

# **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 -  $\frac{\Box}{1}$  -  $\frac{\Box}{2}$   $\frac{\Box}{3}$ 

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

Rated voltage	12 VDC	18 VDC	24 VDC
Rated current	44.2 mA	29.4 mA	22.1 mA
Coil resistance	271.7 Ω	611.3 Ω	1086.8 Ω
Must operate voltage	70% max. of rated vo	ltage	
Must release voltage	5% min. of rated volta	age	
Max. voltage	110% of rated voltage	е	
Power consumption	Approx. 530 mW		

## ■ Contact Ratings

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

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

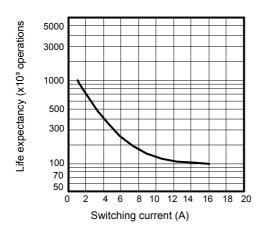
Coil Rating	Contact ratings	
12 to 24 VDC	16 A 250 VAC	
	16 A 30 VDC	

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

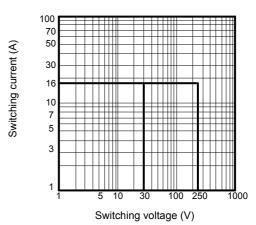
Coil Rating	Contact ratings	Approved conditions
12, 18, 24 V ===	16 A at 250V ∼ ( cosØ = 1 )	Operation range : class 1
	16 A at 30V === ( 0 ms )	Pick-up class : class B
		Pollution degree : 2
		Overvoltage category : III
		Material group : Illa
		Ambient temperature : -40°C to 85 °C

# **Engineering Data**

#### Life Expectancy



## Max. Switching Capacity

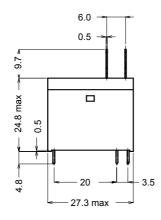


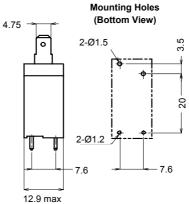
Note: All units are in millimeters unless otherwise indicated

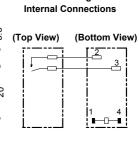
# **Dimensions**

G5JS-1A





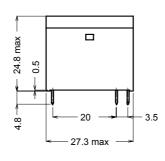


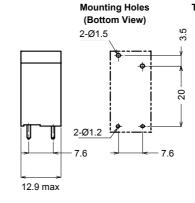


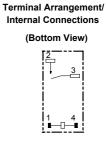
Terminal Arrangement/

G5JS-1A-NT









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