## SUBMINIATURE PC BOARD RELAY

## FEATURES

- Subminiature size for high density packaging
- DIL pitch terminals
- Epoxy sealed for automatic wave soldering
- High sensitivity: 150 mW nominal with 96 mW pickup
- Meets FCC Part 68.3021500 V lightning surge
- Meets FCC Part 68.3041000 V dielectric
- UL, CUR file E43203


## CONTACTS

| Arrangement | SPDT (1 Form C) Crossbar contacts |
| :---: | :---: |
| Ratings | Resistive load: <br> Max. switched power: 30 W or 62.5 VA <br> Max. switched current: 1 A <br> Max. switched voltage: 60 VDC or 125 VAC <br> UL Rating: 1 A at 30 VDC <br> 0.3 A at 60 VDC <br> 0.5 A at 125 VAC |
| Material | Silver gold clad |
| Resistance | < 100 milliohms initially (6 V 1 A method) |

## COIL

| Power <br> At Pickup Voltage <br> (typical) | Standard coil: 128 mW <br> Sensitive coil: 96 mW |
| :--- | :--- |
| Max. Continuous <br> Dissipation <br> Temperature Rise | Standard: $33^{\circ} \mathrm{C}\left(59^{\circ} \mathrm{F}\right)$ at nominal <br> Soil voltage <br> coin <br> Sensitiv: $25^{\circ} \mathrm{C}\left(45^{\circ} \mathrm{F}\right)$ at nominal <br> coil voltage |
| Temperature | Max. $105^{\circ} \mathrm{C}\left(221^{\circ} \mathrm{F}\right)$ |

## NOTES

1. All values at $20^{\circ} \mathrm{C}\left(68^{\circ} \mathrm{F}\right)$.
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 10 million operations $1 \times 10^{5}$ at 0.5 A 120 VAC Res. |
| :---: | :---: |
| Operate Time (typical) | Standard: 3 ms at nominal coil voltage Sensitive: 5 ms at nominal coil voltage |
| Release Time (typical) | 1 ms at nominal coil voltage (with no coil suppression) |
| Capacitance | Coil to contact: 7.0 pF Contact to contact: 7.0 pF |
| Bounce (typical) | At 10 mA contact current 2 ms at operate 8 ms at release |
| Dielectric Strength (at sea level for 1 min.) | 1250 Vrms coil to contact 400 Vrms between open contacts Meets FCC Part 68.3021500 V lightning surge Meets FCC Part 68.304 1000 V dielectric |
| Insulation Resistance | 100 megohms min. at $20^{\circ} \mathrm{C}, 500 \mathrm{VDC}$, 50\% RH |
| Dropout | Greater than 10\% of nominal coil voltage |
| Ambient Temperature Operating <br> Storage | At nominal coil voltage <br> Standard: $-40^{\circ} \mathrm{C}\left(-40^{\circ} \mathrm{F}\right)$ to $70^{\circ} \mathrm{C}\left(158^{\circ} \mathrm{F}\right)$ <br> Sensitive: $-40^{\circ} \mathrm{C}\left(-40^{\circ} \mathrm{F}\right)$ to $80^{\circ} \mathrm{C}\left(176^{\circ} \mathrm{F}\right)$ <br> Both: $-25^{\circ} \mathrm{C}\left(-13^{\circ} \mathrm{F}\right)$ to $105^{\circ} \mathrm{C}\left(221^{\circ} \mathrm{F}\right)$ |
| Vibration | 3.3 mm DA at $10-55 \mathrm{~Hz}$ |
| Shock | 10 g Functional, 100g destructive |
| Enclosure | P.E.T. polyester |
| Terminals | Tinned copper alloy |
| Max. Solder Temp. | $270^{\circ} \mathrm{C}\left(518^{\circ} \mathrm{F}\right)$ |
| Max. Solder Time | 5 seconds |
| Max. Immersion Time | 30 seconds |
| Weight | 2.2 grams |

RELAY ORDERING DATA

COIL SPECIFICATIONS: STANDARD COIL

| Nominal <br> Coil <br> VDC | Must. <br> Operate <br> VDC | Max. <br> Continuous <br> VDC | Coil <br> Resistance <br> $\pm 10 \%$ | ORDER NUMBER |
| :---: | :---: | :---: | :---: | :---: |
| 1.5 | 1.2 | 2.4 | 11.3 | AZ957-1C-1.5DE |
| 3 | 2.4 | 4.7 | 45.0 | AZ957-1C-3DE |
| 5 | 4.0 | 7.9 | 125 | AZ957-1C-5DE |
| 6 | 4.8 | 9.5 | 180 | AZ957-1C-6DE |
| 9 | 7.2 | 14.2 | 405 | AZ957-1C-9DE |
| 12 | 9.6 | 19.0 | 720 | AZ957-1C-12DE |
| 24 | 19.2 | 37.9 | 2880 | AZ957-1C-24DE |

COIL SPECIFICATIONS: SENSITIVE COIL

| Nominal <br> Coil <br> VDC | Must. <br> Operate <br> VDC | Max. <br> Continuous <br> VDC | Coil <br> Resistance <br> $\mathbf{\pm 1 0 \%}$ | ORDER NUMBER |
| :---: | :---: | :---: | :---: | :---: |
| 1.5 | 1.2 | 2.7 | 15.0 | AZ957-1C-1.5DSE |
| 3 | 2.4 | 5.5 | 60.0 | AZ957-1C-3DSE |
| 5 | 4.0 | 9.1 | 167 | AZ957-1C-5DSE |
| 6 | 4.8 | 11.0 | 240 | AZ957-1C-6DSE |
| 9 | 7.2 | 16.4 | 540 | AZ957-1C-9DSE |
| 12 | 9.6 | 21.9 | 960 | AZ957-1C-12DSE |
| 24 | 19.2 | 43.8 | 3840 | AZ957-1C-24DSE |

MECHANICAL DATA

Dimensions in inches with metric equivalents in parentheses. Tolerance: $\pm .010^{\prime \prime}$

