibration resistance</b>	Destruction : 10 to 55 to 10 Hz, 1.5 mm double amplitude Malfunction : 10 to 55 to 10 Hz, 1.5 mm double amplitude
<b>Shock resistance</b>	Destruction : 1,000 m/s <sup>2</sup> Malfunction : 150 m/s <sup>2</sup>
<b>Life expectancy</b>	Mechanical : 2,000,000 operations ( 18,000 operations/hr ) Electrical : 100,000 operations min ( 1,800 operations/hr )
<b>Ambient temperature</b>	Operating : -40°C to 85°C ( with no icing )
<b>Ambient humidity</b>	35% to 85%
<b>Weight</b>	Approx. 17g

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

## ■ Approved by Standards

### UL508 (File No. E41643) & CSA C22.2 No. 14 (File No. LR31928)

Coil Rating	Contact ratings
12 to 24 VDC	16 A 250 VAC 16 A 30 VDC

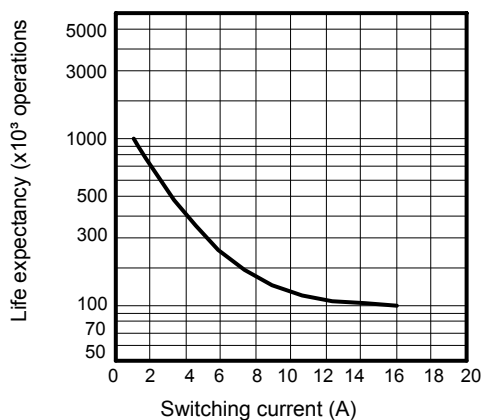
### VDE0435 ( EN60255, EN61810 ), VDE0700 ( EN60335 )

Coil Rating	Contact ratings	Approved conditions
12, 18, 24 V $\text{---}$	16 A at 250V $\sim$ ( $\cos\phi = 1$ ) 16 A at 30V $\text{---}$ ( 0 ms )	Operation range : class 1 Pick-up class : class B Pollution degree : 2 Overvoltage category : III Material group : IIIa Ambient temperature : -40°C to 85 °C

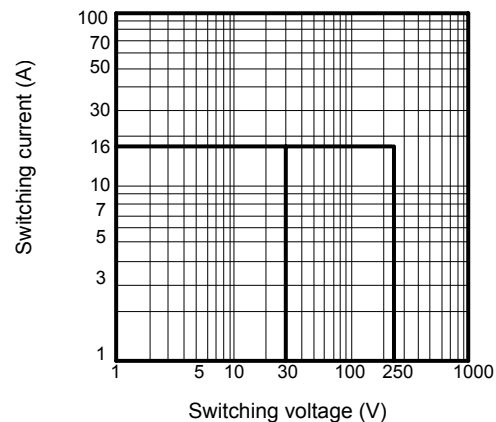
Note:  $\sim$  indicates AC and  $\text{---}$  indicates DC (IE417 publications)

## Engineering Data

### Life Expectancy



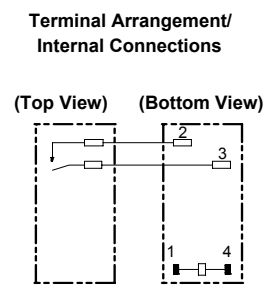
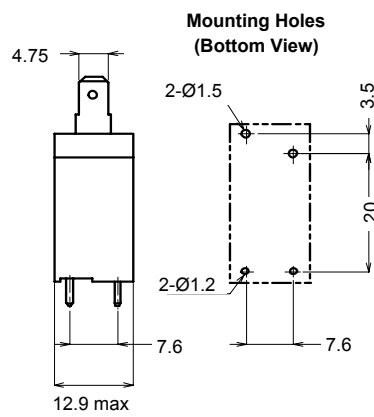
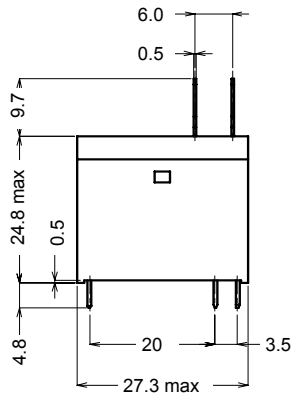
### Max. Switching Capacity



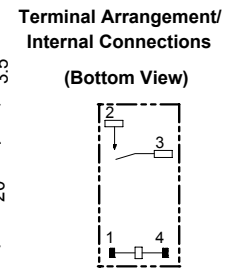
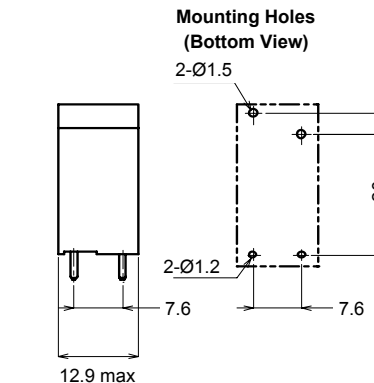
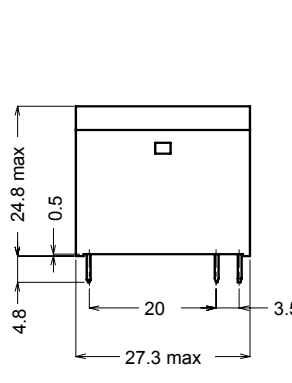
Note: All units are in millimeters unless otherwise indicated

# Dimensions

**G5JS-1A**



**G5JS-1A-NT**



**ALL DIMENSIONS SHOWN ARE IN MILLIMETERS**  
 To convert millimeters into inches, multiply by 0.03937. To convert grams into ounces, multiply by 0.03527.