## 20 AMP MINIATURE DUAL AUTOMOTIVE RELAY - QUIET

## FEATURES

- Extremely silent operation
- Up to 20 Amp switching capability in a compact size
- Sealed
- Two separate relays in one package
- Vibration and shock resistant
- ISO/TS 16949, ISO 14000
- Cost effective
- Designed for power windows, power seats and wiper applications


## CONTACTS

| Arrangement DPDT (2x1-Form C) <br> Ratings Max. switched power: 280 W <br> Max. switched voltage: 100 VDC <br> Max. switched current (make/break), <br> 2 Form C: 25A/20A, 20A <br> Material Silver tin oxide (silver nickel available - contact factory) |
| :--- |
| Resistance |
| < 100 milliohms at 1A, 5 VDC |
| COIL |
| Power <br> At Pickup Voltage <br> (typical)  <br> Max. Continuous <br> Dissipation <br> Temperature Rise $1.92^{\circ} \mathrm{W} 20^{\circ} \mathrm{C}\left(68^{\circ} \mathrm{F}\right)$ ambient <br> $\left.38^{\circ} \mathrm{F}\right)$ nominal coil VDC <br> 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 <br> Mechanical Electrical | Minimum operations $1 \times 10^{7}$ operations $2 \times 105$ 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 | $\begin{aligned} & 100 \text { megohms min. at } 20^{\circ} \mathrm{C} \text {, } \\ & 500 \mathrm{VDC}, 50 \% \mathrm{RH} \end{aligned}$ |
| Dropout | >8.3\% of nominal coil voltage |
| Ambient Temperature Operating Storage | $\begin{aligned} & \text { At nominal coil voltage } \\ & -40^{\circ} \mathrm{C}\left(-40^{\circ} \mathrm{F}\right) \text { to } 85^{\circ} \mathrm{C}\left(185^{\circ} \mathrm{F}\right) \\ & -40^{\circ} \mathrm{C}\left(-40^{\circ} \mathrm{F}\right) \text { to } 155^{\circ} \mathrm{C}\left(311^{\circ} \mathrm{F}\right) \end{aligned}$ |
| Vibration | 0.062" DA at $10-55 \mathrm{~Hz}, 10 \mathrm{~g}$ 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> $\pm 10 \%$ | 2 Form C <br> (SPDT) |
| 12 | 7.2 | 22.0 | 255 | AZ935-2C-12DET |

## MECHANICAL DATA



Dimensions in inches with metric equivalents in parentheses. Tolerance: $\pm 0.010$ "

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