## 20A MINIATURE POWER RELAY

## FEATURES

- Dielectric strength 5000 Vrms
- 20 Amp switching - single pole contacts
- Isolation spacing greaterthan 8 mm
- Moldedmaterials: all94V-0
- UL, CUR fileE43203



## CONTACTS

| Arrangement | SPST (1 Form C) <br> SPST (1 Form A and 1 Form B) |
| :--- | :--- |
| Ratings | Resistive load: <br> Max. switched power: 480 W or 5000 VA <br> Max. switched current: 20 A <br> Max. switched voltage: $150^{*}$ VDC or 400 VAC <br> *Note: If switching voltage is greater than 30 VDC, special <br> precautions must be taken. Please contact the factory. |
| Rated Load <br> UL | 20 A at 250 VAC , resistive $70^{\circ} \mathrm{C}$ |
| Material | Silver Tin oxide |
| Resistance | $<30$ milliohms initially |

## COIL

| Power <br> At Pickup Voltage <br> (typical) | 270 mW |
| :--- | :--- |
| Max. Continuous <br> Dissipation | 2.6 W at $20^{\circ} \mathrm{C}\left(68^{\circ} \mathrm{F}\right)$ ambient <br> 2.0 W at $40^{\circ} \mathrm{C}\left(104^{\circ} \mathrm{F}\right)$ ambient |
| Temperature Rise | $32^{\circ} \mathrm{C}\left(58^{\circ} \mathrm{F}\right)$ nominal coil voltage |
| Temperature | Max. $130^{\circ} \mathrm{C}\left(266^{\circ} \mathrm{F}\right)$ |

## NOTES

[^0]
## GENERAL DATA

| Life Expectancy <br> Mechanical <br> Electrical | Minimum operations <br> $2 \times 10^{7}$ <br> $1 \times 10^{5}$ at 16 A 250 VAC Res. |
| :--- | :--- |
| Operate Time (typical) | 7 ms at nominal coil voltage |
| Release Time (typical) | 3 ms at nominal coil voltage <br> (with no coil suppression) |
| Dielectric Strength <br> (at sea level for 1 min.) | 5000 Vrms coil to contact <br> 1000 Vrms between open contacts |
| Insulation <br> Resistance | 1000 megohms min. at $20^{\circ} \mathrm{C}, 500 \mathrm{VDC}$, <br> $50 \%$ RH |
| Dropout | Greater than $10 \%$ of nominal coil voltage |
| Ambient Temperature <br> Operating <br> Storage | At nominal coil voltage <br> $-40^{\circ} \mathrm{C}\left(-40^{\circ} \mathrm{F}\right)$ to $85^{\circ} \mathrm{C}\left(185^{\circ} \mathrm{F}\right)$ <br> $-40^{\circ} \mathrm{C}\left(-40^{\circ} \mathrm{F}\right)$ to $130^{\circ} \mathrm{C}\left(266^{\circ} \mathrm{F}\right)$ |
| Vibration | $0.062^{\prime \prime} \mathrm{DA}$ at $10-55 \mathrm{~Hz}$ |
| Shock | 10 g |
| Enclosure | P.B.T. polyester |
| Terminals | Tinned copper alloy |
| Max. Solder Temp. | $270^{\circ} \mathrm{C}\left(518^{\circ} \mathrm{F}\right)$ |
| Max. Solder Time | 5 seconds |
| Max. Immersion Time | 30 seconds |
| Max. Solvent Temp | $80^{\circ} \mathrm{C}$ (176 $\left.{ }^{\circ} \mathrm{F}\right)$ |
| Weight | 19 grams |

RELAY ORDERING DATA

| COIL SPECIFICATIONS - DC Coil |  |  |  | ORDER NUMBER* |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Nominal Coil VDC | Must Operate VDC | Max. Continuous VDC | $\begin{gathered} \text { Nominal } \\ \mathrm{mA} \pm 10 \% \\ \hline \end{gathered}$ | $\begin{gathered} \text { Coil Resistance } \\ \pm 10 \% \end{gathered}$ | $\begin{aligned} & \text { Form A } \\ & \text { (SPST) } \end{aligned}$ | $\begin{aligned} & \text { Form C } \\ & \text { (SPDT) } \end{aligned}$ |
| 5 | 3.5 | 11.3 | 102.0 | 49 | AZ725-1AE-5D | AZ725-1CE-5D |
| 6 | 4.2 | 13.3 | 88.21 | 68 | AZ725-1AE-6D | AZ725-1CE-6D |
| 12 | 8.4 | 26.0 | 46.2 | 260 | AZ725-1AE-12D | AZ725-1CE-12D |
| 24 | 16.8 | 53.5 | 21.8 | 1,100 | AZ725-1AE-24D | AZ725-1CE-24D |
| 48 | 33.6 | 107.0 | 10.9 | 4,400 | AZ725-1AE-48D | AZ725-1CE-48D |
| 60 | 42.0 | 135.0 | 8.6 | 7,000 | AZ725-1AE-60D | AZ725-1CE-60D |

* Substitute " 1 BE " in place of " 1 AE " for Form B contacts.

| DESCRIPTION | ORDER NUMBER |
| :---: | :---: |
| Socket | ST484-U1 |
| Retaining Clip | ST482-2 |

## 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.
