

AZ850

MICROMINIATURE POLARIZED RELAY

FEATURES

- Microminiature size: Height: 0.197 inches (5mm); Length: 0.551 inches (14mm); Width: 0.354 inches (9mm)
- High sensitivity, 79mW pickup
- Monostable and bistable (latching) single coil and two coil versions available
- Meets FCC Part 68.302 1500V lightning surge
- DIP terminal layout, fits 10 pin IC socket
- Epoxy sealed for automatic wave soldering and cleaning
- UL, CUR file E43203



CONTACTS

Arrangement	DPDT (2 Form C) Bifurcated crossbar contacts
Ratings	Resistive load: Max. switched power: 30W or 62.5VA Max. switched current: 1A Max. switched voltage: 220VDC or 250VAC Max. carry current: 2A
Rated Load UL, CUR	1A at 30VDC resistive 0.5A at 125VAC resistive
Material	Silver palladium; gold clad
Resistance	< 50 milliohms initially

COIL (Polarized)

Power At Pickup Voltage (typical)	Single side stable: 79–169mW Bistable (latching) single coil: 56–84mW Bistable (latching) two coil: 113–169mW
Max. Continuous Dissipation	875mW at 20°C (68°F) ambient
Temperature Rise	18°C (32°F) at nominal coil voltage
Temperature	Max. 105°C (221°F)

NOTES

1. All values at 20°C (68°F).
2. Relay has fixed coil polarity.
3. Relay may pull in with less than "Must Operate" value.
4. Relay adjustment may be affected if undue pressure is exerted on relay case.
5. For complete isolation between the relay's magnetic fields, it is recommended that a 0.197" (5.0mm) space be provided between adjacent relays.
6. Specifications subject to change without notice.

GENERAL DATA

Life Expectancy Mechanical Electrical	Minimum operations 1 x 10 ⁸ 2 x 10 ⁵ at 1A, 30VDC, resistive 1 x 10 ⁵ at 0.5A, 125VAC, resistive
Operate Time (typical)	2ms at nominal coil voltage
Release Time (typical)	1ms at nominal coil voltage (with no coil suppression)
Set Time (bistable versions)	2ms at nominal coil voltage (typical)
Reset Time (bistable versions)	2ms at nominal coil voltage (typical)
Dropout	Greater than 10% of nominal coil voltage
Capacitance	Contact to contact: 0.4pF Contact set to contact set: 0.2pF Contact to coil: 0.9pF
Dielectric Strength (at sea level)	1000Vrms between contact sets 1000Vrms across contacts 1000Vrms contact to coil Meets FCC part 68.302 1500V lightning surge
Insulation Resistance	1000 megohms min. at 25°C, 500VDC, 50% RH
Ambient Temperature Operating Storage	At nominal coil voltage -40°C (-40°F) to 70°C (158°F) -40°C (-40°F) to 105°C (221°F)
Vibration	.130" DA at 10–55 Hz
Shock	50 g
Enclosure	LCP
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	Approx. 1.5 grams

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RELAY ORDERING DATA

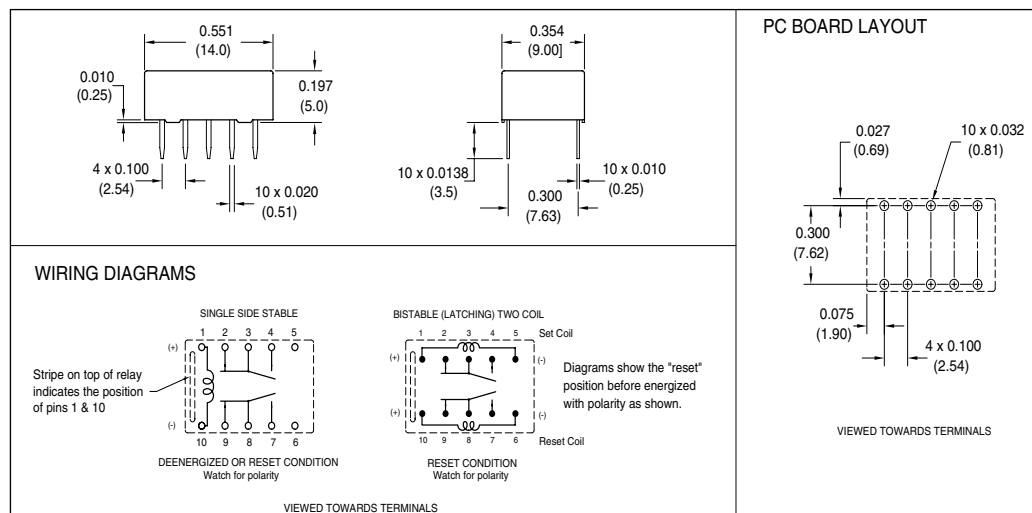
SINGLE SIDE STABLE				
COIL SPECIFICATIONS				ORDER NUMBER
Nominal Coil VDC	Must Operate VDC	Max Continuous VDC	Coil Resistance $\pm 10\%$	
3	2.3	7.5	64.3	AZ850-3
5	3.8	12.5	178	AZ850-5
6	4.5	15.0	257	AZ850-6
9	6.8	22.5	579	AZ850-9
12	9.0	30.0	1028	AZ850-12
24	18.0	48.0	2880	AZ850-24

BISTABLE (LATCHING) SINGLE COIL				
COIL SPECIFICATIONS				ORDER NUMBER
Nominal Coil VDC	Must Operate VDC	Max Continuous VDC	Coil Resistance $\pm 10\%$	
3	2.3	8.7	90	AZ850P1-3
5	3.8	14.5	250	AZ850P1-5
6	4.5	17.4	360	AZ850P1-6
9	6.8	26.1	810	AZ850P1-9
12	9.0	34.8	1440	AZ850P1-12
24	18.0	57.6	3840	AZ850P1-24

BISTABLE (LATCHING) TWO COIL					
COIL SPECIFICATIONS				ORDER NUMBER	
Nominal Coil VDC	Must Operate VDC	Max Continuous VDC	Coil Resistance $\pm 10\%$		
			Coil I	Coil II	
3	2.3	6.0	45	45	AZ850P2-3
5	3.8	10.0	125	125	AZ850P2-5
6	4.5	12.0	180	180	AZ850P2-6
9	6.8	18.0	405	405	AZ850P2-9
12	9.0	24	720	720	AZ850P2-12
24	18.0	36	1920	1920	AZ850P2-24

*Not UL Approved

MECHANICAL DATA



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

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9/4/19

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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.