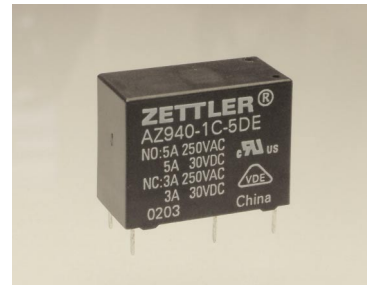


# AZ940

## 10 AMP MINIATURE POWER RELAY

### FEATURES

- 10 Amp switching capability
- 4 kV dielectric strength
- Epoxy sealed version available
- UL, CUR file E44211
- VDE file 134326



### CONTACTS

<b>Arrangement</b>	SPST (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>Rated Load UL, CUR (N.O.)</b>	10 A at 125 VAC general use, 100K cycles [1] [2] 10 A at 277 VAC cos phi 0.4, 10K cycles [1] [2] 5 A at 250 VAC general use, 100K cycles [1] [2] 5 A at 30 VDC [1] [2] 1/10 HP at 125 VAC, 100K cycles [1] [2] 1/6 HP at 250 VAC, 100K cycles [1] [2]
<b>UL, CUR (N.C.)</b>	3 A at 250 VAC general use, 100 K cycles [1] [2] 3 A at 30 VDC resistive, 100K cycles [1] [2]
<b>VDE</b>	Form A N.O.: 5 A 250 VAC [1] [2] Form C N.O.: 5 A 250 VAC [1] [2] Form C N.C.: 3 A 250 VAC [1] [2]
<b>Material</b>	Silver cadmium oxide [1] or silver nickel [2]. Gold plating available.
<b>Resistance</b>	<100 milliohms initially

### GENERAL DATA

<b>Life Expectancy Mechanical Electrical</b>	Minimum operations 1 x 10 <sup>7</sup> 1 x 10 <sup>5</sup> at 10 A 250 VAC Res.
<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 Operating 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" (1.5 mm) DA at 10–55 Hz
<b>Shock Operating 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
<b>Packing unit in pcs</b>	100 per styropor tray / 1000 per carton box

### COIL

<b>Power At Pickup Voltage (typical)</b>	253 mW (Standard Coil) 113 mW (Sensitive Coil)
<b>Max. Continuous Dissipation</b>	1.1 W at 20°C (68°F)
<b>Temperature Rise</b>	40°C (72°F) standard coil 20°C (36°F) sensitive coil
<b>Temperature</b>	Max. 105°C (221°F)

### 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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# AZ940

## RELAY ORDERING DATA

COIL SPECIFICATIONS – Standard Coil (SPDT and SPST)				ORDER NUMBER*
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance Ohm $\pm 10\%$	
3	2.3	4.7	20	AZ940-1C-3D
5	3.8	7.7	55	AZ940-1C-5D
6	4.5	9.4	80	AZ940-1C-6D
9	6.8	14.0	180	AZ940-1C-9D
12	9.0	18.7	320	AZ940-1C-12D
18	13.5	28.1	720	AZ940-1C-18D
24	18.0	37.5	1,280	AZ940-1C-24D

\* Substitute "1A" for "1C" to indicate 1 Form A contacts. Add suffix "B" to "1A" or "1C" for silver nickel contacts. Add suffix "E" at the end of order number for sealed version. Add suffix "G" for gold plated contacts.

COIL SPECIFICATIONS – Sensitive Coil (SPST)				ORDER NUMBER**
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance Ohm $\pm 10\%$	
3	2.3	7.0	45	AZ940-1A-3DS
5	3.8	11.7	125	AZ940-1A-5DS
6	4.5	14.0	180	AZ940-1A-6DS
9	6.8	20.9	400	AZ940-1A-9DS
12	9.0	28.1	720	AZ940-1A-12DS
18	13.5	41.9	1,600	AZ940-1A-18DS
24	18.0	55.5	2,800	AZ940-1A-24DS

\*\* Add suffix "B" to "1A" for silver nickel contacts. Add suffix "E" at the end of order number for sealed version. Add suffix "G" for gold plated contacts.

## MECHANICAL DATA

Top view dimensions: .807 [20.50] (width), .417 [10.59] (height), .622 [15.80] (total height), .020 [0.51] (flange thickness), 5 x .157 [4.0] (terminal width).

Side view dimensions: .417 [10.59] (height), .622 [15.80] (total height).

Bottom view dimensions: 2 x .014  $\pm$  .005 [0.35  $\pm$  0.12] (lead width), 5 x .028  $\pm$  .005 [0.76  $\pm$  0.12] (lead length), 3 x .012  $\pm$  .005 [0.31  $\pm$  0.12] (lead width).

### PC BOARD LAYOUT

Dimensions: .054 [1.36] (lead offset), .400 [10.16] (lead spacing), .300 [7.62] (lead spacing), .058 [1.49] (lead offset), .300 [7.62] (lead spacing), .100 [2.54] (lead spacing), 5 x  $\phi$  .051 [ $\phi$  1.3] (terminal diameter).

### WIRING DIAGRAM

FORM A: Coil terminals 1 and 5, contact terminals 8 and 10.

FORM C: Coil terminals 1 and 16, contact terminals 5 and 10.

VIEWED TOWARD TERMINALS

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

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