

AZ851

MICROMINIATURE POLARIZED RELAY

FEATURES

- Microminiature size: Height: .244 inches (6.2 mm); Length: .559 inches (14.2 mm); Width: .366 inches (9.3 mm)
- High sensitivity, 79 mW pickup
- Meets FCC Part 68.302 1500 V lightning surge
- Surface mount type with "L" shaped terminals
- Monostable and bistable (latching) versions available
- 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)	79–142 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 x 10 ⁸ 2 x 10 ⁵ at 1 A, 30 VDC resistive 1 x 10 ⁵ at 0.5 A, 125VAC resistive
Operate Time (typical)	2 ms at nominal coil voltage
Release Time (typical)	1 ms at nominal coil voltage (with no coil suppression)
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 85°C (185°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. Solvent Temp.	80°C (176°F)
Max. Immersion Time	30 seconds
Weight	1.5 grams



AMERICAN ZETTLER, INC.

www.azettler.com

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RELAY ORDERING DATA

SINGLE SIDE STABLE				
COIL SPECIFICATIONS				ORDER NUMBER
Nominal Coil VDC	Max. Continuous VDC	Coil Resistance $\pm 10\%$	Must Operate VDC	
3	7.5	64.3	2.25	AZ851-3
5	12.5	178	3.75	AZ851-5
6	15.0	257	4.5	AZ851-6
9	22.5	579	6.75	AZ851-9
12	30.0	1,028	9.0	AZ851-12
24	48.0	2,880	18.0	AZ851-24
48	80.0	7,680	36.0	AZ851-48*

BISTABLE (LATCHING) SINGLE COIL				
COIL SPECIFICATIONS				ORDER NUMBER
Nominal Coil VDC	Max. Continuous VDC	Coil Resistance $\pm 10\%$	Must Operate VDC	
3	8.7	90.0	2.25	AZ851P1-3
5	14.5	250	3.75	AZ851P1-5
6	17.4	360	4.5	AZ851P1-6
9	26.1	810	6.75	AZ851P1-9
12	34.8	1,440	9.0	AZ851P1-12
24	57.6	3,840	18.0	AZ851P1-24

