

# OUAZ series

## Miniature, Sealed PC Board Relay

Telecommunications, Appliances,  
Office Machines, Audio Equipment.

 UL File No. E82292

 CSA File No. LR48471



Users should thoroughly review the technical data before selecting a product part number. It is recommended that user also seek out the pertinent approvals files of the agencies/laboratories and review them to ensure the product meets the requirements for a given application.

### Features

- Gold overlay silver palladium alloy contact suitable for low loads.
- High density available on PC board due to small size.
- 2.54mm terminal pitch same as I.C. socket terminal pitch.
- Sensitive and standard coils available.
- Immersion cleanable, sealed version available.

### Contact Data @ 20°C

**Arrangements:** 1 Form A (SPST-NO) and 1 Form C (SPDT).

**Material:** Gold overlay silver palladium.

**Max. Switching Rate:** 300 ops./min. (no load).

30 ops./min. (rated load).

**Expected Mechanical Life:** 10 million operations (no load).

**Expected Electrical Life:** 100,000 operations (rated load).

**Minimum Load:** 1mA @1VDC.

**Initial Contact Resistance:** 50 milliohms @ 100mA,6VDC.

### Coil Data @ 20°C

OUAZ-D Standard				
Rated Coil Voltage (VDC)	Nominal Current (mA)	Coil Resistance (ohms) ± 10%	Must Operate Voltage (VDC)	Must Release Voltage (VDC)
5	90.9	55	3.50	0.25
6	75.0	80	4.20	0.30
9	50.0	180	6.30	0.45
12	37.5	320	8.40	0.60
24	18.8	1,280	16.80	1.20

OUAZ-L Sensitive				
Rated Coil Voltage (VDC)	Nominal Current (mA)	Coil Resistance (ohms) ± 10%	Must Operate Voltage (VDC)	Must Release Voltage (VDC)
5	40.0	125	3.75	0.50
6	33.3	180	4.50	0.60
9	22.5	400	6.75	0.90
12	17.0	700	9.00	1.20
24	8.6	2,800	18.00	2.40

### Contact Ratings

**Ratings:** 1A @ 24VDC resistive,

1A @ 120VAC resistive.

**Max. Switched Voltage: AC:** 120V.

DC: 60V.

