# 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
- Minimum switching load 10 mV, 10 μA
- · Epoxy sealed
- 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			
	* Note: If switching voltage is greater than 30 VDC, special precautions must be taken.  Please contact the factory.			
Rated Load UL, CUR	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)	79–169 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.
- 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.
- 7. Ultrasonic cleaning is not recommended.

#### **GENERAL DATA**

Life Expectancy Mechanical Electrical	Minimum operations 1 x 108 2 x 105 at 1 A, 30 VDC resistive 1 x 105 at 0.5 A, 125 VAC resistive		
Operate Time (typical)	2 ms at nominal coil voltage		
Release Time (typical)	1 ms at nominal coil voltage (with no coil suppression)		
Set Time (bistable versions)	2 ms at nominal coil voltage (typical) Recommended coil pulse: 20 ms		
Reset Time (bistable versions)	2 ms at nominal coil voltage (typical) Recommended coil pulse: 20 ms		
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 1000 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	At nominal coil voltage -40°C (-40°F) to 85°C (185°F)		
Vibration	.130" (3.3 mm) 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		
Packing unit in pcs (TR Tape & Reel)	25 per plastic tube / 1000 per carton box 500 per reel		

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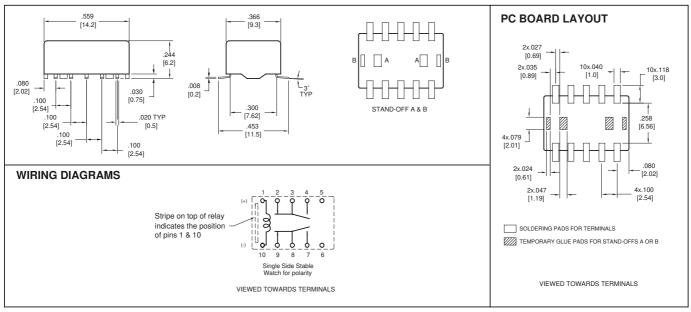
AZ851\_

#### **RELAY ORDERING DATA**

Standard Coil: Mond				
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance Ohm ± 10%	ORDER NUMBER
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 *

<sup>\*</sup> Not UL Approved

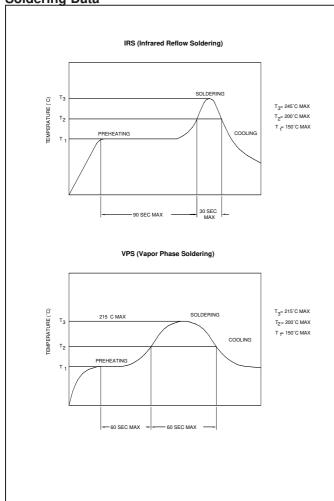
#### **MECHANICAL DATA**



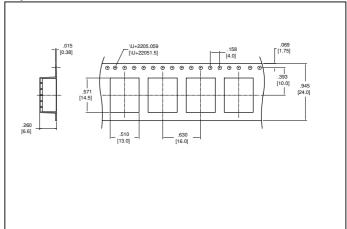
Dimensions in inches with metric equivalents in parentheses. Tolerance: ± .010"

## **AZ851**

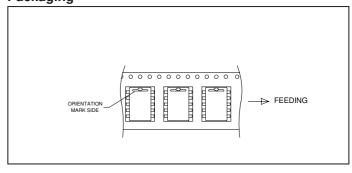
#### **Soldering Data**



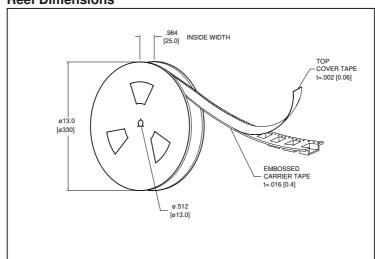
#### **Tape Dimensions**



#### **Packaging**



#### **Reel Dimensions**



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