## 25 AMP SUBMINIATURE AUTOMOTIVE RELAY

## FEATURES

- 0.3 mm contact gap
- 25 Amp contact rating
- Low profile, small footprint
- High operating temperature $\left(85^{\circ} \mathrm{C}\right)$
- SPDT (1 Form C)
- Epoxy sealed for automatic wave soldering
- ISO/TS 16949, ISO9001, ISO14000
- Tested in accordance with SAE J2544


## CONTACTS

| Arrangement | SPDT (1 Form C) |
| :---: | :---: |
| Ratings | Resistive load <br> Max.switched power: 210 W <br> Max switched current: 20 A <br> Max. switched voltage: 30 VDC <br> Max. carry current: 35 A / 10 min. <br> Max. surge current: $60 \mathrm{~A} / 1 \mathrm{sec}$. <br> 20 A at 14 VDC motor (make) <br> 4 A at 14 VDC motor (break) |
| Material | Silver tin oxide |
| Resistance | <100 milliohms initially <br> ( $6 \mathrm{~V}, 1 \mathrm{~A}$ voltage drop method) |

## COIL

| Power <br> At Pickup Voltage <br> (typical) | 222 mW |
| :--- | :--- |
| Max. Continuous | 1.09 W at $20^{\circ} \mathrm{C}\left(68^{\circ} \mathrm{F}\right)$ ambient <br> at nominal coil voltage <br> Dissipation <br> Temperature Rise |
| $44^{\circ} \mathrm{C}\left(79^{\circ} \mathrm{F}\right)$ |  |

## NOTES

[^0]
## GENERAL DATA

| Life Expectancy Mechanical Electrical | Minimum operations $\begin{aligned} & 1 \times 10^{6} \\ & 1 \times 10^{5} \text { at } 25 \text { A } 14 \text { VDC locked motor [2] } \end{aligned}$ |
| :---: | :---: |
| Operate Time (max.) | 10 ms max . at nominal coil voltage |
| Release Time (max.) | 5 ms max. at nominal coil voltage (with no coil suppression) |
| Dielectric Strength (at sea level for 1 min .) | 500 VAC coil to contact <br> 500 VAC between open contacts |
| Insulation Resistance | 100 megohms min. at $20^{\circ} \mathrm{C}, 500$ VDC $50 \% \mathrm{RH}$ |
| Dropout | Greater than 8\% of nominal coil voltage |
| Ambient Temperature Operating Storage | At nominal coil voltage $\begin{aligned} & -40^{\circ} \mathrm{C}\left(-40^{\circ} \mathrm{F}\right) \text { to } 85^{\circ} \mathrm{C}\left(185^{\circ} \mathrm{F}\right) \\ & -40^{\circ} \mathrm{C}\left(-40^{\circ} \mathrm{F}\right) \text { to } 155^{\circ} \mathrm{C}\left(311^{\circ} \mathrm{F}\right) \end{aligned}$ |
| Vibration | 0.062" DA at $10-55 \mathrm{~Hz}$ |
| Shock | 10 g operational ( $100 \mu \mathrm{sec}$.) 100 g destructive |
| Enclosure | P.B.T. polyester |
| Terminals | Tinned copper alloy, P.C. |
| Weight | 6 grams |

RELAY ORDERING DATA

| COIL SPECIFICATIONS |  |  |  |  |  |  |  | ORDER NUMBER* |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Nominal Coil <br> VDC | Must Operate <br> VDC | Max. Continuous <br> VDC | Coil Resistance <br> $\pm 10 \%$ | SPDT |  |  |  |  |
| 6 | 3.6 | 8.1 | 60 | AZ9471-1C-6DEA |  |  |  |  |
| 9 | 5.4 | 12.2 | 135 | AZ9471-1C-9DEA |  |  |  |  |
| 10 | 6.3 | 13.5 | 180 | AZ9471-1C-10DEA |  |  |  |  |
| 12 | 7.3 | 16.2 | 240 | AZ9471-1C-12DEA |  |  |  |  |
| 18 | 10.8 | 24.4 | 540 | AZ9471-1C-18DEA |  |  |  |  |
| 24 | 14.4 | 32.5 | 960 | AZ9471-1C-24DEA |  |  |  |  |

## MECHANICAL DATA

Outline Dimensions

Dimensions in inches with metric equivalents in parentheses. Tolerance: $\pm .010^{\prime \prime}$


[^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.
