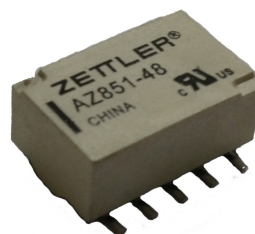


# AZ851

## MICROMINIATURE POLARIZED RELAY

### FEATURES

- Microminiature size: Height: 0.244 inches (6.2mm); Length: 0.559 inches (14.2mm); Width: 0.366 inches (9.3mm)
- High sensitivity, 79mW pickup
- Meets FCC Part 68.302 1500V lightning surge
- Surface mount type with "L" shaped terminals
- 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: 60W or 62.5VA Max. switched current: 1A Max. switched voltage: 220VDC or 250VAC Max. carry current: 2A
Rated Load UL, CUR	2A at 30VDC, gen 1A at 30VDC resistive 0.5A at 125VAC resistive
Material	Silver palladium, gold clad
Resistance	< 50 milliohms initially

### COIL (Polarized)

Power At Pickup Voltage (typical)	79–142mW
Max. Continuous Dissipation	875mW 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 0.197" (5.0mm) space be provided between adjacent relays.
6. Specifications subject to change without notice.

### GENERAL DATA

Life Expectancy Mechanical Electrical	Minimum operations 1 x 10 <sup>8</sup> 2 x 10 <sup>5</sup> at 1A, 30VDC resistive 1 x 10 <sup>5</sup> at 0.5A, 125VAC resistive
Operate Time (typical)	2ms at nominal coil voltage
Release Time (typical)	1ms at nominal coil voltage (with no coil suppression)
Dropout	Greater than 10% of nominal coil voltage
Capacitance	Contact to contact: 0.4pF Contact set to contact set: 0.2pF Contact to coil: 0.9pF
Dielectric Strength (at sea level)	1000Vrms between contact sets 1000Vrms across contacts 1000Vrms contact to coil Meets FCC part 68.302 1500V lightning surge
Insulation Resistance	1000 megohms min. at 25°C, 500VDC, 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	0.130" 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	Approx. 1.5 grams

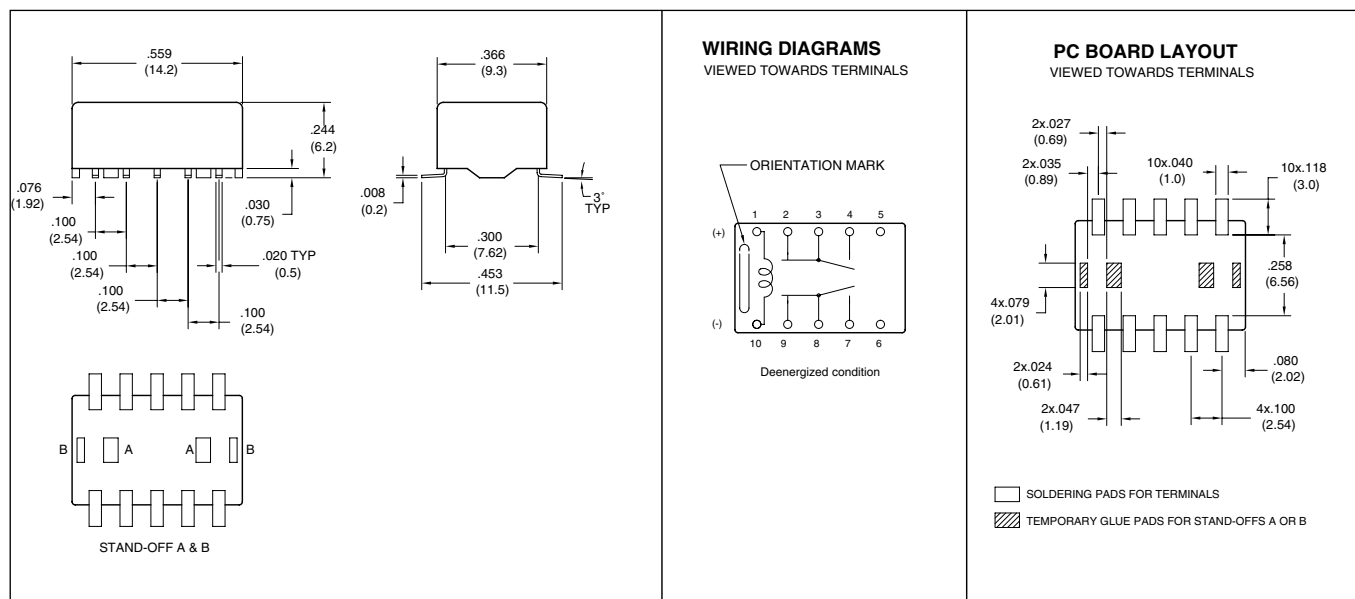
# AMERICAN ZETTLER, INC.

