

# AZ961

## MINIATURE POWER RELAY

### FEATURES

- 1 Form A or 1 Form C
- Standard and sensitive coils
- All plastics rated 94V-0
- Epoxy sealed version available
- Class B insulation system
- UL, CUR file E43203



### CONTACTS

<b>Arrangement</b>	SPST NO (1 Form A) SPDT (1 Form C)
<b>Ratings</b>	Resistive load: 1 Form A Max. switched power: 150 W or 1250 VA Max. switched current: 5 A Max. switched voltage: 150 VDC* or 300 VAC 1 Form C Max. switched power: 150 W N.O. or 1250 VA Max. switched current: 5 A Max. switched voltage: 150 VDC* or 300 VAC  *NOTE: If switching voltage is greater than 30 VDC, special precautions must be taken. Please contact the factory.
<b>UL, CUR</b>	1 Form A 5 A at 250 VAC, General Use, 10k cycles [1] 3 A at 30 VDC, Resistive, 10k cycles [1] 5 A at 250 VAC, General Use, 100k cycles [2][3]  1 Form C 5 A at 250 VAC, General Use, 10k cycles [1] N.O. 3 A at 250 VAC, General Use, 10k cycles [1] N.C. 5 A at 30 VDC, Resistive, 10k cycles [1] N.O. 3 A at 30 VDC, Resistive, 10k cycles [1] N.C. 5 A at 250 VAC, General Use, 100k cycles [2][3] N.O. 5 A at 250 VAC, General Use, 100k cycles [2][3] N.C. B300 Pilot Duty N.O. [1]  Silver cadmium oxide [1], silver tin oxide [2], silver nickel [3]
<b>Material</b>	Silver cadmium oxide, silver tin oxide or silver nickel Gold plating available

### GENERAL DATA

<b>Life Expectancy</b> Mechanical Electrical	Minimum operations 1 x 10 <sup>7</sup> 1 x 10 <sup>5</sup> at 5 A 240 VAC Res. N.O.
<b>Operate Time (typical)</b>	10 ms at nominal coil voltage
<b>Release Time (typical)</b>	5 ms at nominal coil voltage (with no coil suppression)
<b>Dielectric Strength</b> (at sea level for 1 min.)	2000 Vrms coil to contact 1000 Vrms between open contacts 4000 surge (2 x 10 us) coil to contact
<b>Insulation Resistance</b>	1000 megohms min. at 500 VDC, 20°C, 50% RH
<b>Dropout</b>	Greater than 5% of nominal coil voltage
<b>Ambient Temperature</b> Operating Standard: Sensitive:	40°C (-40°F) to 95°C (203°F) 40°C (-40°F) to 100°C (212°F)
<b>Storage</b>	40°C (-40°F) to 130°C (266°F)
<b>Vibration</b>	0.062" DA at 10–55 Hz
<b>Shock</b>	10 g
<b>Enclosure</b>	P.B.T. polyester
<b>Terminals</b>	Tinned copper alloy, P.C.
<b>Max. Solder Temp.</b>	250°C (482°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>	8 grams

### COIL

<b>Power</b> At Pickup Voltage (typical) Max Continuous Dissipation Temperature Rise	Standard coil: 176 mW Sensitive coil: 129 mW  1.5 W at 20°C (68°F)  At nominal coil voltage: Standard coil: 27°C (49°F) Sensitive coil: 20°C (36°F)
<b>Max. Temperature</b>	130°C (266°F)