**Max. Switched Current:** 1A.

**Max. Switched Power:** 120VA, 30W.

### Operate Data

**Must Operate Voltage: OUAZ-D:** 70% of nominal voltage or less.

**OUAZ-L:** 75% of nominal voltage or less.

**Must Release Voltage: OUAZ-D:** 5% of nominal voltage or more.

**OUAZ-L:** 10% of nominal voltage or more.

**Operate Time: OUAZ-D:** 5 ms max.

**OUAZ-L:** 10 ms max.

**Release Time:** 7 ms max.

### Initial Dielectric Strength

**Between Open Contacts:** 500VAC 50/60 Hz. (1 minute).

**Between Coil and Contacts:** 1,000VAC 50/60 Hz. (1 minute).

**Surge Voltage Between Coil and Contacts:** 1,500V FCC Part 68  
(10/160µs).

### Environmental Data

**Temperature Range:**

**Operating: OUAZ-D:** -30°C to +60°C

**OUAZ-L:** -30°C to +75°C.

**Vibration, Mechanical:** 10 to 55 Hz., 1.5mm double amplitude

**Operational:** 10 to 55 Hz., 1.5mm double amplitude.

**Shock, Mechanical:** 500m/s<sup>2</sup> (50G approximately).

**Operational:** 100m/s<sup>2</sup> (10G approximately).

**Operating Humidity:** 20 to 85% RH. (Non-condensing)

### Initial Insulation Resistance

**Between Mutually Insulated Elements:** 1,000M ohms min. @ 500VDCM.

### Coil Data

**Voltage:** 5 to 24VDC.

**Nominal Power: OUAZ-D:** 450 mW.

**OUAZ-L:** 200 mW.

**Coil Temperature Rise: OUAZ-D:** 60°C max., at rated coil voltage.

**OUAZ-L:** 25°C max., at rated coil voltage.

**Max. Coil Power:** 130% of nominal.

**Duty Cycle:** Continuous.

### Mechanical Data

**Termination:** Printed circuit terminals.

**Enclosure (94V-0 Flammability Ratings):**

**OUAZ-SS:** Vented (Flux-tight), plastic cover.

**OUAZ-SH:** Sealed, plastic case.

**Weight:** 0.12 oz. (3.5g) approximately.

**Ordering Information**

Typical Part Number ►

**OUAZ -SS -1 12 L M ,900**

**1. Basic Series:**

OUAZ = Miniature, sealed PC board relay.

**2. Enclosure:**

SS = Vented (Flux-tight)\*, plastic cover.  
SH = Sealed, plastic case.

**3. Termination:**

1 = 1 pole

**4. Coil Voltage:**

03 = 3VDC    06 = 6VDC    12 = 12VDC  
05 = 5VDC    09 = 9VDC    24 = 24VDC

**5. Coil Input:**

L = Sensitive    D = Standard

**6. Contact Arrangement:**

Blank = 1 Form C, SPDT    M = 1 Form A, SPST-NO

**7. Suffix:**

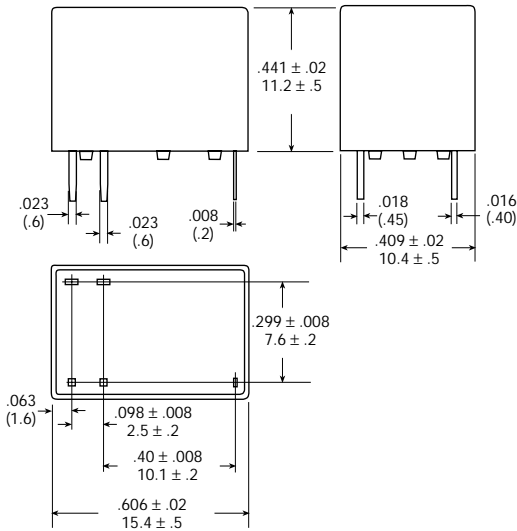
,900 = Standard model    Other Suffix = Custom model

\* Not suitable for immersion cleaning processes.

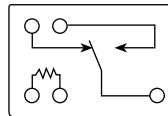
**Our authorized distributors are more likely to stock the following items for immediate delivery.**

None at present.

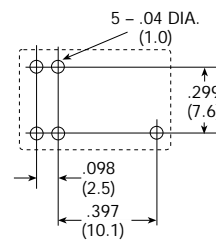
**Outline Dimensions**



**Wiring Diagram (Bottom View)**

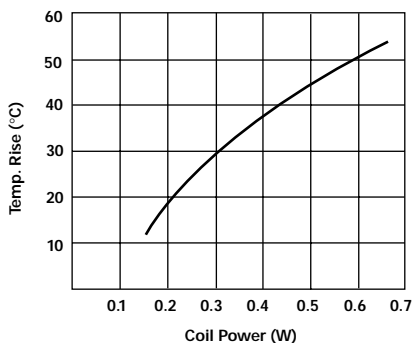


**PC Board Layout (Bottom View)**

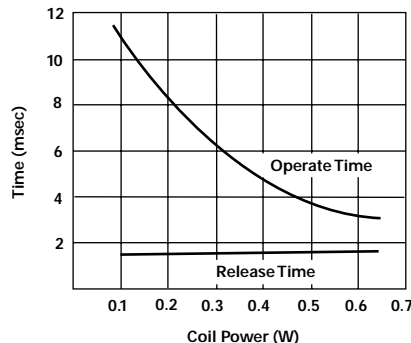


**Reference Data**

**Coil Temperature Rise**



**Operate Time**



**Life Expectancy**

