# AZ6991

### SENSITIVE SUBMINIATURE RELAY

#### FEATURES

- Extremely small footprint utilizing only 0.22 square inch of PCB area
- Thin vertical profile only 0.196" wide, horizontal version available
- 8 Amp switching capability
- High sensitivity, 95mW pickup
- Dielectric strength 4000Vrms contact to coil
- Coils to 60VDC
- Epoxy sealed version for wave soldering and cleaning available
- Isolation spacing greater than 8mm
- UL, CUR file E43203,
- VDE file 40020561

#### CONTACTS

Arrangement	SPST (1 Form A) SPDT (1 Form C)
Ratings	Resistive load: Max. switched power: 180W or 2216VA Max. switched current: 6A Max. switched voltage: 125VDC* or 400VAC
	Note: If switching voltage is greater than 30 VDC, special precautions must be taken. Please contact the factory.
Rated Load UL/CUR	8A at 277VAC resistive (Form A and C [N.O.]) 6A at 277VAC resistive (Form C [N.C.]) 6A at 30VDC resistive R300, B300 Pilot Duty
VDE	6A at 250 VAC resistive 6A at 30 VDC resistive
Material	Silver nickel, Silver Tin Optional gold plating
Resistance	<100 milliohms initially (at 1A, 6VDC)

#### COIL

Power			
At Pickup Voltage (typical)	95mW		
Max. Continuous Dissipation	1.0W at 20°C (68°F) ambient		
Temperature Rise	20°C (36°F) at nominal coil voltage		
Temperature	Max. 105°C (221°F)		



#### **GENERAL DATA**

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Life Expectancy Mechanical Electrical	Minimum operations 10 million operations 3 X 10 <sup>4</sup> at 6A, 30VDC or 250VAC Res.		
Operate Time (typical)	8ms at nominal coil voltage		
Release Time (typical)	4ms at nominal coil voltage (with no coil suppression)		
Dielectric Strength (at sea level for 1 min.)	1000Vrms between open contacts 4000Vrms contact to coil		
Insulation Resistance	100 megohms min. at 20°C, 500 VDC, 50% RH		
Dropout	Greater than 5% of nominal coil voltage		
Ambient Temperature Operating Storage	At nominal coil voltage -40°C (-40°F) to 85°C (158°F) -40°C (-40°F) to 105°C (221°F)		
Vibration	0.062" DA 10–55 Hz		
Shock	5 g		
Enclosure	P.B.T. polyester 94V-0		
Terminals	Tinned copper alloy, P.C.		
Max. Solder Temp.	260°C (500°F)		
Max. Solder Time	5 seconds		
Max. Solvent Temp.	80°C (176°F)		
Max. Immersion Time	30 seconds		
Weight (approx.)	5 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.



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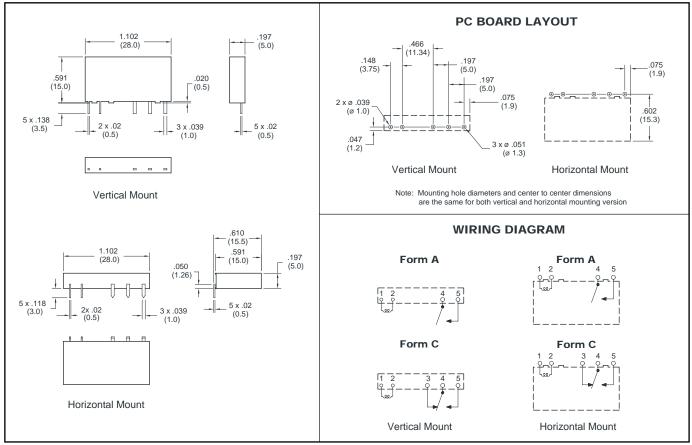
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#### **RELAY ORDERING DATA**

COIL SPECIFICATIONS			ORDER NUMBER*		
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance	Unsealed	Sealed
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 "E" after 1A or 1C for Silver Tin contacts. Add suffix "A" for gold plated contacts. Add suffix "H" for horizontal version.

#### **MECHANICAL DATA**



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