*Not UL Approved

MECHANICAL DATA

WIRING DIAGRAMS

VIEWED TOWARDS TERMINALS

ORIENTATION MARK

DEENERGIZED OR RESET CONDITION

PC BOARD LAYOUT

VIEWED TOWARDS TERMINALS

□ SOLDERING PADS FOR TERMINALS
 ▨ TEMPORARY GLUE PADS FOR STAND-OFFS A OR B

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



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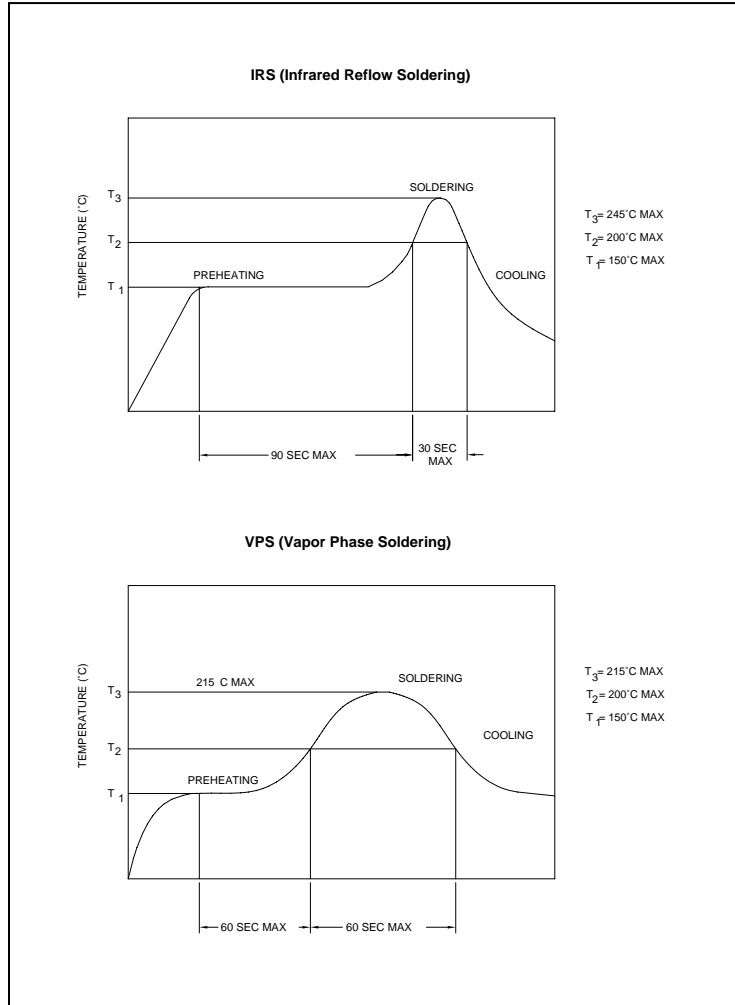
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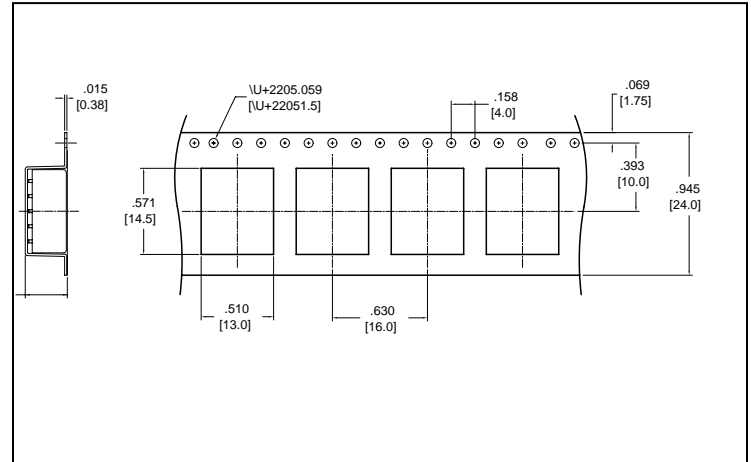
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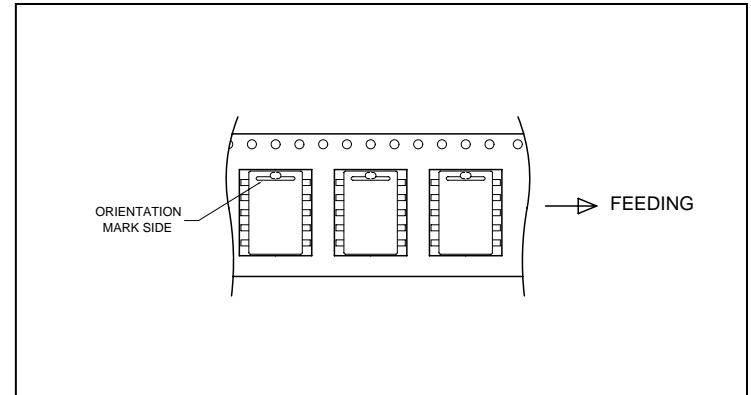
Soldering Data



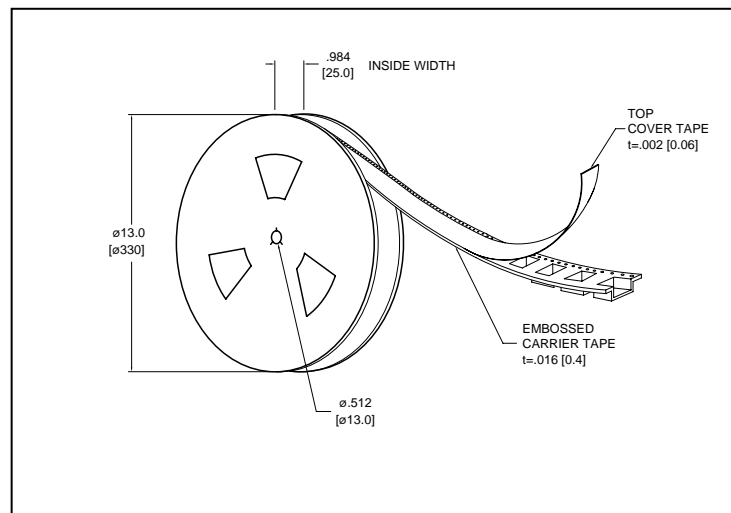
Tape Dimensions



Packaging



Reel Dimensions



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