## 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)

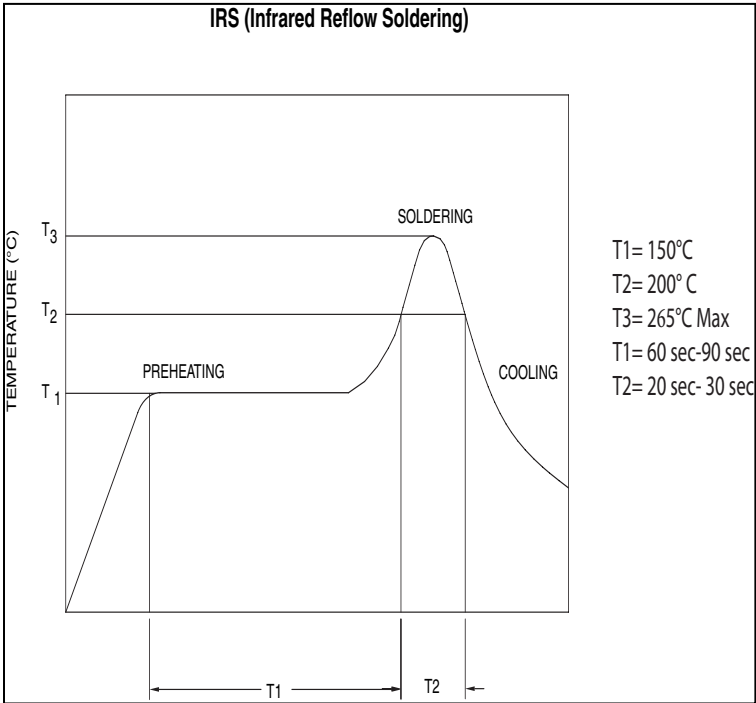
## MECHANICAL DATA



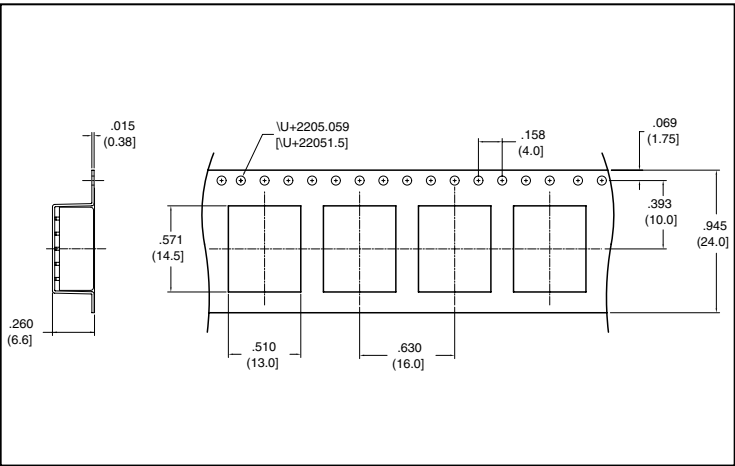
Dimensions in inches with metric equivalents in parentheses. Tolerance:  $\pm .010$ "

# AZ851

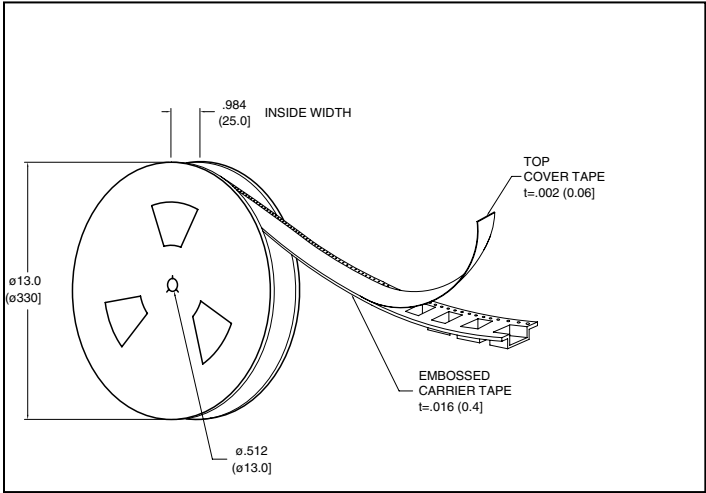
## Soldering Data



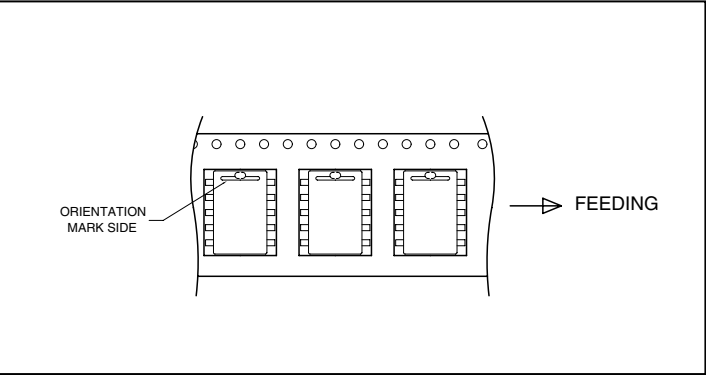
## Tape Dimensions



## Reel Dimensions



## Packaging



**AMERICAN ZETTLER, INC.**

2/01/16

PHONE: (949) 831-5000

[www.azettler.com](http://www.azettler.com)

E-MAIL: SALES@AZETTLER.COM

This specification provides an overview of the most significant part features. Any individual applications and operating conditions are not taken into consideration. It is recommended to test the product under application conditions. Responsibility for the application remains with the customer. Proper operation and service life cannot be guaranteed if the part is operated outside the specified limits.