## 30 AMP MICRO AUTOMOTIVE RELAY

## FEATURES

- Up to 30 Amp switching capability in a compact size
- Form A and C contacts available (single or twin relay)
- Vibration and shock resistant
- Epoxy sealed for automatic wave soldering
- ISO/TS 16949, ISO9001, ISO14000
- Tested in accordance with J2544
- Designed for high in-rush applications
- Cost effective
- Single and Dual (Twin) relay versions


## CONTACTS

| Arrangement | SPST (1 Form A) DPST (2 Form A) <br> SPDT (1 Form C) DPDT (2 Form C) |
| :--- | :--- |
| Ratings | Resistive load: <br> Max. switched power: 480 W <br> Max. switched current: 30 A / 25A N.O. / N.C. <br> Max. switched voltage: 30 VDC |
| Rated load: 30 A at 16 VDC |  |$|$| Silver tin oxide (silver nickel available - contact |
| :--- |
| factory) |

## COIL

| Power |  |
| :--- | :--- |
| At Pickup Voltage |  |
| (typical) | 187 mW |
| Max. Continuous | 2.6 W at $20^{\circ} \mathrm{C}\left(68^{\circ} \mathrm{F}\right)$ ambient |
| Dissipation |  |
| Temperature Rise | $34^{\circ} \mathrm{C}\left(61^{\circ} \mathrm{F}\right)$ at nominal coil voltage |
| Max Temperature | $155^{\circ} \mathrm{C}\left(311^{\circ} \mathrm{F}\right)$ |

## NOTES

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## GENERAL DATA

| Life Expectancy Mechanical Electrical | $\begin{aligned} & \text { Minimum operations } \\ & 1 \times 10^{6} \\ & 3 \times 10^{5} \text { at } 20 \mathrm{~A} 14 \text { VDC Res. N.O. } \end{aligned}$ |
| :---: | :---: |
| Operate Time | 3 ms typical at nominal coil voltage |
| Release Time) | 1.5 ms typical at nominal coil voltage (with no coil suppression) |
| Dielectric Strength (at sea level for $1 \mathbf{m i n}$.) | 500 Vrms coil to contact <br> 500 Vrms between open contacts |
| Insulation Resistance | 100 megohms min. at $20^{\circ} \mathrm{C}, 500$ VDC $50 \% \mathrm{RH}$ |
| Dropout | Greater than $12.5 \%$ of nominal coil voltage |
| Ambient Temperature Operating Storage | At nominal coil voltage $-40^{\circ} \mathrm{C}\left(-40^{\circ} \mathrm{F}\right)$ to $105^{\circ} \mathrm{C}\left(221^{\circ} \mathrm{F}\right)$ $-40^{\circ} \mathrm{C}\left(-40^{\circ} \mathrm{F}\right)$ to $155^{\circ} \mathrm{C}\left(311^{\circ} \mathrm{F}\right)$ |
| Vibration | 6 g at $10-500 \mathrm{~Hz}$ |
| Shock | $30 \mathrm{~g}, 6 \mathrm{~ms}$ |
| 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 | 4 grams |

## MECHANICAL DATA



Dimensions in inches with millimeters in brackets below. Tolerance: $\pm .010^{\prime \prime}$

## RELAY ORDERING DATA

| STANDARD RELAYS - 1 FORM A, 1 FORM C (SINGLE) |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| COIL SPECIFICATIONS |  |  |  |  |  |  |  | ORDER NUMBER |  |
| Nominal Coil <br> VDC | Must Operate <br> VDC | Max. Continuous <br> VDC | Coil Resistance <br> $\pm 10 \%$ | 1 Form A (SPST) | 1 Form C (SPDT) |  |  |  |  |
| 6 | 3.5 | 13.2 | 83 | AZ987-1A-6DET | AZ987-1C-6DET |  |  |  |  |
| 10 | 5.7 | 22.0 | 181 | AZ987-1A-10DET | AZ987-1C-10DET |  |  |  |  |
| 12 | 6.9 | 26.0 | 254 | AZ987-1A-12DET | AZ987-1C-12DET |  |  |  |  |
| 24 | 13.8 | 53.0 | 1016 | AZ987-1A-24DET | AZ987-1C-24DET |  |  |  |  |


| STANDARD RELAYS - 2 FORM A, 2 FORM C (TWIN) |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| COIL SPECIFICATIONS |  |  |  |  |  |  |  | ORDER NUMBER |  |
| Nominal Coil <br> VDC | Must Operate <br> VDC | Max. Continuous <br> VDC | Coil Resistance <br> $\mathbf{\pm 1 0 \%}$ | 2 Form A (DPST) | 2 Form C (DPDT) |  |  |  |  |
| 6 | 3.5 | 13.2 | 83 | AZ987-2A-6DET | AZ987-2C-6DET |  |  |  |  |
| 10 | 5.7 | 22.0 | 181 | AZ987-2A-10DET | AZ987-2C-10DET |  |  |  |  |
| 12 | 6.9 | 26.0 | 254 | AZ987-2A-12DET | AZ987-2C-12DET |  |  |  |  |
| 24 | 13.8 | 53.0 | 1016 | AZ987-2A-24DET | AZ987-2C-24DET |  |  |  |  |


[^0]:    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.
