## 20 AMP MINIATURE AUTOMOTIVE RELAY

## FEATURES

- High switching capacity - 20 Amps
- DC coils to 24 VDC
- Epoxy sealed versions available
- Class F insulation for high temperature operation
- QS9000, ISO9001, ISO14001
- Extremely cost effective


## CONTACTS

| Arrangement | SPST (1 Form A) <br> SPDT (1 Form C) |
| :--- | :--- |
| Ratings <br> Medium Duty | Resistive load <br> Max. switched power: 280 W or 5000 VA <br> Max. switched current: 20 A <br> Max. switched voltage: 30 VDC or 250 VAC |
| Material | Silver nickel |
| Resistance | $<100$ milliohms initially <br> $(24 \mathrm{~V}, 1$ A voltage drop method) |

## COIL

| Power <br> At Pickup Voltage <br> (typical) <br> Max Continuous <br> Dissipation | 220 mW |
| :--- | :--- |
| Temperature Rise | $40^{\circ} \mathrm{C}\left(72^{\circ} \mathrm{F}\right)$ at nominal coil voltage |
| Temperature | $\mathrm{Max} .155^{\circ} \mathrm{C}\left(311^{\circ} \mathrm{F}\right)$ |

## 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. Unsealed relays should not be dip cleaned.
4. Specifications subject to change without notice.

## GENERAL DATA

| Life Expectancy Mechanical Electrical | Minimum operations $\begin{aligned} & 1 \times 10^{7} \\ & 1 \times 10^{5} \text { at } 20 \text { A } 14 \text { VDC Res. } \end{aligned}$ |
| :---: | :---: |
| 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 $1 \mathbf{~ m i n}$.) | 1500 Vrms contact to coil 1000 Vrms across contacts |
| Insulation Resistance | 100 megohms min. at $20^{\circ} \mathrm{C}, 500$ VDC, $50 \% \mathrm{RH}$ |
| Dropout | Greater than 10\% of nominal coil voltage |
| Ambient Temperature <br> Operating <br> Storage | At nominal coil voltage $\begin{aligned} & -40^{\circ} \mathrm{C}\left(-40^{\circ} \mathrm{F}\right) \text { to } 105^{\circ} \mathrm{C}\left(221^{\circ} \mathrm{F}\right) \\ & -55^{\circ} \mathrm{C}\left(-67^{\circ} \mathrm{F}\right) \text { to } 155^{\circ} \mathrm{C}\left(311^{\circ} \mathrm{F}\right) \end{aligned}$ |
| Vibration | 0.062 " DA at $10-55 \mathrm{~Hz}$ |
| Shock | 10 g operational, 100 g damage |
| 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 | 12 g |

## RELAY ORDERING DATA

| STANDARD RELAYS |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| COIL SPECIFICATIONS |  |  | ORDER NUMBER* |  |  |
| Nominal Coil <br> VDC | Must Operate <br> VDC | Max. Continuous <br> VDC | Coil Resistance <br> $\pm 10 \%$ | Unsealed | Sealed |
| 6 | 3.2 | 9.9 | 45 | AZ942A-1CT-6D | AZ942A-1CT-6DE |
| 12 | 6.3 | 19.8 | 180 | AZ942A-1CT-12D | AZ942A-1CT-12DE |
| 24 | 12.6 | 39.8 | 720 | AZ942A-1CT-24D | AZ942A-1CT-24DE |

*Substitute " 1 AT " in place of "1CT" to indicate 1 Form A contact.

## MECHANICAL DATA



[^0]
## AMERICAN ZETTLER, INC. www.azettler.com


[^0]:    Dimensions in inches with metric equivalents in parentheses. Tolerance: $\pm 0.010^{\prime \prime}$

