# 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

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

### COIL

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



### **GENERAL DATA**

Life Expectancy Mechanical Electrical	Minimum operations $1 \times 10^7$ $1 \times 10^5$ at 5 A 240 VAC Res. N.O.		
Operate Time (typical)	10 ms at nominal coil voltage		
Release Time (typical)	5 ms at nominal coil voltage (with no coil suppression)		
Dielectric Strength (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		
Insulation Resistance	1000 megohms min. at 500 VDC, 20°C, 50% RH		
Dropout	Greater than 5% of nominal coil voltage		
Ambient Temperature Operating Standard: Sensitive: Storage			
Vibration	0.062" DA at 10–55 Hz		
Shock	10 g		
Enclosure	P.B.T. polyester		
Terminals	Tinned copper alloy, P.C.		
Max. Solder Temp.	250°C (482°F)		
Max. Solder Time	5 seconds		
Max. Solvent Temp.	80°C (176°F)		
Max. Immersion Time	30 seconds		
Weight	8 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.

9/26/05W

## AZ961

### **RELAY ORDERING DATA**

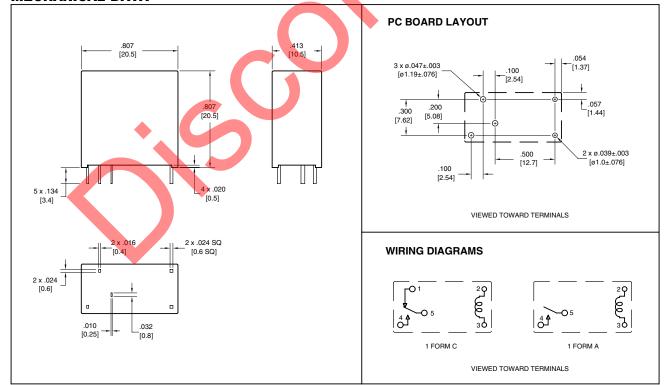
COIL SPECIFICATIONS				ORDER NUMBER*	
Nominal Coil VDC	Max. Continuous VDC	Coil Resistance ±10%	Must Operate VDC	1 Form A	1 Form C
3	6.1	25	2.1	AZ961–1A–3D	AZ961-1C-3D
5	10.2	69	3.5	AZ961–1A–5D	AZ961-1C-5D
6	12.2	100	4.2	AZ961–1A–6D	AZ961–1C–6D
9	18.4	225	6.3	AZ961–1A–9D	AZ961-1C-9D
12	24.5	400	8.4	AZ961–1A–12D	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 ±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 conctacts. 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: ±0.010"

#### ERICAN ZETTLE C.

PHONE: (949) 831-5000

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PHONE: (949) 831-5000 E-MAIL: SALES @ AZETTLER.COM
This specification provides an overview of the most significant part features. Any individual applications and operating conditions are not taken into consideration. It is recommended to test the product
under application conditions. Responsibility for the application remains with the customer. Proper operation and service life cannot be guaranteed if the part is operated outside the specified limits.