## 10 AMP SUBMINIATURE POWER RELAY

## FEATURES

- High sensitivity, 120 mW pickup
- Dielectric strength 5000 Vrms
- Isolation spacing greater than 10 mm
- Proof tracking index (PTI/CTI) 250
- 10 Amp switching capability
- Epoxy sealed version available
- Reinforced insulation, EN 60730-1 (VDE 0631, part 1) EN 60335-1 (VDE 0700, part 1)

- UL, CUR file E43203
- VDE file 40010953


## CONTACTS

| Arrangement | SPDT (1 Form C), DPDT (2 Form C) SPST (1 Form A and 1 Form B) |
| :---: | :---: |
| Ratings | Resistive load: <br> Max. switched power: 240 W or 2500 VA <br> (2 Form C: 150 W or 1250 VA ) <br> Max. switched current: 10 A <br> (2 Form C: 5 A) <br> Max. switched voltage: $240^{*}$ VDC or 440 VAC <br> *Note: If switching voltage is greater than 30 VDC , special precautions must be taken. Please contact the factory. |
| Rated Load UL, CUR <br> VDE | 10 A at 250 VAC resistive, 30k cycles [1], [2], [3] 10 A at 30 VDC resistive, 30k cycles [1], [2], [3] B300, R300 <br> 5 A at 250 VAC resistive, 30k cycles [1], [2], [3] (2 Form C) <br> 8 A at 250 VAC resistive, 100k cycles [1], [2], [3] <br> (1 Form A, 1 Form B and 1 Form C) |
| Material | Silver tin oxide [1] or silver nickel [2], gold plated silver nickel [3] available |
| Resistance | < 100 milliohms initially |

COIL

| Power |  |
| :--- | :--- |
| $\quad$ At Pickup Voltage | 120 mW (up to 24 VDC coil) |
| (typical) | $140 \mathrm{~mW}(48 \mathrm{VDC}$ and 60 VDC coil) |
| Max. Continuous | 1.2 W at $20^{\circ} \mathrm{C}\left(68^{\circ} \mathrm{F}\right)$ ambient |
| Dissipation | $20^{\circ} \mathrm{C}\left(36^{\circ} \mathrm{F}\right)$ at nominal coil voltage |
| Temperature Rise | Max. $130^{\circ} \mathrm{C}\left(266^{\circ} \mathrm{F}\right)$ |
| Temperature |  |

## 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. Specifications subject to change without notice.

GENERAL DATA

| Life Expectancy Mechanical Electrical | Minimum operations $3 \times 10^{7}$ <br> $1 \times 105$ at 8 A 250 VAC res. |
| :---: | :---: |
| Operate Time (typical) | 7 ms at nominal coil voltage |
| Release Time (typical) | 3 ms at nominal coil voltage (with no coil suppression) |
| Dielectric Strength (at sea level for 1 min.) | 5000 Vrms coil to contact <br> 2500 Vrms between contact sets <br> 1000 Vrms between open contacts |
| Insulation Resistance | 1000 megohms min. at $20^{\circ} \mathrm{C}, 500$ VDC, $50 \%$ RH |
| Insulation (according to DIN VDE 0110, IEC 60664-1) | C250 <br> Overvoltage category: III <br> Pollution degree: 3 <br> Nominal voltage: 250 VAC |
| Dropout | Greater than 10\% of nominal coil voltage |
| Ambient Temperature Operating Storage | At nominal coil voltage $-40^{\circ} \mathrm{C}\left(-40^{\circ} \mathrm{F}\right)$ to $85^{\circ} \mathrm{C}\left(185^{\circ} \mathrm{F}\right)$ $-40^{\circ} \mathrm{C}\left(-40^{\circ} \mathrm{F}\right)$ to $105^{\circ} \mathrm{C}\left(221^{\circ} \mathrm{F}\right)$ |
| Vibration | Break Contact: 5 g at $10 \ldots 500 \mathrm{~Hz}$ <br> Make Contact: 20 g at $10 \ldots . .500 \mathrm{~Hz}$ |
| Shock | 10 g |
| Enclosure | P.B.T. polyester, UL94 V-O |
| Terminals | Tinned copper alloy, P.C. |
| Max. Solder Temp. | $270^{\circ} \mathrm{C}\left(518^{\circ} \mathrm{F}\right)$ |
| Max. Solder Time | 5 seconds |
| Max. Solvent Temp. | $80^{\circ} \mathrm{C}\left(176{ }^{\circ} \mathrm{F}\right)$ |
| Max. Immersion Time | 30 seconds |
| Weight | 8 grams |
| Packing unit in pcs | 20 per plastic tube / 1000 per carton box |

## AZ6962

RELAY ORDERING DATA

| COIL SPECIFICATIONS |  |  |  |  |  |  |  |  |  | ORDER NUMBER* |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Nominal Coil <br> VDC | Must Operate <br> VDC | Max. Continuous <br> VDC | Coil Resistance <br> Ohm | 1 Form A <br> (SPST-NO) | 1 Form C <br> (SPDT) |  |  |  |  |  |  |
| 5 | 3.5 | 11.6 | $113 \pm 10 \%$ | AZ6962-1AE-5D | AZ6962-1CE-5D |  |  |  |  |  |  |
| 6 | 4.2 | 14.0 | $164 \pm 10 \%$ | AZ6962-1AE-6D | AZ6962-1CE-6D |  |  |  |  |  |  |
| 9 | 6.3 | 20.8 | $360 \pm 10 \%$ | AZ6962-1AE-9D | AZ6962-1CE-9D |  |  |  |  |  |  |
| 12 | 8.4 | 27.2 | $620 \pm 10 \%$ | AZ6962-1AE-12D | AZ6962-1CE-12D |  |  |  |  |  |  |
| 15 | 10.5 | 31.0 | $800 \pm 10 \%$ | AZ6962-1AE-15D | AZ6962-1CE-15D |  |  |  |  |  |  |
| 18 | 12.6 | 39.4 | $1,295 \pm 10 \%$ | AZ6962-1AE-18D | AZ6962-1CE-18D |  |  |  |  |  |  |
| 24 | 16.8 | 53.1 | $2,350 \pm 10 \%$ | AZ6962-1AE-24D | AZ6962-1CE-24D |  |  |  |  |  |  |
| 48 | 33.6 | 98.0 | $8,000 \pm 15 \%$ | AZ6962-1AE-48D | AZ6962-1CE-48D |  |  |  |  |  |  |
| 60 | 42.0 | 122.4 | $12,500 \pm 15 \%$ | AZ6962-1AE-60D | AZ6962-1CE-60D |  |  |  |  |  |  |

"Substitute " 1 B " in place of " 1 A " for Form B contacts. Suffix "E" at " 1 AE ", "1BE" or " 1 CE " indicates silver tin oxide contacts.
Substitute suffix " $B$ " in place of " $E$ " at " $1 A E$ ", " $1 B E$ " or " $1 C E$ " for silver nickel contacts. Substitute " $2 C$ " in place of " $1 C$ " for 2 Form $C$ relay.
Add suffix "E" at the end of order number for sealed version. Add suffix "A" at the end of order number for gold plated contacts (at silver nickel only).

## MECHANICAL DATA



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

## ZETTLER electronics GmbH