### 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.**

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9/26/05W

# AZ961

## RELAY ORDERING DATA

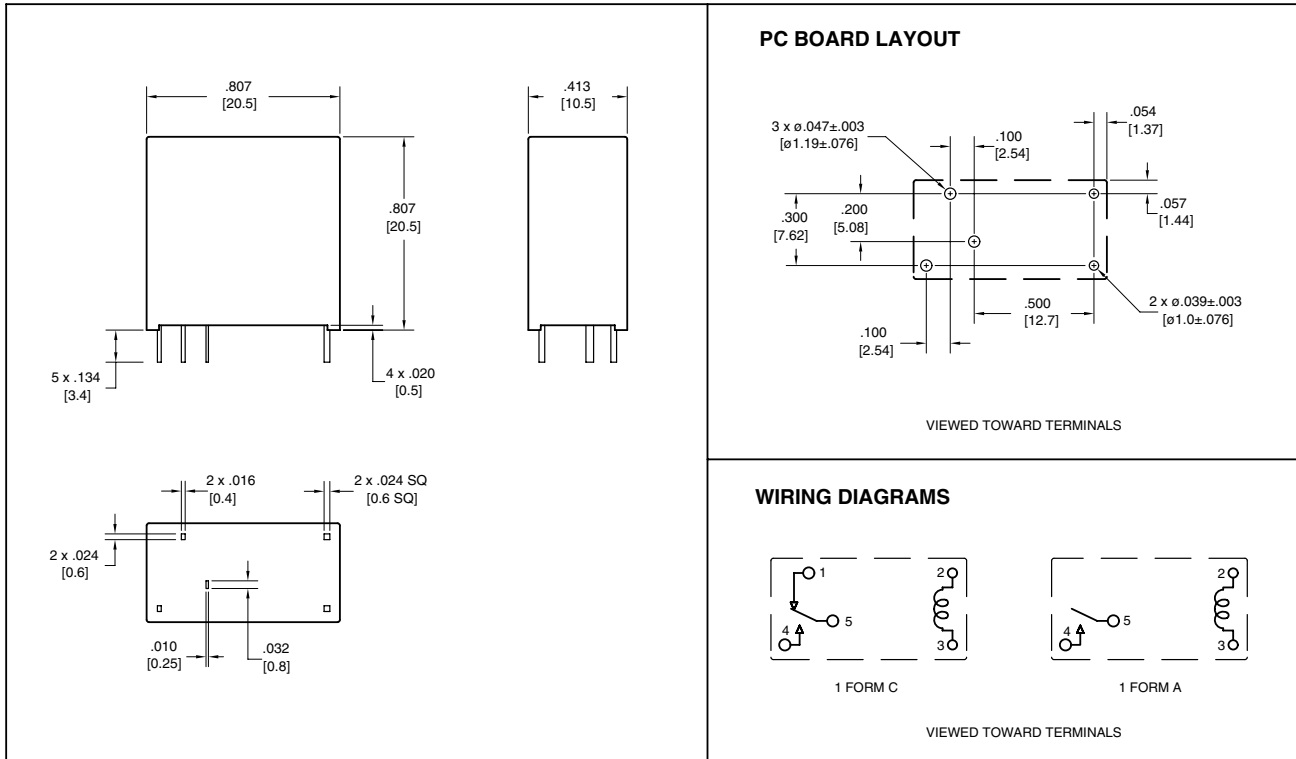
STANDARD COIL					
COIL SPECIFICATIONS				ORDER NUMBER*	
Nominal Coil VDC	Max. Continuous VDC	Coil Resistance $\pm 10\%$	Must Operate VDC	1 Form A	1 Form C
3	6.1	25	2.1	AZ961-1A-3D	AZ961-1C-3D
5	10.2	69	3.5	AZ961-1A-5D	AZ961-1C-5D
6	12.2	100	4.2	AZ961-1A-6D	AZ961-1C-6D
9	18.4	225	6.3	AZ961-1A-9D	AZ961-1C-9D
12	24.5	400	8.4	AZ961-1A-12D	AZ961-1C-12D
18	36.7	900	12.6	AZ961-1A-18D	AZ961-1C-18D
24	48.9	1600	16.8	AZ961-1A-24D	AZ961-1C-24D
48	97.9	6400	33.6	AZ961-1A-48D	AZ961-1C-48D

SENSITIVE COIL					
COIL SPECIFICATIONS				ORDER NUMBER*	
Nominal Coil VDC	Max. Continuous VDC	Coil Resistance $\pm 10\%$	Must Operate VDC	1 Form A	1 Form C
3	7.3	36	2.1	AZ961-1A-3DS	AZ961-1C-3DS
5	12.2	100	3.5	AZ961-1A-5DS	AZ961-1C-5DS
6	14.7	145	4.2	AZ961-1A-6DS	AZ961-1C-6DS
9	22.0	325	6.3	AZ961-1A-9DS	AZ961-1C-9DS
12	29.3	575	8.4	AZ961-1A-12DS	AZ961-1C-12DS
18	44.2	1300	12.6	AZ961-1A-18DS	AZ961-1C-18DS
24	58.9	2310	16.8	AZ961-1A-24DS	AZ961-1C-24DS
48	117.0	9220	33.6	AZ961-1A-48DS	AZ961-1C-48DS

\*Add suffix "E" to "-1A" or "-1C" for silver tin oxide contacts. Add suffix "B" to "-1A" or "-1C" for silver nickel contacts. Add suffix "E" for epoxy sealed version. Add suffix "A" for gold plated contacts.

## MECHANICAL DATA



Dimensions in inches with metric equivalents in parentheses. Tolerance:  $\pm 0.010$ "



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