

AZ8222

SUBMINIATURE ULTRA-SENSITIVE DIP RELAY

FEATURES

- Low profile for compact board spacing
- DC coils to 48VDC
- Bifurcated crossbar contacts
- Ultra-sensitivity, 84mW pickup
- Life expectancy to 100 million operations
- High switching capacity, 60W, 125VA
- Fits standard 16 pin IC socket
- Epoxy sealed for automatic wave soldering and cleaning
- Meets FCC Part 68.302 1500V lightning surge
- Meets FCC Part 68.304 1000V dielectric
- UL, CUR file E43203



CONTACTS

| | |
|--------------------------|--|
| Arrangement | DPDT (2 Form C) |
| Ratings | Resistive load: Max. switched power: 60W or 125VA Max. switched current: 2A Max. switched voltage: 120VDC or 240VAC |
| Rated Load UL | 2A at 30VDC 1A at 125VAC |
| Material | Silver nickel, gold plated |
| Resistance | <100 milliohms max (at 10mA, 30mV) |

COIL

| | |
|--|--|
| Power At Pickup Voltage (typical) | 180mW standard 100mW sensitive 84mW ultra-sensitive |
| Max. Continuous Dissipation | 1.2W at 20°C (68°F) |
| Temperature Rise | 34°C (61°F) standard 23°C (41°F) sensitive 19°C (34°F) ultra-sensitive |
| Temperature | Max. 105°C (221°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 1 x 10 ⁸ 1 x 10 ⁵ at 2A, 30VDC Res. |
| Operate Time (max.) | 7ms at nominal coil voltage |
| Release Time (max.) | 4ms at nominal coil voltage (with no coil suppression) |
| Dielectric Strength (at sea level for 1 min.) | 1500Vrms contact to coil 1000Vrms between open contacts 1500Vrms contact set to contact set |
| Insulation Resistance | 1000 megohms min. at 20°C, 500VDC, 50% RH |
| Dropout | Greater than 10% of nominal coil voltage |
| Ambient Temperature Operating | At nominal coil voltage -40°C (-40°F) to 70°C (158°F) standard -40°C (-40°F) to 80°C (176°F) sensitive -40°C (-40°F) to 85°C (185°F) ultra-sensitive |
| Storage | -40°C (-40°F) to 105°C (221°F) |
| Vibration | 1.5mm DA at 10–55 Hz |
| Shock | 20 g |
| Enclosure | P.B.T. polyester |
| 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 (approx.) | 5 grams |

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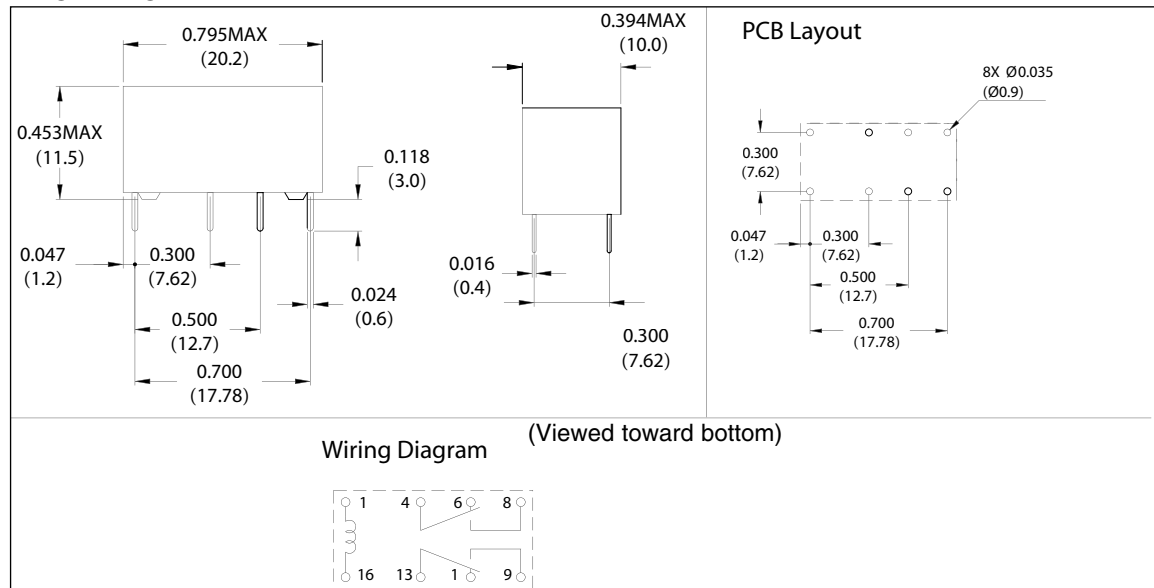
AZ8222

