

# AZ940

## 10 AMP MINIATURE POWER RELAY

### FEATURES

- 10 Amp switching capability
- SPST-N.O. and SPDT configurations
- 4 kV dielectric strength
- Epoxy sealed version available
- UL, CUR E43203



### CONTACTS

<b>Arrangement</b>	SPST N.O. (1 Form A) SPDT (1 Form C)
<b>Ratings</b>	Resistive load: Max. switched power: 150 W or 1250 VA (N.O.) 90 W or 750 VA (N.C.) Max. switched current: 10 A (N.O.), 3 A (N.C.). Max. switched voltage: 150 VDC* or 400 VAC,  *Note: If switching voltage is greater than 30 VDC, special precautions must be taken. Please contact the factory.
<b>UL, CUR (N.O.)</b>	10 A at 125 VAC General Use, 100K cycles 5 A at 250 VAC General Use, 100K cycles 5 A at 30 VDC
<b>UL, CUR (N.C.)</b>	3 A at 250 VAC General Use, 100 K cycles 3 A at 30 VDC Resistor, 100K cycles
<b>Material</b>	Silver cadmium oxide
<b>Resistance</b>	< 0.1 Ohm (24 V, 1 A voltage drop method)

### COIL

<b>Power</b>	
<b>At Pickup Voltage (typical)</b>	253 mW (Standard Coil) 113 mW (Sensitive Coil)
<b>Max. Continuous Dissipation</b>	940 mW at 20°C (68°F)
<b>Temperature Rise</b>	41°C (74°F) (Standard Coil) 18°C (32°F) (Sensitive Coil)
<b>Temperature</b>	Max. 105°C (221°F)

### GENERAL DATA

<b>Life Expectancy</b> <b>Mechanical</b> <b>Electrical</b>	Minimum operations 1 x 10 <sup>7</sup> 1 x 10 <sup>5</sup> at rated load
<b>Operate Time (max.)</b>	8 ms at nominal coil voltage
<b>Release Time (max.)</b>	5 ms at nominal coil voltage (with no coil suppression)
<b>Dielectric Strength (at sea level for 1 min.)</b>	1000 Vrms contact to contact 4000 Vrms contact to coil
<b>Insulation Resistance</b>	1 x 10 <sup>9</sup> ohms minimum at 500 VDC
<b>Dropout</b>	Greater than 5% of nominal coil voltage
<b>Ambient Temperature</b> <b>Operating</b>  <b>Storage</b>	At nominal coil voltage -40°C (-40°F) to 70°C (158°F) standard -40°C (-40°F) to 85°C (185°F) sensitive -40°C (-40°F) to 105°C (221°F)
<b>Vibration</b>	0.062" DA at 10–55 Hz
<b>Shock</b>  <b>Operating</b>  <b>Mechanical</b>	10 g for 11 ms 1/2 sine pulse (no contact opening >100 usec) 100 g for 11 ms 1/2 sine pulse
<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>	7 grams

### 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.

**ZETTLER** electronics

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# AZ940

## RELAY ORDERING DATA

COIL SPECIFICATIONS – Standard Coil (SPDT and SPST)				ORDER NUMBER*
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance $\pm 10\%$	
3	2.3	4.3	20	AZ940-1C-3D
5	3.8	7.2	55	AZ940-1C-5D
6	4.5	8.7	80	AZ940-1C-6D
9	6.8	13.0	180	AZ940-1C-9D
12	9.0	17.3	320	AZ940-1C-12D
18	13.5	26.0	720	AZ940-1C-18D
24	18.0	34.7	1280	AZ940-1C-24D

\*Add suffix "E" for sealed version. Substitute "1A" for "1C" for SPST version.

COIL SPECIFICATIONS – Sensitive Coil (SPST)				ORDER NUMBER**
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance $\pm 10\%$	
3	2.3	6.5	45	AZ940-1A-3DS
5	3.8	10.8	125	AZ940-1A-5DS
6	4.5	13.0	180	AZ940-1A-6DS
9	6.8	19.4	400	AZ940-1A-9DS
12	9.0	26.0	720	AZ940-1A-12DS
18	13.5	39.0	1600	AZ940-1A-18DS
24	18.0	51.3	2800	AZ940-1A-24DS

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

## MECHANICAL DATA

### PC BOARD LAYOUT

### WIRING DIAGRAM

VIEWED TOWARD TERMINALS

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

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