## 25 AMP MINIATURE POWER RELAY

## FEATURES

- Low cost
- 25 Amp switching
- 80 Amp inrush current
- Quick connect and PCB terminals
- Flux tight construction
- Class F insulation system standard
- UL, CUR file E44211



## CONTACTS

| Arrangement | SPST (1 Form A) |
| :--- | :--- |
| Ratings | Resistive load: <br> Max. switched power: 600 W or 6250 VA <br> Max. switched current: 25A <br> Max. switched voltage: 150VDC* or 250VAC <br> $*$ Note: If switching voltage is greater than 30VDC, special <br> precautions must be taken. Please contact the factory. |
| Rated Load <br> UL, CUR | 25A at 277VAC resistive (100k cycles) $85^{\circ} \mathrm{C}(1]$ [2] <br> 1HP at 120VAC (100k cycles) $85^{\circ} \mathrm{C}$ [1] [2] <br> 2 HP at 240VAC (100k cycles) $85^{\circ} \mathrm{C}[2]$ <br> 2 HP at 240VAC (30k cycles) $85^{\circ} \mathrm{C}[1]$ |
| Material | silver cadmium oxide [1], silver tin oxide [2] |
| Resistance | $<100$ milliohms initially <br> $(6 \mathrm{~V}, 1 \mathrm{~A}$ voltage drop method) |

## COIL

| Power <br> At Pickup Voltage <br> (typical) | 441 mW |
| :--- | :--- |
| Max. Continuous |  |
| Dissipation | 2.25 W at $20^{\circ} \mathrm{C}\left(68^{\circ} \mathrm{F}\right)$ ambient |
| Temperature Rise | $45^{\circ} \mathrm{C}\left(81^{\circ} \mathrm{F}\right)$ at nominal coil voltage |
| Temperature | Max. $155^{\circ} \mathrm{C}\left(311^{\circ} \mathrm{F}\right)$ |

## NOTES

[^0]
## GENERAL DATA

| Life Expectancy Mechanical Electrical | Minimum operations $\begin{aligned} & 2 \times 10^{6} \\ & 1 \times 10^{5} \text { at 20A 250VAC Res. } \end{aligned}$ |
| :---: | :---: |
| Operate Time (max) | 20 ms at nominal coil voltage |
| Release Time (max) | 10 ms at nominal coil voltage (with no coil suppression) |
| Dielectric Strength (at sea level for $1 \mathbf{m i n}$.) | 4500 Vrms coil to contact 1000 Vrms between open contacts $10,000 \mathrm{~V}$ surge contact to coil |
| Insulation Resistance | 1000 megohms min. at $20^{\circ} \mathrm{C}, 500 \mathrm{VDC}$, $50 \% \mathrm{RH}$ |
| Dropout | Greater than 10\% of nominal coil voltage |
| Ambient Temperature Operating Storage | At nominal coil voltage $\begin{aligned} & -40^{\circ} \mathrm{C}\left(-40^{\circ} \mathrm{F}\right) \text { to } 85^{\circ} \mathrm{C}\left(185^{\circ} \mathrm{F}\right) \\ & -40^{\circ} \mathrm{C}\left(-40^{\circ} \mathrm{F}\right) \text { to } 130^{\circ} \mathrm{C}\left(266^{\circ} \mathrm{F}\right) \end{aligned}$ |
| Vibration | 0.062" DA at $10-55 \mathrm{~Hz}$ |
| Shock <br> Operating Non-Operating | $20 \mathrm{~g}, 11 \mathrm{~ms}, 1 / 2$ sine (no false operation) $100 \mathrm{~g}, 11 \mathrm{~ms}, 1 / 2$ sine (no damage) |
| Enclosure | P.B.T. polyester |
| Terminals | Tinned copper alloy <br> P.C. \& quick connect <br> Note: Allow suitable slack on leads when wiring, and do not subject the terminals to excessive force. |
| Max. Solder Temp. | $270^{\circ} \mathrm{C}\left(518^{\circ} \mathrm{F}\right)$ |
| Max. Solder Time | 5 seconds |
| Weight | Approx. 23 grams |

## RELAY ORDERING DATA

| COIL SPECIFICATIONS - QUICK CONNECT TERMINALS |  |  |  |  |  |  | ORDER NUMBER* |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Nominal Coil <br> VDC | Must Operate <br> VDC | Max. Continuous <br> VDC | Coil Resistance <br> $\pm 10 \%$ | Form A <br> (SPST) |  |  |  |
| 5 | 3.5 | 7.9 | 27.8 | AZ769-1A-5D |  |  |  |
| 12 | 8.4 | 19.0 | 160 | AZ769-1A-12D |  |  |  |
| 24 | 16.8 | 37.9 | 640 | AZ769-1A-24D |  |  |  |
| 48 | 33.6 | 76.0 | 2560 | AZ769-1A-48D |  |  |  |


| COIL SPECIFICATIONS - PCB TERMINALS |  |  |  | ORDER NUMBER* |
| :---: | :---: | :---: | :---: | :---: |
| Nominal Coil <br> VDC | Must Operate <br> VDC | Max. Continuous <br> VDC | Coil Resistance <br> $\pm \mathbf{1 0 \%}$ | Form A <br> (SPST) |
| 5 | 3.5 | 7.9 | 27.8 | AZ769-1A-5DK |
| 12 | 8.4 | 19.0 | 160 | AZ769-1A-12DK |
| 24 | 16.8 | 37.9 | 640 | AZ769-1A-24DK |
| 48 | 33.6 | 76.0 | 2560 | AZ769-1A-48DK |

*Add suffix " $E$ " to " $1 A$ " for silver tin oxide contacts.

## MECHANICAL DATA



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.
