# AZ821/AZ831

## SUBMINIATURE DIP RELAY

#### FEATURES

- · Low profile for compact board spacing
- DC coils to 48 VDC
- Single button crossbar contacts
- High sensitivity, 100 mW pickup
- Life expectancy to 15 million operations
- High switching capacity, 125 W, 120 VA
- Fits standard 16 pin IC socket
- Epoxy sealed for automatic wave soldering and cleaning
- Meets FCC Part 68.302 1500 V lightning surge
- Meets FCC Part 68.304 1000 V dielectric
- UL, CUR file E43203; CSA LR 701392

#### CONTACTS

Arrangement	DPDT (2 Form C)				
Ratings	Resistive load: Max. switched power: 125 W or 120 VA Max. switched current: 2 A				
	Max. switched current: 2 A Max. switched voltage: 150 VDC or 240 VAC				
Rated Load UL	1.25 A at 100 VDC, 125 W 0.5 A at 125 VAC				
CSA	1.25 A at 150 VAC, 150 VDC				
Material	Gold/silver alloy, gold plated				
Resistance	< 50 milliohms initially 200 milliohms at end of life				

#### COIL

Power At Pickup Voltage (typical) Max. Continuous Dissipation	AZ821: 250 mW AZ831: 100 mW 1.7 W at 20°C (68°F) 1.3 W at 40°C (104°F) AZ821: 37°C (67°F) at nominal coil voltage AZ831: 18°C (32°F) at nominal coil voltage	
Temperature Rise		
Temperature	Max. 115°C (239°F)	

#### NOTES

- 1. All values at 20°C (68°F).
- 2. Relay may pull in with less than "Must Operate" value.
- 3. Other coil resistances and sensitivities available upon request.
- 4. Specifications subject to change without notice.



#### GENERAL DATA

Life Expectancy Mechanical Electrical	Minimum operations 15 x 10 <sup>6</sup> 1 x 10 <sup>5</sup> at 2 A 30 VDC Res.		
Operate Time (typical)	3 ms at nominal coil voltage		
Release Time (typical)	2 ms at nominal coil voltage (with no coil suppression)		
Dielectric Strength (at sea level for 1 min.)	1500 Vrms coil to contact 1000 Vrms contact to contact		
Insulation Resistance	1000 megohms min. at 20°C, 500 VDC, 50% RH		
Dropout	Greater than 10% of nominal coil voltage		
Capacitance	Contact to contact: 2.0 pF Contact set to contact set: 1.5 pF Contact to coil: 5.0 pF		
Ambient Temperature Operating Storage	At nominal coil voltage AZ821: -40°C (-40°F) to 75°C (167°F) AZ831: -40°C (-40°F) to 95°C (203°F) -40°C (-40°F) to 115°C (239°F)		
Vibration	1.5 mm DA at 10–55 Hz		
Shock	40 g 11 ms <sup>1</sup> / <sub>2</sub> sine		
Enclosure	P.B.T. polyester 94 V-O		
Terminals	Tinned copper alloy		
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	6 grams		

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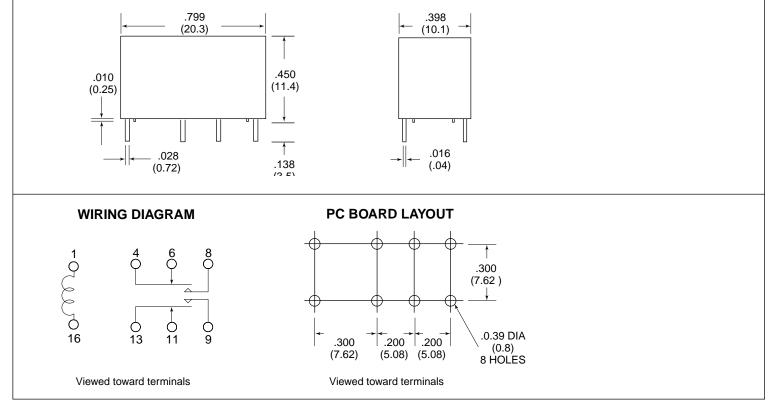
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#### RELAY ORDERING DATA

	STANDARD COIL SPECIFICATIONS				
Nominal Coil VDC	Max. Continuous VDC	Coil Resistance ± 10%	Must Operate VDC	ORDER NUMBER	
5	7.8	36	3.75	AZ821–2C–5DE	
6	10.9	70	4.5	AZ821-2C-6DE	
9	15.4	140	6.8	AZ821-2C-9DE	
12	21.8	280	9.0	AZ821–2C–12DE	
24	42.2	1050	18.0	AZ821-2C-24DE	
48	82.5	4000	36.0	AZ821–2C–48DE	
	SENSITIVE COIL SPECIFICATIONS				
Nominal Coil VDC	Max. Continuous VDC	Coil Resistance ± 10%	Must Operate VDC	ORDER NUMBER	
5	14.6	125	3.75	AZ831–2C–5DSE	
6	17.5	180	4.5	AZ831-2C-6DSE	
9	26.2	405	6.8	AZ831–2C–9DSE	
12	35.0	720	9.0	AZ831-2C-12DSE	
24	70.0	2,880	18.0	AZ831-2C-24DSE	
48	140.0	11,520	36.0	AZ831-2C-48DSE	

#### MECHANICAL DATA



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

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