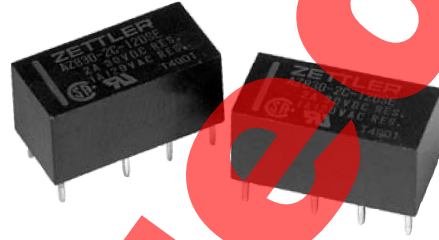


POLARIZED DIP RELAY SINGLE SIDE STABLE

FEATURES

- Low profile for compact board spacing
- DC coils to 48 VDC
- High sensitivity, 100 mW pickup
- Meets FCC Part 68.302 1500 V lightning surge
- Meets FCC Part 68.304 1000 V dielectric
- Life expectancy to 100 million operations
- High switching capacity, 60 W, 125 VA
- Fits standard 16 pin IC socket
- Epoxy sealed
- UL file E43203 (UL1950); CSA file LR 88413



CONTACTS

| | |
|--------------------------|---|
| Arrangement | DPDT (2 Form C) Bifurcated crossbar contacts |
| Ratings | Resistive load: Max. switched power: 60 W or 125 VA Max. switched current: 2 A Max. switched voltage: 250 VDC or 300 VAC Max. carry current: 3A |
| Rated Load UL | 2 A at 30 VDC 1 A at 120 VAC |
| Material | Silver alloy, gold clad. Silver palladium, gold clad available upon request (not recommended for current greater than 1 Amp). |
| Resistance | < 50 milliohms initially |

COIL

| | |
|--|---|
| Power At Pickup Voltage (typical) | Standard coil: 200 mW Sensitive coil: 100 mW |
| Max. Continuous Dissipation | 1.0 W at 20°C (68°F) 0.9 W at 40°C (104°F) |
| Temperature Rise | Standard: 38°C (68°F) at nominal coil voltage Sensitive: 21°C (38°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. Relay has fixed coil polarity. |
| 4. For complete isolation between the relay's magnetic fields, it is recommended that a .197" (5.0 mm) space be provided between adjacent relays. |
| 5. Relay adjustment may be affected if undue pressure is exerted on relay case. |
| 6. Specifications subject to change without notice. |

GENERAL DATA

| | |
|--|--|
| Life Expectancy Mechanical Electrical | Minimum operations 1 x 10 ⁸ 1 x 10 ⁵ at 2 A, 30 VDC or 1 A, 125 VAC 2 x 10 ⁶ at 1 A, 30 VDC or .5 A, 125 VAC (see table for additional figures) |
| Operate Time (typical) | 3 ms at nominal coil voltage |
| Release Time (typical) | 2 ms at nominal coil voltage (with no coil suppression) |
| Capacitance | Contact to contact: 1.0 pF Contact set to contact: 1.0 pF Contact to coil: 2.0 pF |
| Bounce (typical) | At 10 mA contact current 1.5 ms at operate N.O. side 2.5 ms at operate N.C. side |
| Dielectric Strength (at sea level) | 1500 Vrms contact to coil 1000 Vrms between contact sets 1000 Vrms across contacts Meets FCC Part 68.302 lightning surge Meets FCC Part 68.304 V dielectric |
| Insulation Resistance | 1000 megohms min. at 20°C, 500 VDC, 50% RH |
| Dropout | Greater than 10% of nominal coil voltage |
| Ambient Temperature Operating Storage | At nominal coil voltage Standard: -40°C (-40°F) to 70°C (158°F) Sensitive: -40°C (-40°F) to 85°C (185°F) Both: -40°C (-40°F) to 105°C (221°F) |
| Vibration | 0.062" (1.5 mm) DA at 10-55 Hz |
| Shock | 40 g |
| Enclosure | P.B.T. polyester |
| Terminals | Tinned copper alloy, P.C. |
| 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 | 5 grams |

AZ830

Discontinuation Notice

Discontinuation date:

31.12.2012

Date of last order:

30.06.2012

Recommended replacement:

AZ832

RELAY ORDERING DATA

| STANDARD COIL | | | | |
|---------------------|---------------------|----------------------------|------------------|----------------|
| COIL SPECIFICATIONS | | | | ORDER NUMBER* |
| Nominal Coil VDC | Max. Continuous VDC | Coil Resistance $\pm 10\%$ | Must Operate VDC | |
| 5 | 7.5 | 62.5 | 3.5 | AZ830-2C-5DE |
| 6 | 9.0 | 90 | 4.2 | AZ830-2C-6DE |
| 12 | 18.0 | 360 | 8.4 | AZ830-2C-12DE |
| 24 | 36.0 | 1440 | 16.8 | AZ830-2C-24DE |
| 48 | 72.0 | 5760 | 33.6 | AZ830-2C-48DE |
| SENSITIVE RELAYS | | | | |
| 5 | 11.0 | 125 | 3.5 | AZ830-2C-5DSE |
| 6 | 13.0 | 180 | 4.2 | AZ830-2C-6DSE |
| 12 | 26.0 | 720 | 8.4 | AZ830-2C-12DSE |
| 24 | 53.0 | 2880 | 16.8 | AZ830-2C-24DSE |
| 48 | 106.0 | 11520 | 33.6 | AZ830-2C-48DSE |

