## 20 AMP MINIATURE

## AUTOMOTIVE RELAY, SINGLE OR DUAL

## FEATURES

- Up to 20 Amp switching capability in a compact size
- Sealed
- Two separate relays in DPDT (dual) version
- Quiet operation
- Vibration and shock resistant
- ISO/TS 16949, ISO 14000
- Tested in accordance with SAE J2544
- Cost effective
- Designed for power windows, power seats and wiper applications


## CONTACTS

| Arrangement | DPDT (2 Form C) <br> SPDT (1 Form C) |
| :--- | :--- |
| Ratings | Max. switched power: 280 W <br>  <br> Max. switched voltage: 100 VDC <br> Max. switched current (make/break), continuous: <br> 1 Form C: <br>  <br>  <br>  <br> 2 Form C: 25A/20A, 20A <br>  <br> Material <br> 25A/20A, 20A |
| Resistance | Silver tin oxide (silver nickel available - contact factory) |

## COIL

| Power <br> At Pickup Voltage <br> (typical) | 203 mW |
| :--- | :--- |
| Max. Continuous |  |
| Dissipation | $2.2 \mathrm{~W} 20^{\circ} \mathrm{C}\left(68^{\circ} \mathrm{F}\right)$ ambient |
| Temperature Rise | $32^{\circ} \mathrm{C}\left(58^{\circ} \mathrm{F}\right)$ nominal coil VDC |
| Max. Temperature | $155^{\circ} \mathrm{C}\left(311^{\circ} \mathrm{F}\right)$ |

## NOTES

1. All values at $20^{\circ} \mathrm{C}\left(68^{\circ} \mathrm{F}\right)$.
2. Maximum make current refers to in-rush current of lamp load.
3. Relay may pull in with less than "Must Operate" value.
4. Specifications subject to change without notice.

## GENERAL DATA

| Life Expectancy Mechanical Electrical | Minimum operations <br> $1 \times 10^{7}$ operations <br> $2 \times 10^{5}$ operations at 20 A 14 VDC Res. |
| :---: | :---: |
| Operate Time (typical) | 3 ms at nominal coil voltage |
| Release Time (typical) | 1.5 ms at nominal coil voltage (with no coil suppression) |
| Dielectric Strength <br> (at sea level for 1 min .) | 500 Vrms coil to contact <br> 500 Vrms between open contacts |
| Insulation Resistance | 100 megohms min. at $20^{\circ} \mathrm{C}$, 500 VDC, $50 \%$ RH |
| Dropout | $>8.3 \%$ of nominal coil voltage |
| Ambient Temperature Operating Storage | At nominal coil voltage $-40^{\circ} \mathrm{C}\left(-40^{\circ} \mathrm{F}\right)$ to $100^{\circ} \mathrm{C}\left(212^{\circ} \mathrm{F}\right)$ <br> $-40^{\circ} \mathrm{C}\left(-40^{\circ} \mathrm{F}\right)$ to $155^{\circ} \mathrm{C}\left(311^{\circ} \mathrm{F}\right)$ |
| Vibration | 0.062 " DA at $10-55 \mathrm{~Hz}, 10 \mathrm{~g}$ at $55-200 \mathrm{~Hz}$ |
| Shock | $30 \mathrm{~g}, 11 \mathrm{~ms}$, functional |
| 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 | 10 grams |

## RELAY ORDERING DATA

| COIL SPECIFICATIONS - DC Coil |  |  |  | ORDER NUMBER |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Nominal Coil <br> VDC | Must Operate <br> VDC | Max. Continuous <br> VDC | Coil Resistance <br> $\pm 10 \%$ | 1 Form C <br> (SPDT) | 2 Form C <br> (DPDT) |
| 12 | 7.2 | 24.0 | 255 | AZ934-1C-12DET | AZ934-2C-12DET |

## MECHANICAL DATA



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

