## 20 A SPDT MINIATURE POWER RELAY

## FEATURES

- Latching relay
- Dielectricstrength 4400 Vrms
- Epoxysealedversionsavailable
- 20 Amp switching
- High inrush current 500A/ 2ms available
- UL,CURÿle E44211


## CONTACTS

$\left.\begin{array}{|l|l|}\hline \text { Arrangement } & \begin{array}{l}\text { SPDT(1 Form C) } \\ \text { SPST1 FormA, 1 Form B) }\end{array} \\ \hline \text { Ratings } & \begin{array}{l}\text { Resistivedoad: } \\ \text { Max.switched power: 5000VA } \\ \text { Max.switched current: 20 A } \\ \text { Max.switched voltage:277 VAC }\end{array} \\ \hline \begin{array}{l}\text { Rated Load } \\ \text { UL, CUR }\end{array} & \begin{array}{l}\text { 20A at 250 VAC, Resistive, 20k cycles [1] } \\ \text { 16A at 250 VAC, Resistive, 100k cycles [1] } \\ 1.5 \text { HP at 250 VAC, Motor, 6k cycles [1] } \\ \text {.5 HP at 120 \& 250 VAC, Motor, 20k cycles (form A) [1] } \\ \text { TV-8 at 240VAC, 25k cycles (form A) [1] }\end{array} \\ \text { Tungsten 1662W 6A at 277VAC, 6k cycles (form A) [1] } \\ \text { Tungsten 1800W 15A at 120VAC, 20k cycles } \\ \text { (form A) [1] } \\ \text { Electronic ballast 1800W 15A at 120VAC, 20k cycles } \\ \text { (form A) [1] } \\ \text { Standard ballast 1662W 6A at 277VAC, 6k cycles } \\ \text { (form A) [1] }\end{array}\right\}$

COIL

| Power <br> At Pickup Voltage <br> (typical) | 1 Coil: 256 mW |
| :--- | :--- |
| Max. Continuous | 1 Coils: 384 mW |
| Dissipation | 2 Coils: 0.6 W |
| Temperature Rise | $26^{\circ} \mathrm{C}\left(47^{\circ} \mathrm{F}\right)$ at nominal coil voltage |
| Max. Temperature | $130^{\circ} \mathrm{C}\left(266^{\circ} \mathrm{F}\right)$ |

GENERAL DATA

| Life Expectancy Mechanical Electrical | $\begin{aligned} & \text { Minimum operations } \\ & 1 \times 10^{6} \\ & 1 \times 10^{5} \text { at } 16 \mathrm{~A} 250 \text { VACRes. } \end{aligned}$ |
| :---: | :---: |
| Set Time (typical) | 15 ms at nominal coil voltage |
| Reset Time (typical) | 15 ms at nominal coil voltage (with no coil suppression) |
| Min. Pulse Time | 75ms |
| Max Pulse Time | 1 min . |
| Dielectric Strength (at sea level for 1 min .) | 4400VACcoil to contact 1000VACbetween open contacts |
| Surge Voltage Coil to Contact | 10,000V(at $1.2 \times 50 \mu \mathrm{~s}$ ) |
| Insulation Resistance | 1000 megohmsmin. at $20^{\circ} \mathrm{C}$ $500 \mathrm{VDC50} \mathrm{\% RH}$ |
| Ambient Temperature Operating Storage | At nominal coil voltage $-40^{\circ} \mathrm{C}\left(-40^{\circ} \mathrm{F}\right.$ ) $\mathrm{ol} 85^{\circ} \mathrm{C}\left(185^{\circ} \mathrm{F}\right)$ $0^{\circ} \mathrm{C}\left(32^{\circ} \mathrm{F}\right.$ ) ${ }^{\circ} 40^{\circ} \mathrm{C}\left(104^{\circ} \mathrm{F}\right)$ |
| Vibration | 0.062"DA at 10-55Hz |
| Shock | 10 g |
| Enclosure | P.B.T. polyester |
| 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. | $80^{\circ} \mathrm{C}\left(176{ }^{\circ} \mathrm{F}\right)$ |
| Weight | 13 g |

## NOTES

[^0]RELAY ORDERING DATA

| COIL SPECIFICATIONS - SINGLE COIL LATCHING | ORDER NUMBER* |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Nominal Coil <br> VDC | Must Operate <br> VDC | Max. Continuous <br> VDC | Coil <br> Resistance $\pm 10 \%$ | Unsealed | Sealed |
| 3 | 2.4 | 3.9 | 22.5 | AZ762P1-1CE-3D | AZ762P1-1CE-3DE |
| 5 | 4.0 | 6.5 | 62.5 | AZ762P1-1CE-5D | AZ762P1-1CE-5DE |
| 6 | 4.8 | 7.8 | 90 | AZ762P1-1CE-6D | AZ762P1-1CE-6DE |
| 12 | 9.6 | 15.6 | 360 | AZ762P1-1CE-12D | AZ762P1-1CE-12DE |
| 24 | 19.2 | 31.2 | 1,440 | AZ762P1-1CE-24D | AZ762P1-1CE-24DE |


| COIL SPECIFICATIONS - DUAL COIL LATCHING |  |  |  |  | ORDER NUMBER* |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Nominal Coil VDC | Must Operate VDC | Max. Continuous VDC | Coil 1 <br> Resistance $\pm 10 \%$ | Coil 2 <br> Resistance $\pm 10 \%$ | Unsealed | Sealed |
| 3 | 2.4 | 3.9 | 15 | 15 | AZ762P2-1CE-3D | AZ762P2-1CE-3DE |
| 5 | 4.0 | 6.5 | 42 | 42 | AZ762P2-1CE-5D | AZ762P2-1CE-5DE |
| 6 | 4.8 | 7.8 | 60 | 60 | AZ762P2-1CE-6D | AZ762P2-1CE-6DE |
| 12 | 9.6 | 15.6 | 240 | 240 | AZ762P2-1CE-12D | AZ762P2-1CE-12DE |
| 24 | 19.2 | 31.2 | 886 | 886 | AZ762P2-1CE-24D | AZ762P2-1CE-24DE |

* Substitute " $1 A$ " or " 1 B " in place of " 1 C " for Form $A$ or $B$ respectively. Form A relay is in the reset postion. Form B relay is in the set position. Add suffix "K" for 3.5 mm pin spacing version. Replace ' 1 AE ' with ' 1 AT ' for $\mathrm{W}+\mathrm{AgSnO} 2$ high inrush contacts (Form $\mathrm{A}, 5.0 \mathrm{~mm}$ pin spacing only). Add suffix "L" for 2.5 mm pin spacing version. Note, Form C only available in 5.0 mm and 3.5 mm pin spacing. Add suffix "R" for reversed polarity coil.


## WIRING DIAGRAM



## MECHANICAL DATA

5.0mm Spacing - Standard


## 3.5mm Spacing - Suffix "K"



PCB LAYOUT
(Form A, 1 Form B

2.5mm Spacing - Suffix "L"



Dimensions in metric.


[^0]:    1. All valuesat $23^{\circ} \mathrm{C}\left(73.4^{\circ} \mathrm{F}\right)$.
    2. Relaymay pull in with lessthan "Must Operate"value.
    3. Speciÿcationssubjectto changewithout notice.
    4. Checkthe relayset/resetstate before energizingthe relay in application.