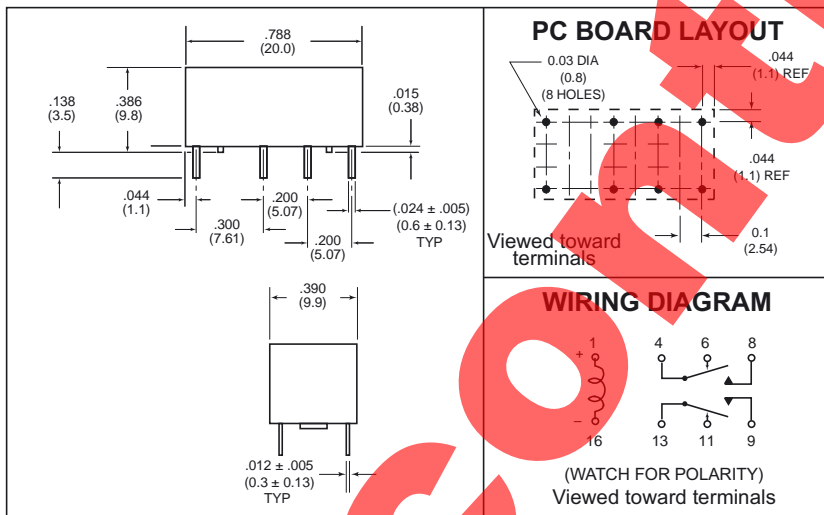
* Add suffix "R" to indicate reversed polarity.

TYPICAL CONTACT LIFE EXPECTANCY

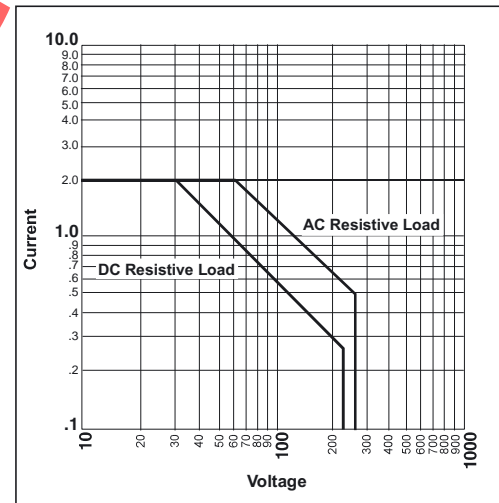
| VOLTAGE | POWER | NUMBER OF OPERATIONS | |
|---------|------------|----------------------|------------------|
| | | RESISTIVE LOAD | INDUCTIVE LOAD |
| 50 mV | 50 μ W | 5×10^7 | 5×10^7 |
| 30 VDC | 60 W | 5×10^5 | 15×10^4 |
| 30 VDC | 40 W | 1×10^6 | 3×10^5 |
| 30 VDC | 20 W | 3×10^6 | 1×10^6 |
| 60 VDC | 60 W | 5×10^5 | — |
| 60 VDC | 40 W | 1×10^6 | — |
| 60 VDC | 20 W | 3×10^6 | — |
| 30 VAC | 120 VA | 5×10^5 | 15×10^4 |
| 30 VAC | 80 VA | 1×10^6 | 3×10^5 |
| 30 VAC | 40 VA | 3×10^6 | 1×10^6 |
| 60 VAC | 120 VA | 5×10^5 | 15×10^4 |
| 60 VAC | 80 VA | 1×10^6 | 3×10^5 |
| 60 VAC | 40 VA | 3×10^6 | 1×10^6 |
| 125 VAC | 125 VA | 5×10^5 | 15×10^4 |
| 125 VAC | 80 VA | 1×10^6 | 3×10^5 |
| 125 VAC | 40 VA | 3×10^6 | 1×10^6 |

- NOTES: 1. Relays operated at nominal coil voltage.
 2. Inductive load tests are at 0.7 power factor.
 3. Table represents typical life figures and are not guaranteed minimums.

MECHANICAL DATA



Maximum Switching Capacity



Coil Temperature Rise

