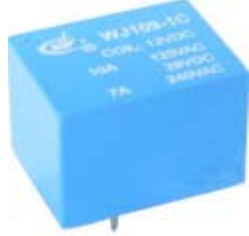




Relays for advanced technology

ULTRA-MINIATURE  
PC BOARD TYPE  
POWER RELAY

WJ109-  
RELAYS



- Ultra-miniature size with universal terminal footprint.
- High contact capacity: 10A.
- Sealed type available.
- Low coil power consumption.

## SPECIFICATIONS

### Contact

Arrangement	1 A; 1 C
Contact Material	Silver alloy
Contact Resistance (By voltage drop 6V 1A)	Max.100mΩ
Rating	
Resistive load (cosφ=1)	10A 125VAC 7A 250VAC 10A 28VDC
Max. Switching current	10A
Max. Switching power	1250VA 300W
Expected life(min.ope) Mechanical(at 180 cpm)	1×10 <sup>7</sup>
Electrical (at 20 cpm)	1×10 <sup>5</sup>

### Characteristics

Operate Time	Max.10msec.	
Release Time	Max.5msec.	
Operating humidity	45 to 85% RH	
Initial breakdown voltage Between coil & contact Between open contacts	2000VAC (50/60Hz)for 1 min. 750VAC (50/60Hz)for 1 min.	
Insulation Resistance	Min.1000MΩ (500 VDC)	
Temperature rise(Max.)	40deg(at nominal voltage)	
Ambient temperature	-40°C ~ +80°C	
Shock Resistance	Functional	Min. 10G
	Destruction	Min. 100G
Vibration Resistance	Functional	10 to 55 Hz at double Amplitude of 1.5mm
	Destruction	10 to 55 Hz at double Amplitude of 1.5mm
Insulation withstand voltage	5000V 1.2×50μs(between coil and contacts)	
Unit weight	Approx.10g	

### Coil

Nominal operating power	0.36 to 0.45W
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## TYPICAL APPLICATION

1. Cooling appliances
2. Air conditioners
3. Audio equipment.
4. Domestic appliances
5. Car control units, etc.

## ORDERING INFORMATION

**WJ109 - 1 C - 12VDC 25Ω**

**1 2 3 4 5**

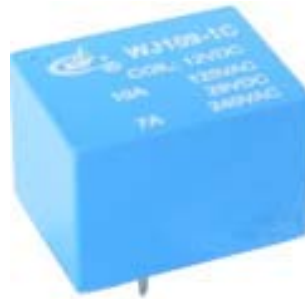
Type	Number of pole	Contact form	Coil voltage(DC)	Coil sensitivity
wj109	1:1pole	A: 1 form A B: 1 form B C: 1 form C	3,5,6,9, 12,24,48V	25,70,100,225, 400,1600:0.36W Nil:0.45W

# COIL DATA (at 20°C)

Nominal Voltage (VDC)	Pick-up Voltage (VDC)	Drop-out Voltage (VDC)	Coil Resistance ( $\Omega$ ) $\pm$ 10%	Nominal operating Power (W)	Coil Resistance ( $\Omega$ ) $\pm$ 10%	Nominal operating Power (W)	Max.Allowable Voltage (VDC)
3	2.25	0.15	25	0.36	20	0.45	130% of nominal Voltage
5	3.75	0.25	70		55		
6	4.50	0.30	100		80		
9	6.75	0.45	225		180		
12	9.00	0.60	400		320		
24	18.00	1.20	1600		1150		
48	36.00	2.40	5120	0.45	5120		

## DIMENSIONS

Unit: mm



Note: The relative changes for the specification will not be advised in the future.