

AZ8222

SUBMINIATURE ULTRA-SENSITIVE DIP RELAY

FEATURES

- Low profile for compact board spacing
- DC coils to 48 VDC
- Bifurcated crossbar contacts
- Ultra-sensitivity, 84 mW pickup
- Life expectancy to 10 million operations
- High switching capacity, 60 W, 125 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



CONTACTS

| | |
|--------------------------|---|
| Arrangement | DPDT (2 Form C) |
| Ratings | Resistive load: Max. switched power: 60 W or 125 VA Max. switched current: 2 A Max. switched voltage: 120 VDC or 240 VAC |
| Rated Load UL | 2.0 A at 30 VDC 1.0 A at 125 VAC |
| Material | Silver nickel, gold plated |
| Resistance | < 50 milliohms initially |

COIL

| | |
|--|--|
| Power At Pickup Voltage (typical) | 180 mW standard 100 mW sensitive 84 mW ultra-sensitive |
| Max. Continuous Dissipation | 1.2 W 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 ⁷ 1 x 10 ⁵ at 2.0 A 30 VDC Res. |
| Operate Time (typical) | 6 ms at nominal coil voltage |
| Release Time (typical) | 4 ms at nominal coil voltage (with no coil suppression) |
| Dielectric Strength (at sea level for 1 min.) | 1500 Vrms contact to coil 1000 Vrms between open contacts 1500 Vrms contact set to contact set |
| Insulation Resistance | 1000 megohms min. at 20°C, 500 VDC, 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 | 1.5 mm DA at 10–55 Hz |
| Shock | 50 g 11 ms 1/2 sine |
| 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 | 5 grams |



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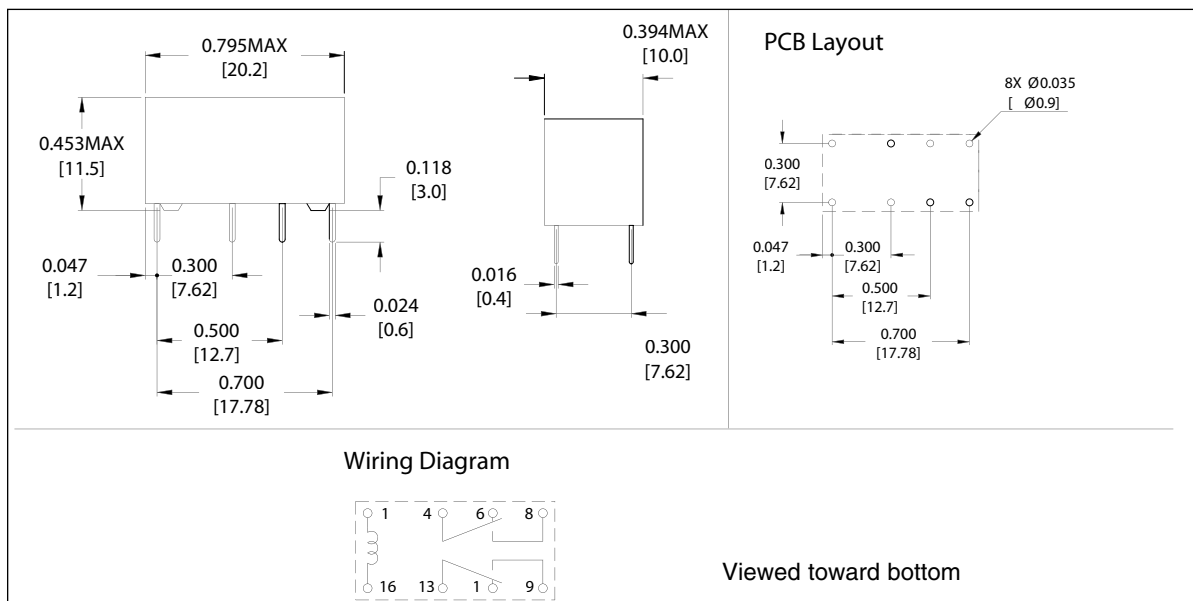
AZ8222

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 | 2.3 | AZ8222-2C-3DSSE |
| 4.5 | 10.4 | 135 | 3.2 | AZ8222-2C-4.5DSSE |
| 5 | 11.5 | 167 | 3.8 | AZ8222-2C-5DSSE |
| 6 | 13.8 | 240 | 4.5 | AZ8222-2C-6DSSE |
| 9 | 20.8 | 540 | 6.8 | AZ8222-2C-9DSSE |
| 12 | 27.7 | 960 | 9.0 | AZ8222-2C-12DSSE |
| 15 | 34.6 | 1500 | 11.3 | AZ8222-2C-15DSSE |

* Contact to contact dielectric strength is 500 Vrms.

MECHANICAL DATA



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



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