AZ850

MICROMINIATURE POLARIZED RELAY

FEATURES

- Microminiature size: Height: .197 inches (5 mm); Length: .551 inches (14 mm); Width: .354 inches (9 mm)
- High sensitivity, 79 mW pickup
- Monostable and bistable (latching) single coil and two coil versions available
- Meets FCC Part 68.302 1500 V 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: 30 W or 62.5 VA Max. switched current: 1 A Max. switched voltage: 220 VDC or 250 VAC Max. carry current: 2 A	
Rated Load UL	1 A at 30 VDC resistive 0.5 A at 125 VAC resistive	
Material	Silver palladium; gold clad	
Resistance	< 50 milliohms initially	

COIL (Polarized)

Power At Pickup Voltage (typical)	Single side stable: 79–169 mW Bistable (latching) single coil: 56–84 mW Bistable (latching) two coil: 113–169 mW			
Max. Continuous Dissipation	875 mW 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 .197" (5.0 mm) space be provided between adjacent relays.
- 6. Specifications subject to change without notice.



GENERAL DATA

Life Expectancy Mechanical ElectricalMinimum operations 1 x 108 2 x 105 at 1 A, 30 VDC, resistive 1 x 105 at 0.5 A, 125VAC, resistiveOperate Time (typical)2 ms at nominal coil voltage (with no coil suppression)Set Time (bistable versions)2 ms at nominal coil voltage (typical)
Release Time (typical) 1 ms at nominal coil voltage (with no coil suppression) Set Time 2 ms at nominal coil voltage (typical)
(with no coil suppression) Set Time 2 ms at nominal coil voltage (typical)
, ,
Reset Time (bistable versions) 2 ms at nominal coil voltage (typical)
Dropout Greater than 10% of nominal coil voltage
Capacitance Contact to contact: 0.4 pF Contact set to contact set: 0.2 pF Contact to coil: 0.9 pF
Dielectric Strength (at sea level) 1000 Vrms between contact sets 1000 Vrms across contacts 1000 Vrms contact to coil Meets FCC part 68.302 1500 V lightning surge
Insulation Resistance 1000 megohms min. at 25°C, 500 VDC, 50% RH
Ambient Temperature Operating StorageAt 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. Solvent Temp.80°C (176°F)Max. Immersion Time30 seconds

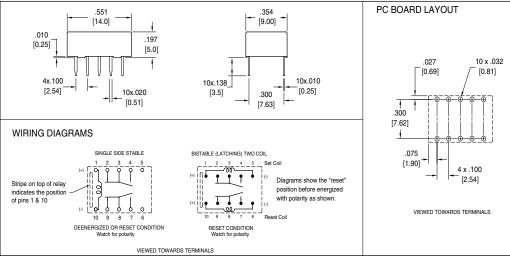
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RELAY ORDERING DATA

SINGLE SIDE STAB						
Nominal Coil VDC	Must Operate VDC	Max Continuous VDC	Coil Resistance ± 10%			
3	2.3	7.5	64.3		AZ850–3	
4.5	3.4	11.25	145.2		AZ850-4.5	
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	1,028		AZ850–12	
24	18.0	48.0	2,880		AZ850–24	
48	36.0	80.0	7,680		AZ850–48*	
BISTABLE (LATCHI	NG) SINGLE COIL	•				
	COIL SPEC	CIFICATIONS				
Nominal Coil VDC	Must Operate VDC	Max Continuous VDC	Coil Resistance ± 10%		ORDER NUMBER	
3	2.3	8.7	90		AZ850P1-3	
4.5	3.4	13.0	203		AZ850P1-4.5	
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 (LATCHI	NG) TWO COIL		•			
	COIL SPEC	CIFICATIONS				
Nominal Coil	Must Operate	Max Continuous	Coil Resistance		ORDER NUMBE	
VDC	VDC	VDC	Coil I	Coil II		
3	2.3	6.0	45	45	AZ850P2-3	
4.5	3.4	13.0	102	102	AZ850P2-4.5	
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	40	1,920	1,920	AZ850P2-24	

MECHANICAL DATA



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



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