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 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 10^7 1 x 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 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

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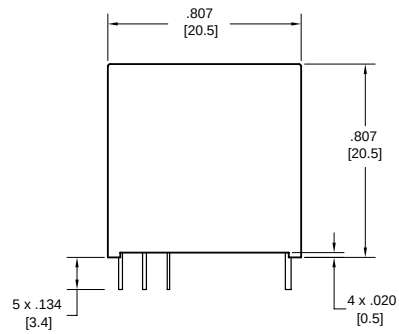
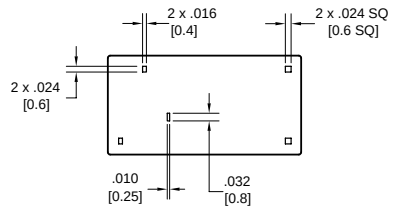
RELAY ORDERING DATA

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

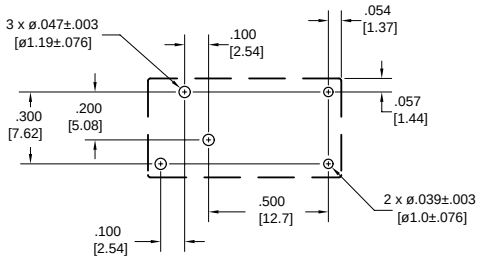
*For epoxy sealed version, add suffix “E”.

MECHANICAL DATA



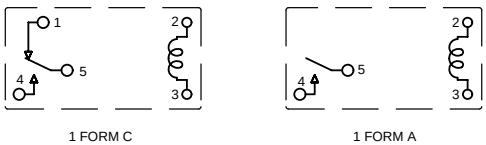


PC BOARD LAYOUT



VIEWED TOWARD TERMINALS

WIRING DIAGRAMS



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

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