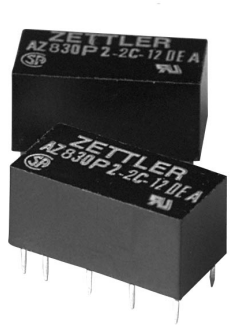
AZ830P

POLARIZED DIP RELAY
BISTABLE (LATCHING)



FEATURES

- High sensitivity, 90 mW pickup
- Low profile DIP package
- Meets FCC Part 68.302 1500 V lightning surge
- Meets FCC Part 68.304 1000 V dielectric
- Epoxy sealed
- DC coils to 48 VDC
- High switching capacity, 60 W, 125 VA
- Fits standard 16 pin IC socket
- UL file E43203; CSA file LR 36664

CONTACTS

Arrangement	DPDT (2 Form C) Bifurcated crossbar contacts
Ratings	Resistive load: Max. switched power: 60 W or 125 VA Max. switched current: 2 A Max. switched voltage: 150 VDC or 300 VAC
Rated Load **UL**	2 A at 30 VDC 1 A at 120 VAC
Material	Silver alloy, gold clad. Silver palladium, gold clad available upon request (not recommended for current greater than 1 Amp).
Resistance	< 50 milliohms initially

COIL (Polarized)

Power	
At Pickup Voltage (typical)	Standard coil: 176 mW Sensitive coil: 90 mW
Max. Continuous Dissipation	1.2 W at 20°C (68°F) ambient
Temperature Rise	Standard: 38°C (68°F) at nominal coil voltage Sensitive: 21°C (38°F) at nominal coil voltage
Temperature	Max. 115°C (239°F)

NOTES

1. All values at 20°C (68°F).
2. Relay may pull in with less than “Must Operate” value.
3. Relay has fixed coil polarity.
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 x 10^8 1 x 10^5 at 2 A, 30 VDC or 1 A, 125 VAC 2 x 10^6 at 1 A, 30 VDC or .5 A, 125 VAC
Set Time (typical)	3 ms at nominal coil voltage
Reset Time (typical)	3.5 ms at nominal coil voltage
Capacitance	Contact to contact: 1.0 pF Contact set to contact: 1.0 pF Contact to coil: 2.0 pF
Bounce (typical)	At 10 mA contact current 1.5 ms at operate N.O. side 2.5 ms at operate N.C. side
Dielectric Strength (at sea level)	1500 Vrms contact to coil 1000 Vrms between contact sets 1000 Vrms across contacts Meets FCC Part 68.302 lightning surge Meets FCC Part 68.304 V dielectric
Insulation Resistance	1000 megohms min. at 20°C, 500 VDC, 50% RH
Ambient Temperature **Operating** **Storage**	At nominal coil voltage Standard: -40°C (-40°F) to 85°C (185°F) Sensitive: -40°C (-40°F) to 95°C (203°F) Both: -40°C (-40°F) to 105°C (221°F)
Vibration	0.062" (1.5 mm) DA at 10–55 Hz
Shock	40 g
Enclosure	P.B.T. polyester
Terminals	Tinned copper alloy, P.C.
Max. Solder Temp.	270°C (518°F)
Max. Solder Time	5 seconds
Max. Solvent Temp.	80°C (176°F)
Max. Immersion Time	30 seconds
Weight	5 grams

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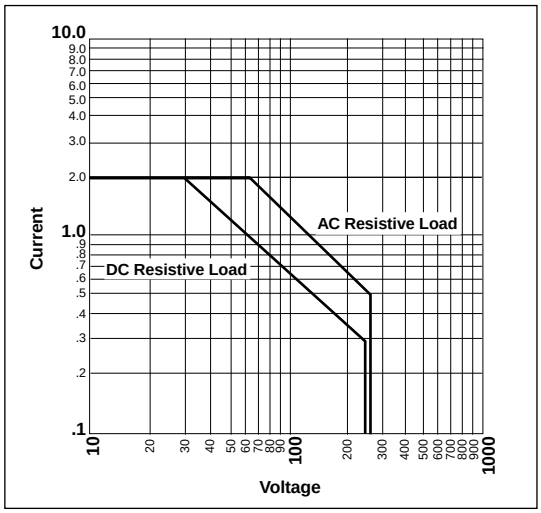
RELAY ORDERING DATA

