## DPDT MINIATURE POWER RELAY

## FEATURES

- Dielectric strength 5000 Vrms
- Low cost
- Epoxy sealed version available
- 10 Amp switching - double pole contacts
- Isolation spacing greater than 8 mm
- UL Class B insulation system
- UL, CUR file E44211
- TÜV file R50129285


## CONTACTS

\begin{tabular}{|c|c|}
\hline Arrangement \& DPST (2 Form A) DPDT (2 Form C) \\
\hline Ratings \& \begin{tabular}{l}
Resistive load: \\
Max. switched power: 300 W or 2500 VA \\
Max. switched current: 10 A \\
Max. switched voltage: \(150^{*}\) VDC or 380 VAC \\
*Note: If switching voltage is greater than 30 VDC, special precautions must be taken. Please contact the factory.
\end{tabular} \\
\hline Rated Load

TüV \& | 10 A at 250 VAC General Use, 100k cycles[1][2][3] |
| :--- |
| 10 A at 30 VDC N.O. Resistive 100k cycles [1] |
| 10 A at 30 VDC N.C. Resistive 50k cycles [1] |
| 10 A at 30 VDC N.O./N.C. Resistive 25k cycles[2][3] |
| $1 / 4 \mathrm{HP}$ at 240 VAC [1] |
| $1 / 8 \mathrm{HP}$ at 120 VAC [1] |
| TV-3 at 125 VAC (2 Form A) [1] |
| 5 A at 30 VDC, 250 VAC resistive, 100 k cycles |
| [1][2][3] |
| [1] Silver cadmium oxide [2] Silver tin oxide [3] Silver nickel | <br>

\hline Material \& Silver cadmium oxide, silver tin oxide or silver nickel, gold plating available <br>

\hline Resistance \& | < 50 milliohms initially |
| :--- |
| (24 V, 1 A voltage drop method) | <br>

\hline
\end{tabular}

## COIL

| Power <br> At Pickup Voltage <br> (typical) | 257 mW |
| :--- | :--- |
| Max. Continuous |  |
| Dissipation <br> Temperature Rise | 1.9 W at $20^{\circ} \mathrm{C}\left(68^{\circ} \mathrm{F}\right)$ ambient <br> $34^{\circ} \mathrm{C}\left(61^{\circ} \mathrm{F}\right)$ at nominal coil voltage |
| Temperature | Max. $130^{\circ} \mathrm{C}\left(266^{\circ} \mathrm{F}\right)$ |

## GENERAL DATA

| Life Expectancy Mechanical Electrical | Minimum operations <br> $1 \times 10^{7}$ <br> $1 \times 10^{5}$ at 10 A 240 VAC Res. |
| :---: | :---: |
| Operate Time (typical) | 8 ms at nominal coil voltage |
| Release Time (typical) | 5 ms at nominal coil voltage (with no coil suppression) |
| Dielectric Strength (at sea level for 1 min .) | 5000 Vrms contact to coil <br> 1000 Vrms between open contacts <br> 3000 Vrms between contact sets |
| Insulation Resistance | 1000 megohms min. at $20^{\circ} \mathrm{C}, 500 \mathrm{VDC}$, $50 \%$ RH |
| Dropout | Greater than 10\% of nominal coil voltage |
| Ambient Temperature Operating Storage | $-40^{\circ} \mathrm{C}\left(-40^{\circ} \mathrm{F}\right)$ to $90^{\circ} \mathrm{C}\left(194^{\circ} \mathrm{F}\right)$ $-40^{\circ} \mathrm{C}\left(-40^{\circ} \mathrm{F}\right)$ to $130^{\circ} \mathrm{C}\left(266^{\circ} \mathrm{F}\right)$ |
| Vibration | 0.062 " DA at $10-55 \mathrm{~Hz}$ |
| Shock | 10 g |
| Enclosure | P.B.T. polyester |
| Terminals | Tinned copper alloy, P.C. |
| Max. Solder Temp. | $270^{\circ} \mathrm{C}$ ( $518^{\circ} \mathrm{F}$ ) |
| Max. Solder Time | 5 seconds |
| Max. Solvent Temp. | $80^{\circ} \mathrm{C}\left(176^{\circ} \mathrm{F}\right)$ |
| Max. Immersion Time | 30 seconds |
| Weight | 18 grams |

## NOTES

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.

RELAY ORDERING DATA

| COIL SPECIFICATIONS |  |  |  | ORDER NUMBER* |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Nominal Coil <br> VDC | Must Operate <br> VDC | Max. Continuous <br> VDC | Coil <br> Resistance | Form A <br> (DPST) |  |
| 3 | 2.1 | 5.7 | $17 \pm 10 \%$ | AZ733-2A-3D | AZ733-2C-3D |
| 5 | 3.5 | 9.4 | $47 \pm 10 \%$ | AZ733-2A-5D | AZ733-2C-5D |
| 6 | 4.2 | 11.4 | $68 \pm 10 \%$ | AZ733-2A-6D | AZ733-2C-6D |
| 9 | 6.3 | 17.4 | $160 \pm 10 \%$ | AZ733-2A-9D | AZ733-2C-9D |
| 12 | 8.4 | 22.8 | $275 \pm 10 \%$ | AZ733-2A-12D | AZ733-2C-12D |
| 18 | 12.6 | 27.9 | $650 \pm 10 \%$ | AZ733-2A-18D | AZ733-2C-18D |
| 24 | 16.8 | 45.7 | $1100 \pm 15 \%$ | AZ733-2A-24D | AZ733-2C-24D |
| 48 | 33.6 | 89.0 | $4170 \pm 15 \%$ | AZ733-2A-48D | AZ733-2C-48D |
| 60 | 42.0 | 115.3 | $7000 \pm 15 \%$ | AZ733-2A-60D | AZ733-2C-60D |
| 110 | 79.3 | 170.5 | $22900 \pm 15 \%$ | AZ733-2A-110D | AZ733-2C-110D |

*Add suffix "E" to " $2 A$ " or " $2 C$ " for silver tin oxide contacts. Add suffix "B" to " $2 A$ " or " $2 C$ " for silver nickel contacts. Add suffix"E" for epoxy sealed version. Add suffix "A" for gold plated contacts.

HARDWARE ORDERING DATA

| DESCRIPTION | ORDER NUMBER | DESCRIPTION | ORDER NUMBER |
| :---: | :---: | :---: | :---: |
| Socket | ST484-U1 | Retainer | ST482-2 |

## MECHANICAL DATA



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

