

# 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
- Epoxy sealed for automatic wave soldering and cleaning
- UL, CUR file E43203



### CONTACTS

<b>Arrangement</b>	DPDT (2 Form C) Bifurcated crossbar contacts
<b>Ratings</b>	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
<b>Rated Load UL</b>	1 A at 30 VDC resistive 0.5 A at 125 VAC resistive
<b>Material</b>	Silver palladium, gold clad
<b>Resistance</b>	< 50 milliohms initially

### COIL (Polarized)

<b>Power At Pickup Voltage (typical)</b>	79–142 mW
<b>Max. Continuous Dissipation</b>	875 mW at 20°C (68°F) ambient
<b>Temperature Rise</b>	18°C (32°F) at nominal coil voltage
<b>Temperature</b>	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

<b>Life Expectancy Mechanical Electrical</b>	Minimum operations 1 x 10 <sup>8</sup> 2 x 10 <sup>5</sup> at 1 A, 30 VDC resistive 1 x 10 <sup>5</sup> at 0.5 A, 125VAC resistive
<b>Operate Time (typical)</b>	2 ms at nominal coil voltage
<b>Release Time (typical)</b>	1 ms at nominal coil voltage (with no coil suppression)
<b>Dropout</b>	Greater than 10% of nominal coil voltage
<b>Capacitance</b>	Contact to contact: 0.4 pF Contact set to contact set: 0.2 pF Contact to coil: 0.9 pF
<b>Dielectric Strength (at sea level)</b>	1000 Vrms between contact sets 1000 Vrms across contacts 1000 Vrms contact to coil Meets FCC part 68.302 1500 V lightning surge
<b>Insulation Resistance</b>	1000 megohms min. at 25°C, 500 VDC, 50% RH
<b>Ambient Temperature Operating Storage</b>	At nominal coil voltage -40°C (-40°F) to 85°C (185°F) -40°C (-40°F) to 105°C (221°F)
<b>Vibration</b>	.130" DA at 10–55 Hz
<b>Shock</b>	50 g
<b>Enclosure</b>	LCP
<b>Terminals</b>	Tinned copper alloy, P.C.
<b>Max. Solvent Temp.</b>	80°C (176°F)
<b>Max. Immersion Time</b>	30 seconds
<b>Weight</b>	1.5 grams



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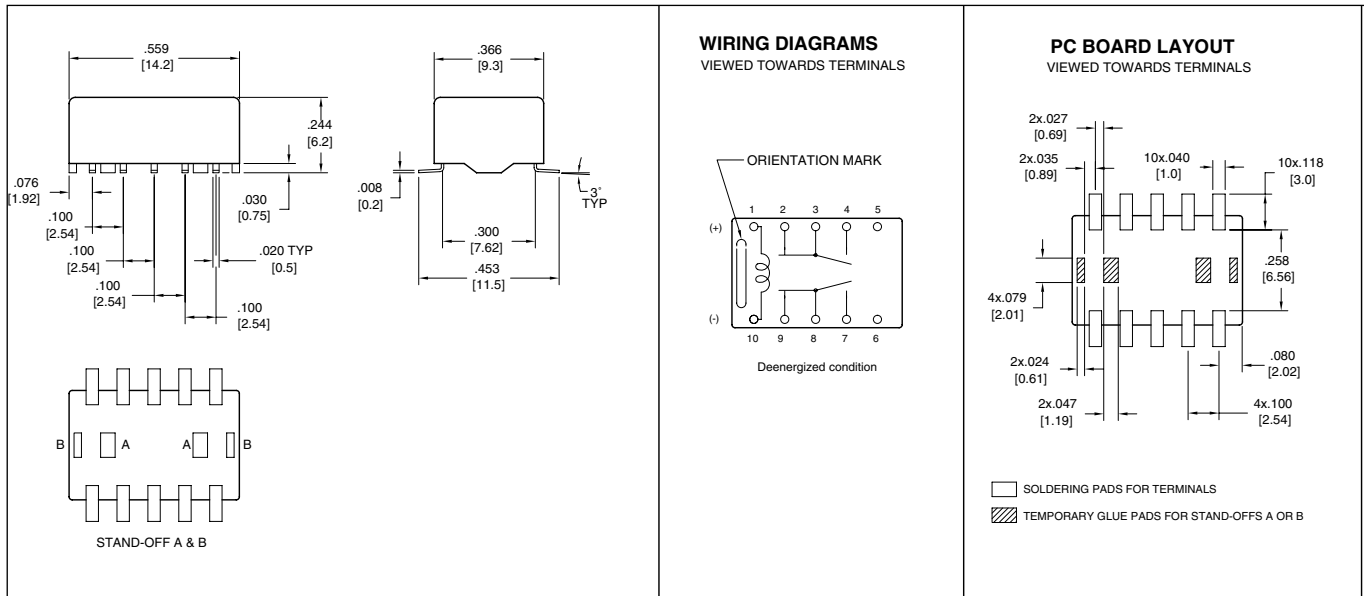
# AZ851

## RELAY ORDERING DATA

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

[1] Not UL approved \*Add suffix "TR" for tape & reel package (500 relays per reel)

