



# OUAZ series

## Miniature, Sealed PC Board Relay

Telecommunications, Appliances,  
Office Machines, Audio Equipment.

UL File No. E82292

CSA File No. LR48471

### 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)
3	150.0	20	2.10	0.15
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)
3	66.7	45	2.25	0.30
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)

### 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.

### Initial Insulation Resistance

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

### Coil Data

**Voltage:** 3 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.

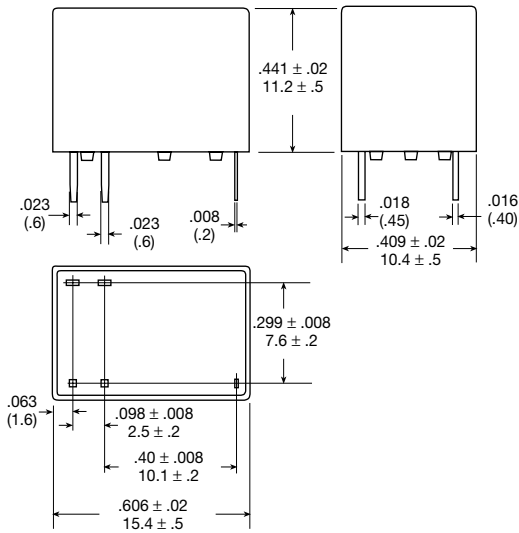
**Duty Cycle:** Continuous.

**Ordering Information**

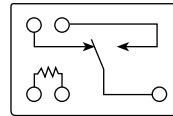
<b>Typical Part Number ▶</b>	<b>OUAZ</b>	<b>-SS</b>	<b>-1</b>	<b>12</b>	<b>L</b>	<b>M</b>
<p><b>1. Basic Series:</b> OUAZ = Miniature, sealed PC board relay.</p> <p><b>2. Enclosure:</b> SS = Vented (Flux-tight)*, plastic cover. SH = Sealed, plastic case.</p> <p><b>3. Termination:</b> 1 = 1 pole</p> <p><b>4. Coil Voltage:</b> 03 = 3VDC    06 = 6VDC    12 = 12VDC 05 = 5VDC    09 = 9VDC    24 = 24VDC</p> <p><b>5. Coil Input:</b> L = Sensitive    D = Standard</p> <p><b>6. Contact Arrangement:</b> Blank = 1 Form C, SPDT    M = 1 Form A, SPST-NO</p>						

\* Not suitable for immersion cleaning processes.

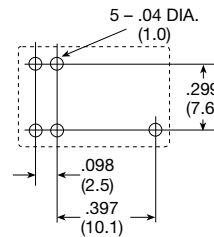
**Outline Dimensions**



**Wiring Diagram (Bottom View)**

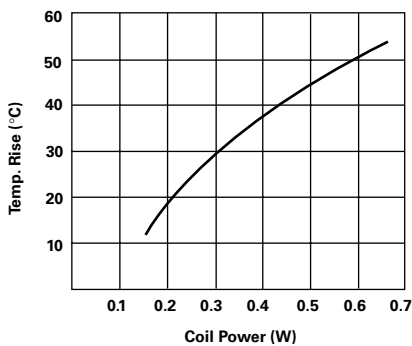


**PC Board Layout (Bottom View)**

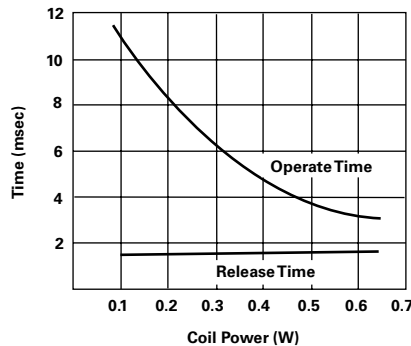


**Reference Data**

**Coil Temperature Rise**



**Operate Time**



**Life Expectancy**

