AZ881

8 A SPST / 5 A DPST POLARIZED SUBMINIATURE POWER RELAY MONOSTABLE OR LATCHING

FEATURES

- Dielectric strength 4000 Vrms
- Single and dual coil latching versions available
- Epoxy sealed version available
- 8 Amp switching
- Class F (155°C) insulation available
- UL, CUR file E44211

CONTACTS

Arrangement	SPST (1 Form A), DPST (2 Form A) DPST (1 Form A and 1 Form B)
Ratings	Resistive load: Max. switched power: 150 W or 2000 VA (SPST) 150 W or 1250 VA (DPST) Max. switched current: 8 A (SPST) 5 A (DPST) Max. switched voltage: 150 VDC or 380 VAC* * Note: If switching voltage is greater than 30 VDC, special precautions must be taken. Please contact the factory.
Rated Load UL, CUR	SPST 8 A at 250 VAC resistive, 100k cycles 5 A at 30 VDC resistive, 100k cycles 1/6 HP at 250 VAC DPST 5 A at 250 VAC resistive, 100k cycles 5 A at 30 VDC resistive, 100k cycles 1/6 HP at 250 VAC
Material	Silver nickel, gold plating optional
Resistance	< 50 milliohms initially

COIL

Power	
At Pickup Voltage (typical)	192 mW (monostable, 2 coil latching) 96 mW (1 coil latching)
Max. Continuous Dissipation	0.75 W at 20°C (68°F) ambient
Temperature Rise	30°C (54°F) at nominal coil voltage
Max. Temperature	130°C (266°F) Class B 155°C (311°F) Class 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. For complete isolation between the relay’s magnetic fields, it is recommended that a .197" (5.0 mm) space be provided between adjacent relays.
5. Relay adjustment may be affected if undue pressure is exerted on relay case.
6. Specifications subject to change without notice.
7. DPST (1Form A and 1Form B): Both contacts may be closed simultaneously during transfer at set / reset process.

GENERAL DATA

Life Expectancy **Mechanical** **Electrical**	Minimum operations 1 x 10^7 1 x 10^5 at 8 A 250 VAC resistive (SPST)
Operate Time (typical)	5 ms at nominal coil voltage
Release Time (typical)	3 ms at nominal coil voltage (with no coil suppression)
Set Time (typical)	5 ms at nominal coil voltage Recommended coil pulse: 20 ms
Reset Time (typical)	4 ms at nominal coil voltage Recommended coil pulse: 20 ms
Dielectric Strength (at sea level)	4000 Vrms contact to coil 1000 Vrms between open contacts 2000 Vrms between contact sets
Insulation Resistance	1000 megohms min. at 20°C 500 VDC 50% RH
Dropout	Greater than 10% of nominal coil voltage
Ambient Temperature **Operating**	At nominal coil voltage -40°C (-40°F) to 70°C (158°F)
Vibration	0.078” (2.0 mm) DA at 10 to 55 Hz
Shock	20 g functional 100 g destructive
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
Packing unit in pcs	50 per plastic tube / 2000 per carton box

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RELAY ORDERING DATA

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COIL SPECIFICATIONS - MONOSTABLE				ORDER NUMBER*		
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC Ohm ± 10%	Coil Resistance	1 Form A	2 Form A	1 Form A 1 Form B
3	2.4	4.7	30	AZ881-1A-3D	AZ881-2A-3D	AZ881-1AB-3D
5	4.0	7.9	83	AZ881-1A-5D	AZ881-2A-5D	AZ881-1AB-5D
6	4.8	9.6	120	AZ881-1A-6D	AZ881-2A-6D	AZ881-1AB-6D
9	7.2	14.4	270	AZ881-1A-9D	AZ881-2A-9D	AZ881-1AB-9D
12	9.6	19.2	480	AZ881-1A-12D	AZ881-2A-12D	AZ881-1AB-12D
24	19.2	37.9	1920	AZ881-1A-24D	AZ881-2A-24D	AZ881-1AB-24D

*Add suffix “E” for epoxy sealed version. Add suffix “A” for gold plated contacts. Add suffix “R” for reversed polarity coil. Add suffix “F” for class F insulation.

AZ881P1

COIL SPECIFICATIONS - SINGLE COIL LATCHING				ORDER NUMBER*		
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC Ohm ± 10%	Coil Resistance	1 Form A	2 Form A	1 Form A 1 Form B
3	2.4	6.7	60	AZ881P1-1A-3D	AZ881P1-2A-3D	AZ881P1-1AB-3D
5	4.0	11.2	167	AZ881P1-1A-5D	AZ881P1-2A-5D	AZ881P1-1AB-5D
6	4.8	13.4	240	AZ881P1-1A-6D	AZ881P1-2A-6D	AZ881P1-1AB-6D
9	7.2	20.1	540	AZ881P1-1A-9D	AZ881P1-2A-9D	AZ881P1-1AB-9D
12	9.6	26.8	960	AZ881P1-1A-12D	AZ881P1-2A-12D	AZ881P1-1AB-12D

*Add suffix “E” for epoxy sealed version. Add suffix “A” for gold plated contacts. Add suffix “R” for reversed polarity coil. Add suffix “F” for class F insulation.

