EN: This Datasheet is presented by the manufacturer.

Please visit our website for pricing and availability at www.hestore.hu.

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 file E43203, CSA file 73363

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/CSA	1 A at 30 VDC 0.5 A at 125 VAC
Material	Silver palladium; gold clad
Resistance	< 50 milliohms initially

COIL (Polarized)

Power At Pickup Voltage (typical)	Single side stable: 79–142 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 Electrical	Minimum operations 1×10^8 2×10^5 at 1 A, 30 VDC 1×10^5 at 0.5 A, 125VAC
Operate Time (typical)	2 ms at nominal coil voltage
Release Time (typical)	1 ms at nominal coil voltage (with no coil suppression)
Set Time (bistable versions)	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 1250 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 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	1.5 grams

ZETTLER electronics

1999-10-27

AZ850

RELAY ORDERING DATA

SINGLE SIDE STABLE

COIL SPECIFICATIONS				ORDER NUMBER
Nominal Coil VDC	Max. Continuous VDC	Coil Resistance ± 10%	Must Operate VDC	
3	7.5	64.3	2.1	AZ850–3
4.5	11.25	145.2	3.15	AZ850-4.5
5	12.5	178	3.5	AZ850–5
6	15.0	257	4.2	AZ850–6
9	22.5	579	6.3	AZ850–9
12	30.0	1,028	8.4	AZ850–12
24	48.0	2,880	16.8	AZ850–24

BISTABLE (LATCHING) SINGLE COIL

COIL SPECIFICATIONS				ORDER NUMBER
Nominal Coil VDC	Max. Continuous VDC	Coil Resistance ± 10%	Must Operate VDC	
3	8.7	90	2.1	AZ850P1–3
4.5	13.0	203	3.2	AZ850P1–4.5
5	14.5	250	3.5	AZ850P1–5
6	17.4	360	4.2	AZ850P1–6
9	26.1	810	6.3	AZ850P1–9
12	34.8	1440	8.4	AZ850P1–12
24	57.6	3840	16.8	AZ850P1–24

BISTABLE (LATCHING) TWO COIL

COIL SPECIFICATIONS				ORDER NUMBER
Nominal Coil VDC	Max. Continuous VDC	Coil Resistance ± 10%		Must Operate VDC	
		Coil I	Coil II		
3	6.0	45	45	2.1	AZ850P2–3
4.5	13.0	102	102	3.2	AZ850P2–4.5
5	10.0	125	125	3.5	AZ850P2–5
6	12.0	180	180	4.2	AZ850P2–6
9	18.0	405	405	6.3	AZ850P2–9
12	24	720	720	8.4	AZ850P2–12
24	40	1,920	1,920	16.8	AZ850P2–24

MECHANICAL DATA

PC BOARD LAYOUT

WIRING DIAGRAMS

SINGLE SIDE STABLE

BISTABLE (LATCHING) TWO COIL

Stripe on top of relay indicates the position of pins 1 & 10

Diagrams show the "reset" position before energized with polarity as shown.

DEENERGIZED OR RESET CONDITION
Watch for polarity

RESET CONDITION
Watch for polarity

Set Coil

Reset Coil

VIEWED TOWARDS TERMINALS

VIEWED TOWARDS TERMINALS

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