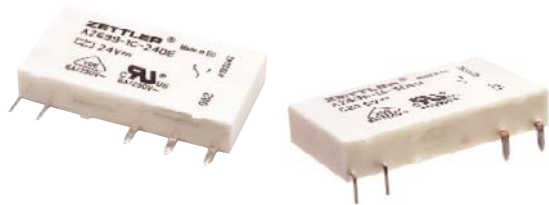


# AZ6991

## SENSITIVE SUBMINIATURE RELAY

### FEATURES

- Extremely small (5mm)
- 6 Amp switching capability
- High sensitivity, 95 mW pickup
- Dielectric strength 4000 Vrms contact to coil
- Isolation spacing greater than 8 mm
- Reinforced insulation, EN 60730-1 (VDE 0631, part 1)  
EN 60335-1 (VDE 0700, part 1)
- Coils up to 60 VDC
- Epoxy sealed version available
- UL, CUR file E43203
- VDE file 40020561



### CONTACTS

<b>Arrangement</b>	SPST (1 Form A) SPDT (1 Form C)
<b>Ratings</b>	Resistive load: Max. switched power: 180 W or 1500 VA Max. switched current: 6 A Max. switched voltage: 150 VDC* or 400 VAC * Note: If switching voltage is greater than 30 VDC, special precautions must be taken. Please contact the factory.
<b>Rated Load UL, CUR</b>	6 A at 277 VAC resistive 6 A at 30 VDC resistive R300 Pilot Duty
<b>VDE</b>	6 A at 250 VAC resistive 6 A at 30 VDC resistive
<b>Material</b>	Silver nickel, gold plating available
<b>Resistance</b>	< 50 milliohms initially

### COIL

<b>Power At Pickup Voltage (typical)</b>	95 mW
<b>Max. Continuous Dissipation</b>	0.9 W at 20°C (68°F) ambient
<b>Temperature Rise</b>	20°C (36°F) at nominal coil voltage
<b>Temperature</b>	Max. 105°C (221°F)

### NOTES

1. All values at 20°C (68°F).
2. Relay may pull in with less than "Must Operate" value.
4. Specifications subject to change without notice.

### GENERAL DATA

<b>Life Expectancy Mechanical Electrical</b>	Minimum operations 1 X 10 <sup>7</sup> operations 1 X 10 <sup>5</sup> at 5 A, 250 VAC
<b>Operate Time (typical)</b>	5 ms at nominal coil voltage
<b>Release Time (typical)</b>	3 ms at nominal coil voltage (with no coil suppression)
<b>Dielectric Strength (at sea level for 1 min.)</b>	1000 Vrms between open contacts 4000 Vrms contact to coil 6000 V surge, contact to coil
<b>Insulation Resistance</b>	100 megohms min. at 20°C, 500 VDC, 50% RH
<b>Dropout</b>	Greater than 5% of nominal coil voltage
<b>Ambient Temperature Operating Storage</b>	At nominal coil voltage -40°C (-40°F) to 85°C (158°F) -40°C (-40°F) to 105°C (221°F)
<b>Vibration</b>	1 mm DA at 10–500 Hz
<b>Shock</b>	5 g
<b>Enclosure</b>	P.B.T. polyester 94V-0
<b>Terminals</b>	Tinned copper alloy, P.C.
<b>Max. Solder Temp.</b>	260°C (500°F)
<b>Max. Solder Time</b>	5 seconds
<b>Max. Solvent Temp.</b>	80°C (176°F)
<b>Max. Immersion Time</b>	30 seconds
<b>Weight</b>	6 grams
<b>Packing unit in pcs</b>	20 per plastic tube / 1000 per carton box

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# AZ6991

## RELAY ORDERING DATA

COIL SPECIFICATIONS				ORDER NUMBER*	
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance Ohm $\pm 10\%$	1 Form A	1 Form C
5	3.75	11.2	147	AZ6991-1A-5D	AZ6991-1C-5D
12	9.0	26.8	848	AZ6991-1A-12D	AZ6991-1C-12D
24	18.0	53.7	3,390 ( $\pm 15\%$ )	AZ6991-1A-24D	AZ6991-1C-24D
48	36.0	100.0	10,600 ( $\pm 15\%$ )	AZ6991-1A-48D	AZ6991-1C-48D
60	45.0	120.0	16,600 ( $\pm 15\%$ )	AZ6991-1A-60D	AZ6991-1C-60D

\* Add suffix "E" at the end of order number for sealed version.  
 Add suffix "A" at the end of order number for gold plated contacts.  
 Add suffix "H" at the end of order number for horizontal mounting.

## MECHANICAL DATA

**Vertical Mount**

**Horizontal Mount**

### PC BOARD LAYOUT

**Vertical Mount**      **Horizontal Mount**

Note: Mounting hole diameters and center to center dimensions are the same for both vertical and horizontal mounting version

### WIRING DIAGRAM

**Form A**

**Form C**

Vertical Mount

**Form A**

**Form C**

Horizontal Mount

Dimensions in inches with metric equivalents in parentheses. Tolerance:  $\pm .010$ "