## 10 AMP SUBMINIATURE POWER RELAY

## FEATURES

- Miniature size: Form A version: 0.63 " ( 16 mm ) height, 1.10" ( 30 mm ) length, 0.39" ( 10 mm ) width
- High sensitivity, 100 mW pickup
- Dielectric strength 4000 Vrms
- Isolation spacing greater than 8 mm
- Approvals/Standards include: UL, VDE, IEC
- 10 Amp switching capability
- Epoxy sealed for automatic wave soldering and cleaning
- UL, CUR file E43203


## CONTACTS

| Arrangement | SPDT (1 Form C) SPST (1 Form B) <br> SPST (1 Form A) |
| :--- | :--- |
| Ratings | Resistive load: <br> Max. switched power: 300 W or 2500 VA <br> Max. switched current: 10 A <br> Max. switched voltage: 150* VDC or 380 VAC <br> UL Rating: 10 A at 30 VDC resistive <br> 10 A at 250 VAC general use <br> $1 / 4 \mathrm{HP} 120$ VAC <br> $1 / 2 \mathrm{HP} 250$ VAC <br> B 300 pilot duty |
|  | *Note: If switching voltage is greater than 30 VDC, special <br> precautions must be taken. Please contact the factory. |
| Material | Silver cadmium oxide or silver tin oxide |
| Resistance | < 30 milliohms initially <br> (at rated current, voltage drop method) |

## COIL

| Power <br> At Pickup Voltage <br> (typical) | 100 mW |
| :--- | :--- |
| Max. Continuous | 1.5 W at $20^{\circ} \mathrm{C}\left(68^{\circ} \mathrm{F}\right)$ ambient |
| Dissipation | 1.2 W at $40^{\circ} \mathrm{C}\left(104^{\circ} \mathrm{F}\right)$ ambient |
| Temperature Rise | $20^{\circ} \mathrm{C}\left(36^{\circ} \mathrm{F}\right)$ at nominal coil voltage |
| Temperature | Max. $110^{\circ} \mathrm{C}\left(230^{\circ} \mathrm{F}\right)$ |

## 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. Specifications subject to change without notice.

## GENERAL DATA

| Life Expectancy Mechanical Electrical | Minimum operations 10 million <br> $1 \times 10^{5}$ at 10 A 240 VAC Res. |
| :---: | :---: |
| Operate Time (typical) | 10 ms at nominal coil voltage |
| Release Time (typical) | 5 ms at nominal coil voltage (with no coil suppression) |
| Dielectric Strength (at sea level for 1 min .) | 4000 Vrms coil to contact <br> 1000 Vrms between open contacts |
| Insulation Resistance | 1000 megohms min. at $20^{\circ} \mathrm{C}, 500 \mathrm{VDC}$, $50 \% \mathrm{RH}$ |
| 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 $70^{\circ} \mathrm{C}\left(158^{\circ} \mathrm{F}\right)$ <br> $-40^{\circ} \mathrm{C}\left(-40^{\circ} \mathrm{F}\right)$ to $110^{\circ} \mathrm{C}\left(230^{\circ} \mathrm{F}\right)$ |
| Vibration | 0.062" DA at 10-55 Hz |
| Shock | 20 g |
| Enclosure | P.B.T. polyester |
| 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 | 14 grams |

## RELAY ORDERING DATA

| COIL SPECIFICATIONS |  |  |  |  |  |  |  |  | ORDER NUMBER |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Nominal Coil <br> VDC | Must Operate <br> VDC | Max Continuous <br> VDC | Coil Resistance <br> Ohms $\pm$ 10\% | 1 Form A <br> (SPST-NO) | 1 Form C <br> (SPDT) |  |  |  |  |  |
| 5 | 3.5 | 12.0 | 110 | AZ696-1A-5D | AZ696-1C-5D |  |  |  |  |  |
| 6 | 4.2 | 14.5 | 160 | AZ696-1A-6D | AZ696-1C-6D |  |  |  |  |  |
| 9 | 6.3 | 22.0 | 360 | AZ696-1A-9D | AZ696-1C-9D |  |  |  |  |  |
| 12 | 8.4 | 29.5 | 660 | AZ696-1A-12D | AZ696-1C-12D |  |  |  |  |  |
| 18 | 12.6 | 44.0 | 1,500 | AZ696-1A-18D | AZ696-1C-18D |  |  |  |  |  |
| 24 | 16.8 | 54.0 | 2,200 | AZ696-1A-24D | AZ696-1C-24D |  |  |  |  |  |
| 48 | 33.6 | 102.0 | 8,000 | AZ696-1A-48D | AZ696-1C-48D |  |  |  |  |  |

* Substitute " 1 B " in place of " $1 A$ " for 1 Form $B$ contact. ADD suffix " $E$ " to " $1 A$ " or " 1 B " or " 1 C " for silver tin oxide contacts.

Add Suffix "E" at the end of order number for sealed version.

## INTERNATIONAL APPROVALS

| Germany | VDE 0435/09.72 at 8 Amps |
| :--- | :--- |
|  | VDE 0631/12.83 at 8 Amps |
|  | VDE 0700/1/2.81 at 8 Amps |

## MECHANICAL DATA

## Coil Temperature Rise



## Maximum Switching Capacity




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

