# **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, 60 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



Arrangement	DPDT (2 Form C)		
Ratings	Resistive load:		
	Max. switched power: 60 W or 120 VA Max. switched current: 2 A Max. switched voltage: 150 VDC or 240 VAC		
Rated Load			
UL	1.25 A, 100 VDC, 30 W 0.5 A. 125 VAC		
CSA	1.25 A, 150 VAC, 150 VDC, 30W, 50 VA		
Material	Gold/silver alloy, gold plated		
Resistance	< 50 milliohms initially 200 milliohms at end of life		

#### COIL

Power At Pickup Voltage (typical)	AZ821: 250 mW AZ831: 100 mW		
Max. Continuous Dissipation	1.7 W at 20°C (68°F) 1.3 W at 40°C (104°F)		
Temperature Rise	AZ821: 37°C (67°F) at nominal coil voltage AZ831: 18°C (32°F) at nominal coil voltage		
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.)	1000 Vrms coil to contact 750 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-0		
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		

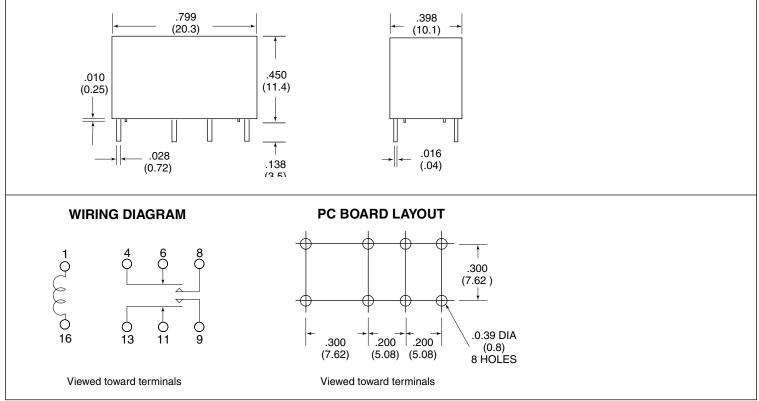


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### **RELAY ORDERING DATA**

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:  $\pm$  .010"