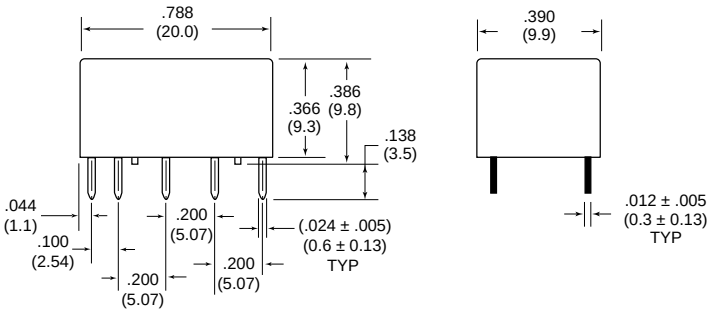
STANDARD RELAYS				
COIL SPECIFICATIONS				
Nominal Coil VDC	Max. Continuous VDC	Coil Resistance ± 10%	Set Reset VDC	ORDER NUMBER*
5	7.5	69.4	3.5	AZ830P2–2C–5DE
6	9.0	100	4.2	AZ830P2–2C–6DE
9	13.5	225	6.3	AZ830P2–2C–9DE
12	18.0	400	8.4	AZ830P2–2C–12DE
24	36.0	1,600	16.8	AZ830P2–2C–24DE
48	72.0	6,400	33.6	AZ830P2–2C–48DE
SENSITIVE RELAYS				
5	11.0	139	3.5	AZ830P2–2C–5DSE
6	13.0	200	4.2	AZ830P2–2C–6DSE
9	19.5	450	6.3	AZ830P2–2C–9DSE
12	26.0	800	8.4	AZ830P2–2C–12DSE
24	53.0	3,200	16.8	AZ830P2–2C–24DSE
48	106.0	12,800	33.6	AZ830P2–2C–48DSE

* Add suffix “A” for silver palladium gold clad contacts.

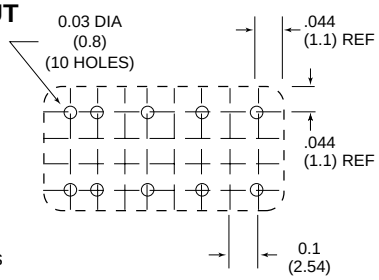
Maximum Switching Capacity



MECHANICAL DATA

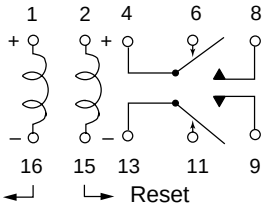


PC BOARD LAYOUT



Viewed toward terminals

TWO COIL LATCHING
WATCH FOR POLARITY

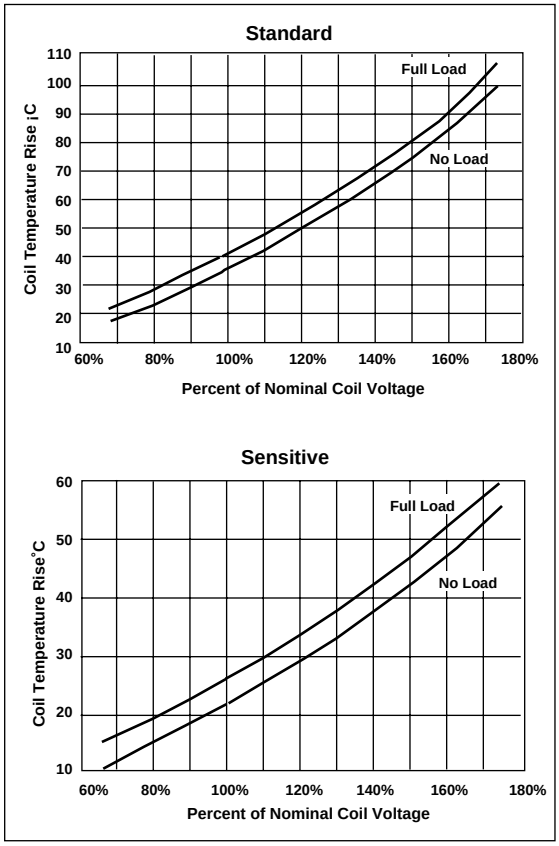


WIRING DIAGRAM

Diagrams show the “reset” position before energized with polarity as shown

Viewed toward terminals

Coil Temperature Rise



Dimensions in inches with metric equivalents in parentheses. Tolerance: ± .010"

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