# 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: Max. switched current: 5 A Max. switched voltage: 150 VDC* or 300 VAC  1 Form C Max. switched power: 150 W or 1250 VA (N.O.) 750 VA (N.C.) Max. switched current: 5 A (N.O.), 3 A (N.C.) Max. switched voltage: 150 VDC* or 300 VAC			
UL, CUR	1 Form A: 5 A at 250 VAC, General Use 3 A at 30 VDC			
	1 Form C: 5 A / 3 A at 250 VAC, General Use 5 A / 3 A at 30 VDC (N.O. / N.C.) *Note: If switching voltage is greater than 30 VDC, special precautions must be taken. Please contact the factory.			
Material	Silver cadmium oxide			
Resistance	< 100 milliohms initially (6 V 1 A voltage drop method)			

## 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)

#### **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.

#### **GENERAL DATA**

Life Expectancy Mechanical Electrical	Minimum operations 1 x 10 <sup>7</sup> 1 x 10 <sup>5</sup> 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 V 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	40°C (-40°F) to 75°C (167°F) 40°C (-40°F) to 85°C (186°F) 40°C (-40°F) to 105°C (221°F)			
Vibration	0.062" (1.5 mm) 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			

#### **RELAY ORDERING DATA**

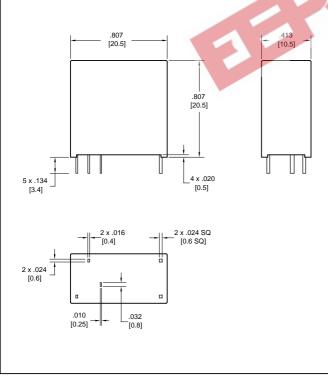
STANDARD COIL						
COIL SPECIFICATIONS			ORDER NUMBER*			
Nominal Coil VDC	Max. Continuous VDC	Coil Resistance Ohm ±10%	Must Operate VDC	1 Form A	1 Form C	
3	6.1	25	2.1	AZ961-1A-3D	AZ961-1C-3D	
5	10.2	69	3.5	AZ961-1A-5D	AZ961-1C-5D	
6	12.2	100	4.2	AZ961-1A-6D	AZ961-1C-6D	
9	18.4	225	6.3	AZ961-1A-9D	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	1,600	16.8	AZ961-1A-24D	AZ961-1C-24D	
48	97.9	6,400	33.6	AZ961-1A-48D	AZ961-1C-48D	

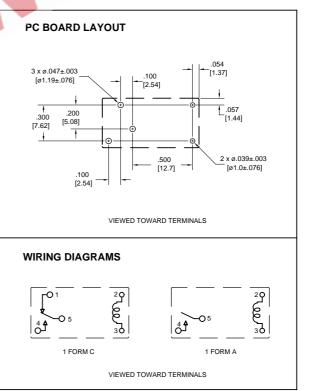
#### **SENSITIVE COIL**

COIL SPECIFICATIONS			ORDER NUMBER*		
Nominal Coil VDC	Max. Continuous VDC	Coil Resistance Ohm ±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	1,300	12.6	AZ961-1A-18DS	AZ961-1C-18DS
24	58.9	2,310	16.8	AZ961-1A-24DS	AZ961-1C-24DS
48	117.0	9,220	33.6	AZ961-1A-48DS	AZ961-1C-48DS

<sup>\*</sup>For epoxy sealed version, add suffix "E".

## MECHANICAL DATA





Dimensions in inches with metric equivalents in parentheses. Tolerance: ±0.010"

# ZETTLER electronics GmbH