AZ881P2

COIL SPECIFICATIONS - DUAL COIL LATCHING				ORDER NUMBER*		
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC Ohm ± 10%	Coil Resistance	1 Form A	2 Form A	1 Form A 1 Form B
3	2.4	4.7	30	AZ881P2-1A-3D	AZ881P2-2A-3D	AZ881P2-1AB-3D
5	4.0	7.9	83	AZ881P2-1A-5D	AZ881P2-2A-5D	AZ881P2-1AB-5D
6	4.8	9.6	120	AZ881P2-1A-6D	AZ881P2-2A-6D	AZ881P2-1AB-6D
9	7.2	14.4	270	AZ881P2-1A-9D	AZ881P2-2A-9D	AZ881P2-1AB-9D
12	9.6	19.2	480	AZ881P2-1A-12D	AZ881P2-2A-12D	AZ881P2-1AB-12D
24	19.2	37.9	1920	AZ881P2-1A-24D	AZ881P2-2A-24D	AZ881P2-1AB-24D

*Add suffix “E” for epoxy sealed version. Add suffix “A” for gold plated contacts. Add suffix “R” for reversed polarity coil. Add suffix “F” for class F insulation.

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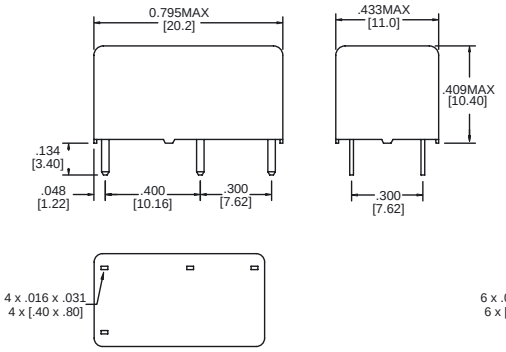
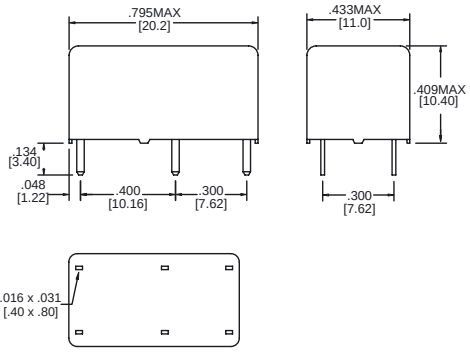
MECHANICAL DATA

Outline Dimensions

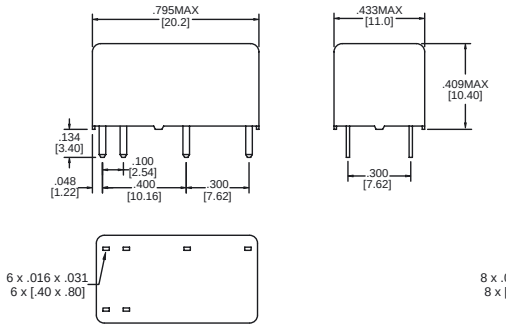
Monostable and 1 coil latching **-1A**



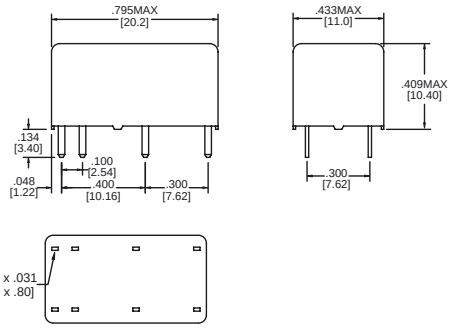
-2A, -1AB



2 coil latching **-1A**

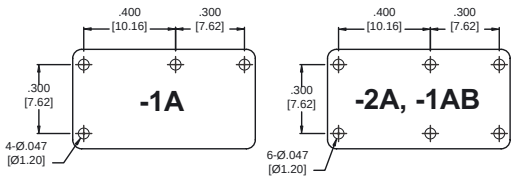


-2A, -1AB

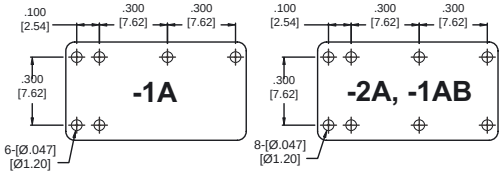


PC Board Layout

Monostable and 1 coil latching



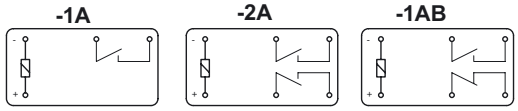
2 coil latching



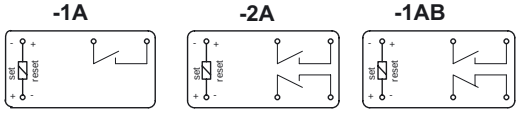
Viewed toward terminals

Wiring Diagrams

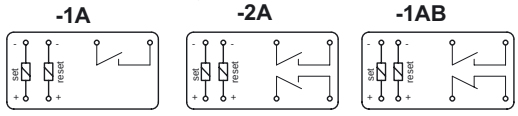
Monostable (Denergized condition)



1 coil latching (Reset condition)



2 coil latching (Reset condition)



Viewed toward terminals

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

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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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