

AZ8P

10 A MINIATURE POWER RELAY BISTABLE (LATCHING)



FEATURES

- Dielectric strength 4000 Vrms
- Clearance and creepage distance >3.5 mm
- Tracking index CTI 250
- Single coil latching
- Epoxy sealed
- UL, CUR file E43203

CONTACTS

Arrangement	SPST (1 Form A) SPDT (1 Form C)
Ratings	Resistive load: 1 Form A Max. switched power: 240 W or 2500 VA Max. switched current: 10 A Max. switched voltage: 220 VDC* or 300 VAC 1 Form C Max. switched power: 170 W or 1750 VA Max. switched current: 7 A Max. switched voltage: 220 VDC* or 300 VAC * Note: If switching voltage is greater than 30 VDC, special precautions must be taken. Please contact the factory.
Rated Load UL	1 Form A 10 A at 250 VAC, resistive [2] 10 A at 24 VDC, resistive [2] 1 Form C 7 A at 250 VAC, resistive, 50k cycles [1] 5 A at 250 VAC, resistive, 100k cycles [1]
Material	Silver nickel [1], silver tin oxide [2]
Resistance	< 100 milliohms initially

COIL

Power	
At Pickup Voltage (typical)	700 mW
Max. Continuous Dissipation	1.3 W 20°C (68°F) ambient
Temperature Rise	138°C (248°F) at nominal coil voltage
Temperature	Max. 155°C (311°F) Class F

GENERAL DATA

Life Expectancy	Minimum operations 2 x 10 ⁷
Mechanical Electrical	
Form A	1 x 10 ⁵ at 10 A, 250 VAC
Form C	1 x 10 ⁵ at 5 A, 250 VAC
Set Time (typical)	5 ms at nominal coil voltage Recommended coil pulse: 20 ms
Reset Time (typical)	6 ms at reset voltage Recommended coil pulse: 20 ms
Dielectric Strength (at sea level for 1 min.)	4000 Vrms coil to contact 1000 Vrms between open contacts
Surge Voltage	
Coil to contact	5,000V (at 1.2x50 µs)
Insulation Resistance	1000 megohms min. at 20°C, 500 VDC, 50% RH
Ambient Temperature Operating	At nominal coil voltage -40°C (-40°F) to 70°C (158°F)
Vibration	0.062" DA at 10–55 Hz, 10 g at 10–50 Hz
Shock	10 g operating, 100 g damage
Enclosure	P.E.T. polyester, UL-94: V0
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	8 grams
Packing unit in pcs	25 per plastic tube / 400 per carton box

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.

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This product specification to be used only together with the application notes which can be downloaded from <http://www.ZETTLERelectronics.com/pdfs/relais/ApplicationNotes.pdf>

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RELAY ORDERING DATA

COIL SPECIFICATIONS						ORDER NUMBER*
BISTABLE (LATCHING): 1 COIL						
Nominal Coil VDC	Set VDC	Max. Continuous VDC	Reset VDC	Max. Reset VDC	Coil Resistance Ohm $\pm 10\%$	
3	2.2	3.0	-0.75	-1.35	8	AZ8P1-1CH-3DE
5	3.7	5.0	-1.25	-2.25	22	AZ8P1-1CH-5DE
6	4.5	6.0	-1.50	-2.70	33	AZ8P1-1CH-6DE
9	6.7	9.0	-2.25	-4.05	74	AZ8P1-1CH-9DE
12	9.0	12.0	-3.00	-5.40	119	AZ8P1-1CH-12DE
18	13.5	18.0	-4.50	-8.10	280	AZ8P1-1CH-18DE
24	18.0	24.0	-6.00	-10.80	475	AZ8P1-1CH-24DE
36	27.0	36.0	-9.00	-16.20	1,050	AZ8P1-1CH-36DE
48	36.0	48.0	-12.00	-21.60	1,750	AZ8P1-1CH-48DE
60	45.0	60.0	-15.00	-27.00	2,750	AZ8P1-1CH-60DE

* "1CH" denotes silver nickel contacts.

Substitute "1AE" in place of "1CH" for 1 Form A silver tin oxide contacts

MECHANICAL DATA

PC BOARD LAYOUT

Viewed toward terminals

WIRING DIAGRAMS

Form A

Form C

Viewed toward terminals

Dimensions in inches with metric equivalents in parentheses. Tolerance: $\pm .010$ "

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