## 16 A SPDT MINIATURE POWER RELAY

## FEATURES

www.datasheet4ucom - Dielectric strength 5000 Vrms

- Low cost
- Epoxy sealed version available
- 16 Amp switching
- Isolation spacing greater than 10 mm
- Reinforced insulation, EN 60730-1 (VDE 0631, part 1), EN 60335-1 (VDE 0700, part 1)
- UL, CUR file E44211

- VDE 40006031


## CONTACTS

| Arrangement | ```SPDT (1 Form C) SPST (1 Form A, 1 Form B)``` |
| :---: | :---: |
| Ratings | Resistive load: <br> Max. switched power: 480 W or 4432 VA <br> Max. switched current: 16 A <br> Max. switched voltage: 150 VDC* or 440 VAC <br> * Note: If switching voltage is greater than 30 VDC, special precautions must be taken. Please contact the factory. |
| Rated Load UL, CUR <br> VDE | 16 A at 277 VAC resistive, 100k cycles [3] 16 A at 277 VAC resistive, 50k cycles [1] <br> 1 HP at 250 VAC (1 Form A) [1] $1 / 2 \mathrm{HP}$ at 125 VAC (1 Form A) [1] TV-5 at 125 VAC (1 Form A) [1] 16 A at 277 VAC resistive, 75 k cycles [2] B300 Pilot Duty [2] R300 Pilot Duty [2] <br> 16 A at 250 VAC resistive, [1] [2] and [3] 9 A at 250 VAC , inductive (Form A) [1] [2] and [3] |
| Material | Silver cadmium oxide [1] or silver tin oxide [2] or silver nickel [3]. Gold plating available |
| Resistance | < 50 milliohms initially |

COIL

| Power <br> At Pickup Voltage <br> (typical) | 196 mW |
| :--- | :--- |
| Max. Continuous <br> Dissipation <br> Temperature Rise | 1.7 W at $20^{\circ} \mathrm{C}\left(68^{\circ} \mathrm{F}\right)$ ambient |
| Max. Temperature | $130^{\circ} \mathrm{C}\left(47^{\circ} \mathrm{C}\right)$ at nominal coil voltage $\left(266^{\circ} \mathrm{F}\right)$ |

## 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.

## GENERAL DATA

| Life Expectancy Mechanical Electrical | $\begin{aligned} & \text { Minimum operations } \\ & 1 \times 10^{7} \\ & 1 \times 10^{5} \text { at } 16 \text { A } 250 \text { VAC Res. } \end{aligned}$ |
| :---: | :---: |
| Operate Time (typical) | 7 ms at nominal coil voltage |
| Release Time (typical) | 3 ms at nominal coil voltage (with no coil suppression) |
| Dielectric Strength (at sea level for 1 min.) | 5000 Vrms coil to contact 1000 Vrms between open contacts |
| Insulation Resistance | 1000 megohms min. at $20^{\circ} \mathrm{C}$ 500 VDC $50 \%$ RH |
| Insulation (according to DIN VDE 0110, IEC 60664-1) | C250 <br> Overvoltage category: III <br> Pollution degree: 3 <br> Nominal voltage: 250 VAC |
| Dropout | Greater than 10\% of nominal coil voltage |
| Ambient Temperature Operating Storage | At nominal coil voltage $-40^{\circ} \mathrm{C}\left(-40^{\circ} \mathrm{F}\right)$ to $85^{\circ} \mathrm{C}\left(185^{\circ} \mathrm{F}\right)$ $-40^{\circ} \mathrm{C}\left(-40^{\circ} \mathrm{F}\right)$ to $105^{\circ} \mathrm{C}\left(221^{\circ} \mathrm{F}\right)$ |
| Vibration | 0.062" (1.5 mm) DA at $10-55 \mathrm{~Hz}$ |
| Shock | 10 g |
| Enclosure | P.B.T. polyester |
| Terminals | Tinned copper alloy, P.C. |
| Max. Solder Temp. | $270^{\circ} \mathrm{C}\left(518^{\circ} \mathrm{F}\right)$ |
| Max. Solder Time | 5 seconds |
| Max. Solvent Temp. | $80^{\circ} \mathrm{C}\left(176{ }^{\circ} \mathrm{F}\right)$ |
| Max. Immersion Time | 30 Seconds |
| Weight | 14 grams |
| Packing unit in pcs | 20 per plastic tube / 1000 per carton box |

RELAY ORDERING DATA

| COIL SPECIFICATIONS - DC COIL |  |  |  |  |  |  |  |  | ORDER NUMBER* |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Nominal Coil <br> VDC | Must Operate <br> VDC | Max. Continuous <br> VDC | Coil Resistance <br> Ohm $\pm 10 \%$ | 1 Form A | 1 Form C |  |  |  |  |  |
| 5 | 3.5 | 10.2 | 62 | AZ762-1A-5D | AZ762-1C-5D |  |  |  |  |  |
| 6 | 4.2 | 12.3 | 90 | AZ762-1A-6D | AZ762-1C-6D |  |  |  |  |  |
| 9 | 6.3 | 18.3 | 200 | AZ762-1A-9D | AZ762-1C-9D |  |  |  |  |  |
| 12 | 8.4 | 24.7 | 360 | AZ762-1A-12D | AZ762-1C-12D |  |  |  |  |  |
| 18 | 12.6 | 37.0 | 810 | AZ762-1A-18D | AZ762-1C-18D |  |  |  |  |  |
| 24 | 16.8 | 49.4 | 1,440 | AZ762-1A-24D | AZ762-1C-24D |  |  |  |  |  |
| 48 | 33.6 | 98.0 | 5,760 | AZ762-1A-48D | AZ762-1C-48D |  |  |  |  |  |
| 60 | 42.0 | 112.9 | 7,500 | AZ762-1A-60D | AZ762-1C-60D |  |  |  |  |  |
| 110 | 77.0 | 206.9 | 25,200 | AZ762-1A-110D | AZ762-1C-110D |  |  |  |  |  |

* " 1 A " or " 1 C " denote silver cadmium oxide contacts. Substitute " 1 B " in place of " $1 A$ " for 1 Form B contact.
Add suffix "E" to " $1 A$ " or " $1 B$ " or " $1 C$ " for silver tin oxide contacts.
Add suffix "B" to "1A" or "1B" or "1C" for silver nickel contacts.
Add suffix "E" at the end of order number for sealed version.
Add suffix " $A$ " at the end of order number for gold plated contacts.

MECHANICAL DATA


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

