

## MINIATURE POWER RELAY

### FEATURES

- AC coils
- Dielectric strength 5000 Vrms
- Low cost
- Flux tight package
- 10 Amp switching - single pole contacts
- Isolation spacing greater than 8mm
- Molded materials: all 94V-0
- UL and Canadian file E43203



### CONTACTS

<b>Arrangement</b>	SPST (1 Form A) SPDT (1 Form C)
<b>Ratings</b>	<p><b>Resistive load:</b> Max. switched power: 300 W, 2500 VA Max. switched current: 10 A Max. switched voltage: 150 VDC/400 VAC</p> <p><b>Inductive load: (cos<math>\phi</math> =0.4)</b> Max. switched power: 150W or 1875VA Max. Switched current: 10A Max. switched voltage: 125VDC or 400 VAC</p> <p><small>Note: If switching voltage is greater than 30 VDC, special precautions must be taken. Please contact the factory.</small></p>
<b>Rated Load UL, CUR</b>	10 A 250 VAC, resistive 1/2 HP 277 VAC
<b>Min. Load</b>	5 VDC, .01 A
<b>Material</b>	Silver alloy
<b>Resistance</b>	30 milliohms initially (6V, 1A method)

### COIL

<b>Power At Pickup Voltage (typical)</b>	576 mW
<b>Max. Continuous Dissipation</b>	1.5 W at 20°C (68°F) ambient 1.2 W at 40°C (104°F) ambient
<b>Temperature Rise</b>	36°C (65°F) at nominal coil voltage
<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.

### GENERAL DATA

<b>Life Expectancy Mechanical Electrical</b>	Minimum operations 1 x 10 <sup>7</sup> 1 x 10 <sup>5</sup> at rated load
<b>Operate Time (typical)</b>	8 ms at nominal coil voltage
<b>Release Time (typical)</b>	5 ms at nominal coil voltage (with no coil suppression)
<b>Dielectric Strength (at sea level for 1 min.)</b>	5000 Vrms coil to contact 1000 Vrms between open contacts
<b>Insulation Resistance</b>	1000 megohms min. at 20°C, 500 VDC 50% RH
<b>Dropout</b>	Greater than 30% of nominal coil voltage
<b>Ambient Temperature Operating Storage</b>	At nominal coil voltage -40°C (-40°F) to 70°C (158°F) -40°C (-40°F) to 105°C (221°F)
<b>Vibration</b>	0.062" DA at 10–55 Hz
<b>Shock</b>	10 g
<b>Enclosure</b>	PC (94V-0)
<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>Weight</b>	17 grams

## RELAY ORDERING DATA

COIL SPECIFICATIONS - AC Coil					ORDER NUMBER	
Nominal Coil VAC	Must Operate VAC	Max. Continuous VAC	Nominal Current mA $\pm 10\%$	Coil Resistance $\pm 10\%$	Form A (SPST)	Form C (SPDT)
6	4.8	7.8	150.0	16	AZ683-1A-6A	AZ683-1C-6A
12	9.6	15.6	75.0	65	AZ683-1A-12A	AZ683-1C-12A
24	19.2	31.2	37.5	260	AZ683-1A-24A	AZ683-1C-24A
50	40.0	65.0	18.0	1130	AZ683-1A-50A	AZ683-1C-50A
110	88.0	143.0	10.6	4600	AZ683-1A-110A	AZ683-1C-110A
220	176.0	286.0	5.3	20200	AZ683-1A-220A	AZ683-1C-220A

## MECHANICAL DATA

**Form A and C**

Terminal Number	Dimensions	Tol.: $\pm 0.005$ (0.13)
1, 5	.023 (0.58) x .023 (0.58)	
2	0.016 (0.4) x 0.040 (1.015)	
3	0.017 (0.431) x 0.040 (1.015)	
4	0.011 (0.279) x 0.040 (1.015)	

Tol.: XX  $\pm 0.010$  (0.26)

**PC BOARD LAYOUT (Bottom View)**

**WIRING DIAGRAM (Bottom View)**

Form C

Form A

Dimensions in inches with metric equivalents in parentheses. Tolerance:  $\pm 0.010$ "