

# AZ767

## SPDT SUBMINIATURE POWER RELAY

### FEATURES

- Low cost
- 10 Amp switching
- Epoxy sealed version available
- UL, CUR file E44211



### CONTACTS

|                               |  |
|-------------------------------|--|
| <b>Arrangement</b>            | SPST (1 Form A)<br>SPDT (1 Form C)   |
| <b>Ratings</b>                | Resistive Load:<br><br>Max. switched power: 150 W or 1250 VA<br>Max. switched current: 5 ADC or 10 AAC<br><br>Sensitive coil<br>Max. switched power: 90 W or 750 VA<br>Max. switched current: 3 A<br><br>SPDT<br>Max. switched power: 90 W or 750 VA<br>Max. switched current: 3 A<br><br>Max. switched voltage: 150 VDC* or 380 VAC<br><br>* Note: If switching voltage is greater than 30 VDC,<br>special precautions must be taken.<br>Please contact the factory |
| <b>Rated Load<br/>UL, CUR</b> | Form A<br>10 A at 125 VAC, Res., 30k cycles<br>5 A at 30 VDC / 250 VAC, 100k cycles<br>10 A LRA / 1.5 A FLA at 120 VAC, 100k cycles<br>1/10 HP at 125 VAC, 100k cycles<br>1/6 HP at 250 VAC, 100k cycles<br><br>Sensitive coil<br>5 A at 125 VAC, Res., 100k cycles<br>3 A at 30 VDC / 250 VAC, 100k cycles<br><br>Form C<br>3 A at 30 VDC / 250 VAC, 100k cycles  |
| <b>Material</b>               | Silver cadmium oxide   |
| <b>Resistance</b>             | < 100 milliohms initially  |

### COIL

|  |   |
|--|---|
| <b>Power<br/>At Pickup Voltage<br/>(typical)</b> | 253 mW standard coil<br>113 mW sensitive coil           |
| <b>Max. Continuous<br/>Dissipation</b>           | 1.25 W at 20°C (68°F) ambient                           |
| <b>Temperature Rise<br/>(at nominal voltage)</b> | 41°C (74°F) standard coil<br>22°C (40°F) sensitive coil |
| <b>Temperature</b>                               | Max. 130°C (266°F)                                      |

### GENERAL DATA

|  |  |
|--|--|
| <b>Life Expectancy<br/>Mechanical<br/>Electrical</b>     | Minimum operations<br>1 x 10 <sup>7</sup><br>1 x 10 <sup>5</sup> at 5 A 250 VAC Res.   |
| <b>Operate Time (typical)</b>                            | 8 ms at nominal coil voltage   |
| <b>Release Time (typical)</b>                            | 5 ms at nominal coil voltage<br>(with no coil suppression)   |
| <b>Dielectric Strength<br/>(at sea level for 1 min.)</b> | 2500 Vrms coil to contact<br>1000 Vrms between open contacts   |
| <b>Insulation<br/>Resistance</b>                         | 1000 megohms min. at 20°C<br>500 VDC 50% RH  |
| <b>Dropout</b>   | Greater than 5% of nominal coil voltage  |
| <b>Ambient Temperature<br/>Operating<br/>Storage</b>     | At nominal coil voltage<br>-40°C (-40°F) to 70°C (158°F) standard<br>-40°C (-40°F) to 85°C (185°F) sensitive<br>-40°C (-40°F) to 105°C (221°F) |
| <b>Vibration</b>   | 0.062" (1.5 mm) DA at 10–50 Hz   |
| <b>Shock</b>   | 10 g operating, 100 g damage   |
| <b>Enclosure</b>   | P.B.T. polyester   |
| <b>Terminals</b>   | Tinned copper alloy, P.C.  |
| <b>Max. Solder Temp.</b>                                 | 270°C (518°F)  |
| <b>Max. Solder Time</b>                                  | 5 seconds  |
| <b>Max. Solvent Temp.</b>                                | 80°C (176°F)   |
| <b>Max. Immersion Time</b>                               | 30 seconds   |
| <b>Weight</b>  | 6 grams  |
| <b>Packing unit in pcs</b>                               | 50 per plastic tray / 500 per carton box   |

### NOTES

1. All values at 20°C (68°F).
2. Relay may pull in with less than "Must Operate" value.
3. Specifications subject to change without notice.

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# AZ767

## RELAY ORDERING DATA

| STANDARD RELAYS     |                  |                     |                                |               |               |
|---------------------|------------------|---------------------|--------------------------------|---------------|---------------|
| COIL SPECIFICATIONS |                  |                     |                                | ORDER NUMBER* |               |
| Nominal Coil VDC    | Must Operate VDC | Max. Continuous VDC | Coil Resistance Ohm $\pm 10\%$ | Form A (SPST) | Form C (SPDT) |
| 3                   | 2.25             | 5.0                 | 20                             | AZ767-1A-3D   | AZ767-1C-3D   |
| 5                   | 3.75             | 8.3                 | 55                             | AZ767-1A-5D   | AZ767-1C-5D   |
| 6                   | 4.5              | 10.0                | 80                             | AZ767-1A-6D   | AZ767-1C-6D   |
| 9                   | 6.75             | 15.0                | 180                            | AZ767-1A-9D   | AZ767-1C-9D   |
| 12                  | 9.0              | 20.0                | 320                            | AZ767-1A-12D  | AZ767-1C-12D  |
| 18                  | 13.5             | 30.0                | 720                            | AZ767-1A-18D  | AZ767-1C-18D  |
| 24                  | 18.0             | 40.0                | 1,280                          | AZ767-1A-24D  | AZ767-1C-24D  |

| SENSITIVE RELAYS    |                  |                     |                                |               |  |
|---------------------|------------------|---------------------|--------------------------------|---------------|--|
| COIL SPECIFICATIONS |                  |                     |                                | ORDER NUMBER* |  |
| Nominal Coil VDC    | Must Operate VDC | Max. Continuous VDC | Coil Resistance Ohm $\pm 10\%$ | Form A (SPST) |  |
| 3                   | 2.25             | 7.5                 | 45                             | AZ767-1A-3DS  |  |
| 5                   | 3.75             | 12.5                | 125                            | AZ767-1A-5DS  |  |
| 6                   | 4.5              | 15.0                | 180                            | AZ767-1A-6DS  |  |
| 9                   | 6.75             | 22.4                | 400                            | AZ767-1A-9DS  |  |
| 12                  | 9.0              | 30.0                | 720                            | AZ767-1A-12DS |  |
| 18                  | 13.5             | 44.7                | 1,600                          | AZ767-1A-18DS |  |
| 24                  | 18.0             | 59.2                | 2,800                          | AZ767-1A-24DS |  |

\* Add suffix "E" for epoxy sealed version.

## MECHANICAL DATA

Top view dimensions: .740 MAX. [18.80] width, .417 MAX. [10.59] height.

Side view dimensions: .614 MAX. [15.59] height, .147 [3.73] terminal height, .073 [1.85] terminal width.

### PC BOARD LAYOUT

Dimensions: .073 [1.85], .059 [1.50], .100 [2.54], .058 [1.49], .300 [7.62], 5 x  $\phi$  .052 [ $\phi$ 1.3], .441 [11.20].

FORM C ONLY

Viewed toward terminals

### WIRING DIAGRAMS

Form A

Form C

Viewed toward terminals

Dimensions in inches with metric equivalents in parentheses. Tolerance:  $\pm .010$ "

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