## 20 AMP SUB-MINIATURE POWER RELAY FOR <br> AUTOMOTIVE USE

## FEATURES

- Low cost
- Up to 20 Amp switching capability in a compact size
- Sealed
- Two separate relays in DPDT version
- Quiet operation
- Vibration and shock resistant
- Designed for power windows, power seats and wiper applications
- QS-9000 Factory


## CONTACTS

| Arrangement | DPDT (2 Form C) <br>  <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> 2 Form C: $\quad$ 25A/20A, 20A |
|  | 25A/20A, 20A |

COIL

| Power |  |
| :--- | :--- |
| At Pickup Voltage <br> (typical) | 203 mW |
| Max. Continuous |  |
| Dissipation | $1.0 \mathrm{~W} 20^{\circ} \mathrm{C}\left(68^{\circ} \mathrm{F}\right)$ ambient |
| Temperature Rise | $42^{\circ} \mathrm{C}\left(108^{\circ} \mathrm{F}\right)$ 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 <br> Mechanical <br> 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 <br> (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 $20^{\circ} \mathrm{C}$, <br> $500 \mathrm{VDC}, 50 \%$ RH |
| Dropout | $>8.3 \%$ of nominal coil voltage |
| Ambient Temperature | At nominal coil voltage <br> $-40^{\circ} \mathrm{C}\left(-40^{\circ} \mathrm{F}\right)$ to $85^{\circ} \mathrm{C}\left(185^{\circ} \mathrm{F}\right)$ |
| Operating <br> Storage | $\left.-40^{\circ} \mathrm{C} \mathrm{(-40}^{\circ} \mathrm{F}\right)$ to $105^{\circ} \mathrm{C}\left(221^{\circ} \mathrm{F}\right)$ |
| Vibration | $0.062^{\prime \prime}(1.5 \mathrm{~mm}) \mathrm{DA}$ at $10-55 \mathrm{~Hz}$, |
| 10 g at $55-200 \mathrm{~Hz}$ |  |

RELAY ORDERING DATA

| COIL SPECIFICATIONS - DC Coil |  |  | ORDER NUMBER* |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Nominal Coil <br> VDC | Must Operate <br> VDC | Max. Continuous <br> VDC | Coil Resistance <br> $\mathbf{\pm 1 0 \%}$ | 1 Form C <br> (SPST) | 2 Form C <br> (SPDT) |
| 12 | 7.2 | 15.0 | 255 | AZ934-1C-12DE | AZ934-2C-12DE |

*Add suffix " $T$ " for Silver tin oxide contact material.

## MECHANICAL DATA



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

## ZETTLER electronics GmbH

