

# AZ6991

## SENSITIVE SUBMINIATURE RELAY

### FEATURES

- Extremely small footprint utilizing only 0.22 square inch of PCB area
- Thin vertical profile only 0.196" wide
- 6 Amp switching capability
- High sensitivity, 95 mW pickup
- Dielectric strength 4000 Vrms contact to coil
- Coils to 60 VDC
- Epoxy sealed version for wave soldering and cleaning available
- Isolation spacing greater than 8 mm
- 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 1662 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</b> <b>UL/CUR</b> <b>VDE</b>	6A at 277 VAC resistive 6A at 30 VDC resistive R300 Pilot Duty 6A at 250 VAC resistive 6A at 30 VDC resistive
<b>Material</b>	Silver nickel Silver nickel with gold plating

### COIL

<b>Power</b> <b>At Pickup Voltage</b> <b>(typical)</b>	95 mW
<b>Max. Continuous</b> <b>Dissipation</b>	1.0 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)

### GENERAL DATA

<b>Life Expectancy</b> <b>Mechanical</b> <b>Electrical</b>	Minimum operations 10 million operations 3 X 10 <sup>4</sup> at 6 A, 30 VDC or 250 VAC Res.
<b>Operate Time (typical)</b>	8 ms at nominal coil voltage
<b>Release Time (typical)</b>	4 ms at nominal coil voltage (with no coil suppression)
<b>Dielectric Strength</b> <b>(at sea level for 1 min.)</b>	1000 Vrms between open contacts 4000 Vrms contact to coil
<b>Insulation</b> <b>Resistance</b>	100 megohms min. at 20°C, 500 VDC, 50% RH
<b>Dropout</b>	Greater than 10% of nominal coil voltage
<b>Ambient Temperature</b> <b>Operating</b> <b>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>	0.062" DA 10–55 Hz
<b>Shock</b>	10 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>	5.4 grams

### NOTES

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



**AMERICAN ZETTLER, INC.**

[www.azettler.com](http://www.azettler.com)

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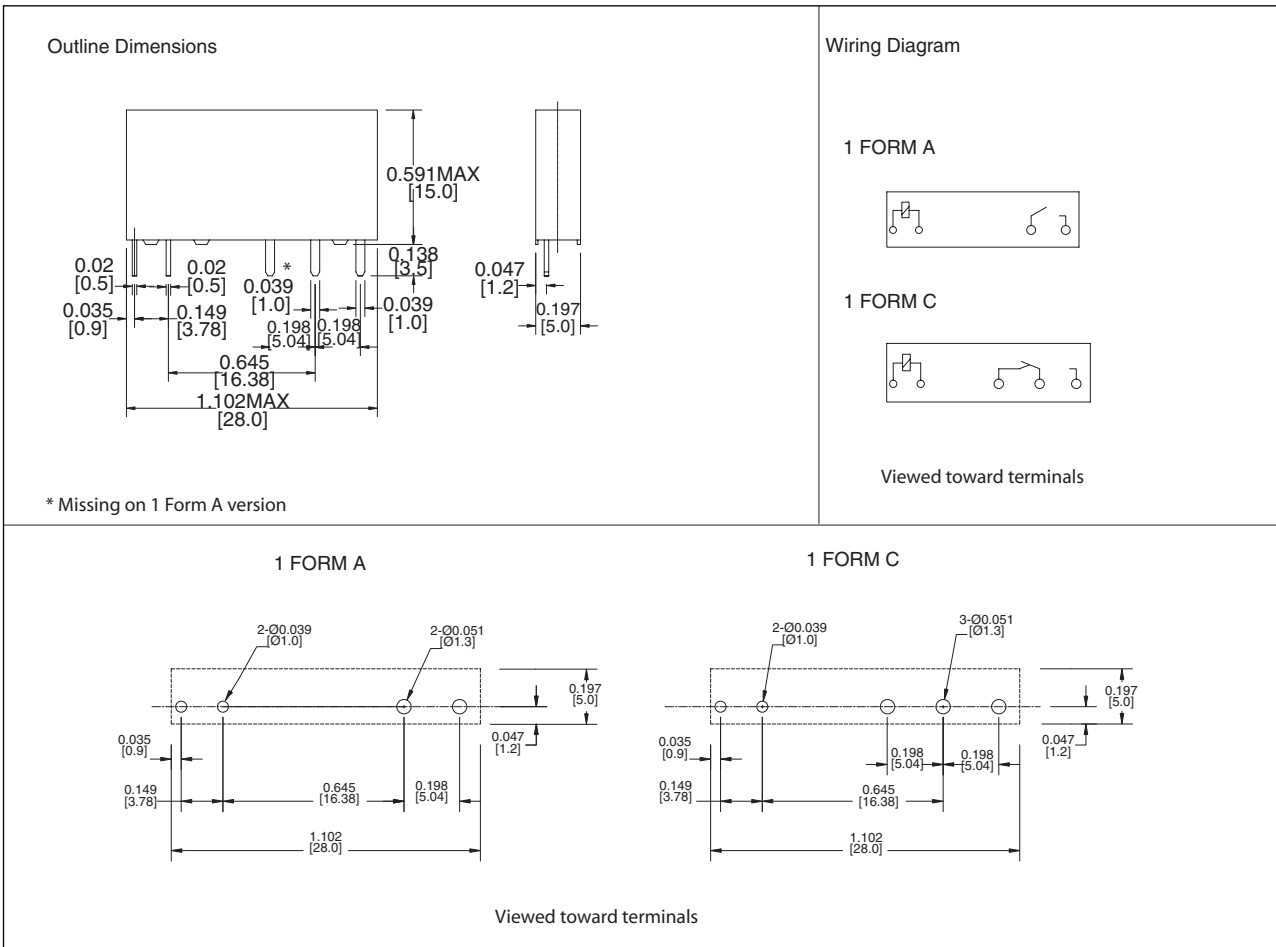
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## RELAY ORDERING DATA

COIL SPECIFICATIONS				ORDER NUMBER*	
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance	Unsealed	Sealed
3	2.25	6.9	53 ± 10%	AZ6991-1A-3D	AZ6991-1A-3DE
5	3.75	11.5	147 ± 10%	AZ6991-1A-5D	AZ6991-1A-5DE
6	4.50	13.8	212 ± 10%	AZ6991-1A-6D	AZ6991-1A-6DE
9	6.75	20.7	476 ± 10%	AZ6991-1A-9D	AZ6991-1A-9DE
12	9.00	27.6	848 ± 10%	AZ6991-1A-12D	AZ6991-1A-12DE
18	13.5	41.4	1906 ± 15%	AZ6991-1A-18D	AZ6991-1A-18DE
24	18.0	55.2	3390 ± 15%	AZ6991-1A-24D	AZ6991-1A-24DE
48	36.0	97.7	10600 ± 15%	AZ6991-1A-48D	AZ6991-1A-48DE
60	45.0	122.2	16600 ± 15%	AZ6991-1A-60D	AZ6991-1A-60DE

\*Substitute "-1C" for "-1A" to indicate 1 Form C contacts. Add suffix "A" for gold plated contacts.

## MECHANICAL DATA



Dimensions in inches with metric equivalents in parentheses. Tolerance: ± .010"



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