RELAY ORDERING DATA

| STANDARD COIL SPECIFICATIONS | | | | |
|--------------------------------------|---------------------|----------------------------|------------------|-------------------|
| Nominal Coil VDC | Max. Continuous VDC | Coil Resistance $\pm 10\%$ | Must Operate VDC | ORDER NUMBER |
| 3 | 4.5 | 30 | 2.3 | AZ8222-2C-3DME |
| 4.5 | 6.0 | 63 | 3.2 | AZ8222-2C-4.5DME |
| 5 | 8.0 | 90 | 3.8 | AZ8222-2C-5DME |
| 6 | 10.0 | 130 | 4.5 | AZ8222-2C-6DME |
| 9 | 14.5 | 280 | 6.8 | AZ8222-2C-9DME |
| 12 | 18.5 | 450 | 9.0 | AZ8222-2C-12DME |
| 15 | 22.0 | 625 | 11.3 | AZ8222-2C-15DME |
| 24 | 35.5 | 1600 | 18.0 | AZ8222-2C-24DME |
| 48 | 56.0 | 4000 | 36.0 | AZ8222-2C-48DME |
| SENSITIVE COIL SPECIFICATIONS | | | | |
| Nominal Coil VDC | Max. Continuous VDC | Coil Resistance $\pm 10\%$ | Must Operate VDC | ORDER NUMBER |
| 3 | 6.0 | 45 | 2.3 | AZ8222-2C-3DSE |
| 4.5 | 9.0 | 101 | 3.2 | AZ8222-2C-4.5DSE |
| 5 | 10.0 | 125 | 3.8 | AZ8222-2C-5DSE |
| 6 | 12.0 | 180 | 4.5 | AZ8222-2C-6DSE |
| 9 | 18.0 | 405 | 6.8 | AZ8222-2C-9DSE |
| 12 | 24.0 | 720 | 9.0 | AZ8222-2C-12DSE |
| 15 | 30.0 | 1125 | 11.3 | AZ8222-2C-15DSE |
| 24 | 48.0 | 2880 | 18.0 | AZ8222-2C-24DSE |
| ULTRA-SENSITIVE COIL SPECIFICATIONS* | | | | |
| Nominal Coil VDC | Max. Continuous VDC | Coil Resistance $\pm 10\%$ | Must Operate VDC | ORDER NUMBER |
| 3 | 7.0 | 60 | 2.4 | AZ8222-2C-3DSSE |
| 4.5 | 10.4 | 135 | 3.2 | AZ8222-2C-4.5DSSE |
| 5 | 11.5 | 167 | 4.0 | AZ8222-2C-5DSSE |
| 6 | 13.8 | 240 | 4.8 | AZ8222-2C-6DSSE |
| 9 | 20.8 | 540 | 7.2 | AZ8222-2C-9DSSE |
| 12 | 27.7 | 960 | 9.6 | AZ8222-2C-12DSSE |
| 15 | 34.6 | 1500 | 12.0 | AZ8222-2C-15DSSE |
| 24 | 55.2 | 3840 | 19.2 | AZ8222-2C-24DSSE |

*Contact to contact dielectric strength is 500Vrms.

MECHANICAL DATA



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

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PHONE: (949) 831-5000

www.azettler.com

E-MAIL: SALES@AZETTLER.COM

This specification provides an overview of the most significant part features. Any individual applications and operating conditions are not taken into consideration. It is recommended to test the product under application conditions. Responsibility for the application remains with the customer. Proper operation and service life cannot be guaranteed if the part is operated outside the specified limits.