## SENSITIVE

## SUBMINIATURE RELAY

## FEATURES

- Extremely small footprint utilizing only 0.18 square inch of PCB area
- Thin vertical profile only 0.256 " wide
- 1 Form A contact with up to 5 Amp switching capability
- High sensitivity, 100 mW pickup
- Dielectric strength 3000 Vrms contact to coil
- Coils to 24 VDC
- Epoxy sealed for automatic wave soldering and cleaning
- UL file E44211; CSA file 74461


## CONTACTS

| Arrangement | SPST (1 Form A) |
| :---: | :---: |
| Ratings | Resistive load: <br> Max. switched power: 150 W or 1250 VA <br> Max. switched current: 5 A <br> Max. switched voltage: $150 *$ VDC or 250 VAC Inductive load (p.f. $=0.40, \mathrm{~L} / \mathrm{R}=7 \mathrm{~ms}$ ) 2 A at $250 \mathrm{VAC}, 30$ VDC |
| UL/CSA Ratings | 5 A at 30 VDC resistive <br> 5 A at 250 VAC general use <br> 1/10 HP 120 VAC <br> Note: If switching voltage is greater than 30 VDC, special precautions must be taken. Please contact the factory. |
| Material | Options: <br> Silver cadmium oxide <br> Silver cadmium oxide with gold plating |
| Resistance | $<30$ milliohms initially <br> ( $6 \mathrm{~V}, 1 \mathrm{~A}$, voltage drop method) |

COIL

| Power <br> At Pickup Voltage <br> (typical) | 100 mW |
| :--- | :--- |
| Max. Continuous | 550 mW at $20^{\circ} \mathrm{C}\left(68^{\circ} \mathrm{F}\right)$ ambient |
| Dissipation | 420 mW at $40^{\circ} \mathrm{C}\left(104^{\circ} \mathrm{F}\right)$ ambient |
| Temperature Rise | $25^{\circ} \mathrm{C}\left(45^{\circ} \mathrm{F}\right)$ at nominal coil voltage |
| Temperature | Max. $105^{\circ} \mathrm{C}\left(221^{\circ} \mathrm{F}\right)$ |

## 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. Minimum permissible contact load:

SCO contact: 100 mA at 5 VDC
SCO contact with gold plating: 10 mA at 5 VDC
4. Specifications subject to change without notice.


## GENERAL DATA

| Life Expectancy Mechanical Electrical | Minimum operations 20 million operations 1 X 105 at 5 A, 30 VDC or 250 VAC Res. |
| :---: | :---: |
| Operate Time (typical) | 6 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 .) | 750 Vrms between open contacts 3000 Vrms contact to coil |
| Insulation Resistance | 100 megohms min. at $20^{\circ} \mathrm{C}, 500 \mathrm{VDC}$, $50 \%$ RH |
| 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 $70^{\circ} \mathrm{C}\left(158^{\circ} \mathrm{F}\right)$ $-40^{\circ} \mathrm{C}\left(-40^{\circ} \mathrm{F}\right)$ to $105^{\circ} \mathrm{C}\left(221^{\circ} \mathrm{F}\right)$ |
| Vibration | 0.062 " 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 | 3 grams |

RELAY ORDERING DATA

| COIL SPECIFICATIONS |  |  |  |  |  |  |  | ORDER NUMBER |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Nominal Coil <br> VDC | Max. Continuous <br> VDC | Coil Resistance <br> $\pm 10 \%$ | Must Operate <br> VDC | SCO <br> Contact | SCO with Gold <br> Plating Contact |  |  |  |  |
| 5 | 8.4 | 125 | 3.5 | AZ695-5 | AZ695-5G |  |  |  |  |
| 6 | 10.1 | 180 | 4.2 | AZ695-6 | AZ695-6G |  |  |  |  |
| 9 | 15.2 | 405 | 6.3 | AZ695-9 | AZ695-9G |  |  |  |  |
| 12 | 20.2 | 720 | 8.4 | AZ695-12 | AZ695-12G |  |  |  |  |
| 18 | 29.5 | 1,620 | 12.6 | AZ695-18 | AZ695-18G |  |  |  |  |
| 24 | 40.5 | 2,880 | 16.8 | AZ695-24 | AZ695-24G |  |  |  |  |

## MECHANICAL DATA

|  |  |
| :---: | :---: |
| PC BOARD LAYOUT <br> Viewed toward terminals | WIRING DIAGRAM <br> Viewed toward terminals |

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

