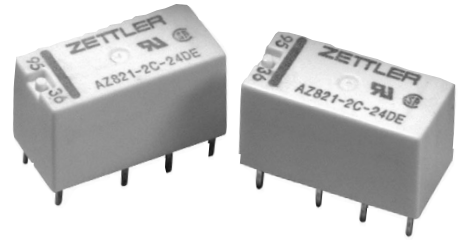


AZ821/AZ831

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 voltage: 150 VDC or 240 VAC |
| Rated Load UL CSA | 1.25 A at 100 VDC, 125 W 0.5 A at 125 VAC 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) | 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 ⁶ 1 x 10 ⁵ 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 1/2 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 |

ZETTLER electronics

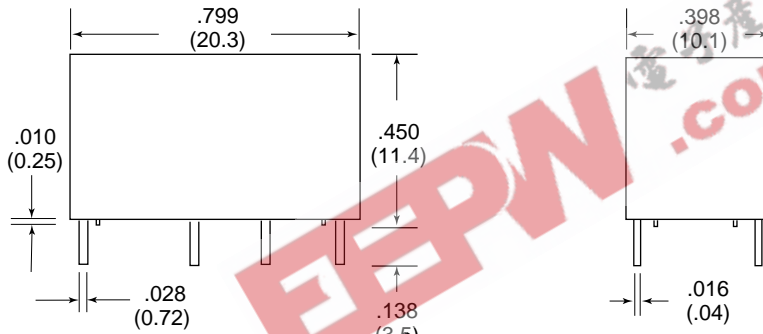
Logistic Design (UK) Limited. Unit 3, Eagle Centre Way, Luton LU4 9US www.zettlerrelay.com sales@zettlerrelay.com
Telephone +44 (0) 1582 599 600 Fax +44 (0) 1582 599 700

AZ821/AZ831

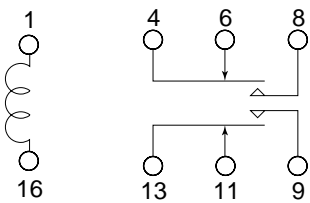
RELAY ORDERING DATA

| STANDARD COIL SPECIFICATIONS | | | | ORDER NUMBER |
|-------------------------------|---------------------|----------------------------|------------------|----------------|
| Nominal Coil VDC | Max. Continuous VDC | Coil Resistance $\pm 10\%$ | Must Operate VDC | |
| 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 | | | | ORDER NUMBER |
| Nominal Coil VDC | Max. Continuous VDC | Coil Resistance $\pm 10\%$ | Must Operate VDC | |
| 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

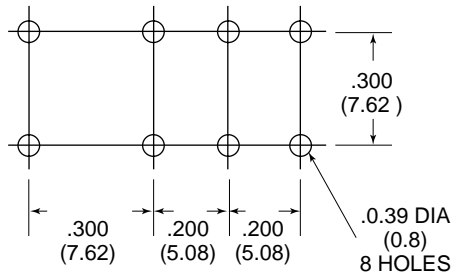


WIRING DIAGRAM



Viewed toward terminals

PC BOARD LAYOUT



Viewed toward terminals

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

ZETTLER electronics

Logistic Design (UK) Limited. Unit 3, Eagle Centre Way, Luton LU4 9US www.zettlerrelay.com sales@zettlerrelay.com
Telephone +44 (0) 1582 599 600 Fax +44 (0) 1582 599 700