## MECHANICAL DATA



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



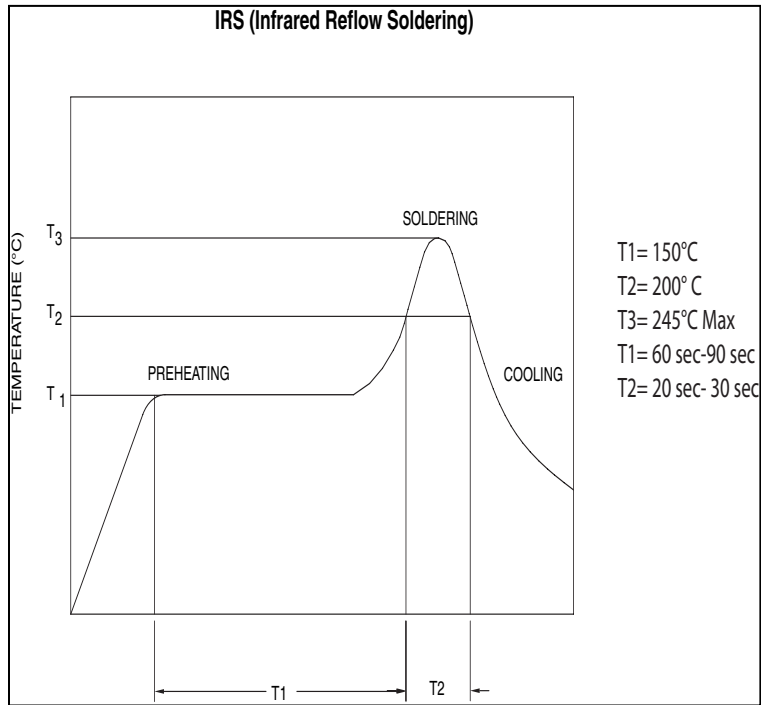
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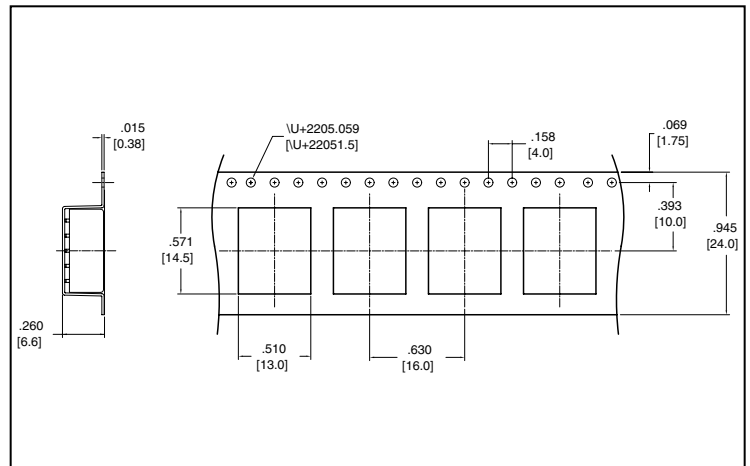
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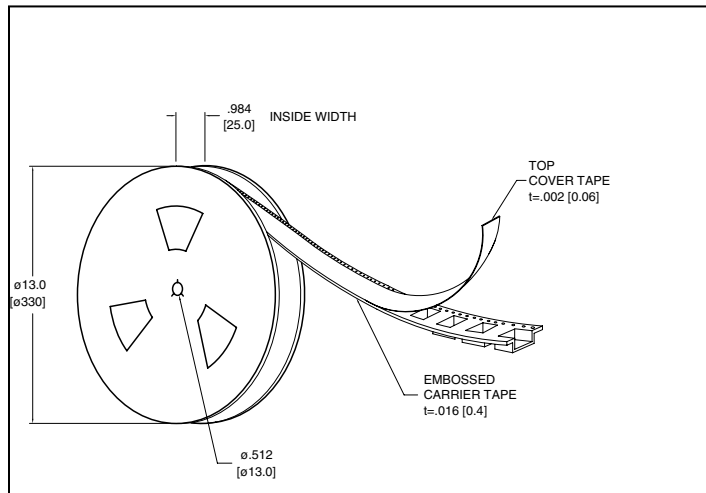
## Soldering Data



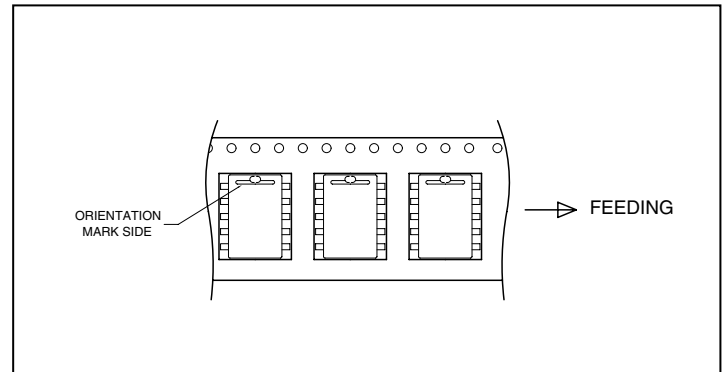
## Tape Dimensions



## Reel Dimensions



## Packaging



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