

## MINIATURE PC BOARD RELAY

### FEATURES

- Subminiature size
- High sensitivity, 110 mW pickup
- Coils to 48 VDC
- Epoxy sealed for automatic wave soldering
- Contacts rated at 6 Amps
- Life expectancy to 20 million operations
- Extremely low cost
- Class B insulation (130°C) standard
- Class F insulation (155°C) version available
- UL, CUR file E44211



### CONTACTS

<b>Arrangement</b>	SPDT (1 Form C)
<b>Ratings</b>	Resistive load: Max. switched power: 300 W or 2400 VA Max. switched current: 10 A Max. switched voltage: 150* VDC or 300 VAC
<b>UL Rating</b>	10 A at 240 VAC General Use 6 A at 30 VDC Resistive 6 A at 300 VAC Resistive  Note: If switching voltage is greater than 30 VDC, special precautions must be taken. Please contact the factory.
<b>Material</b>	Silver alloy
<b>Resistance</b>	< 100 milliohms initially

### COIL

<b>Power At Pickup Voltage (typical)</b>	Standard coil: 210 mW Sensitive coil: 140 mW
<b>Max. Continuous Dissipation</b>	Class B: 2.0 W 20°C (68°F) ambient 1.6 W 40°C (104°F) ambient Class F: 2.5 W 20°C (68°F) ambient 2.1 W 40°C (104°F) ambient
<b>Temperature Rise</b>	At nominal coil voltage Standard coil: 38°C (68°F) Sensitive coil: 28°C (50°F)
<b>Temperature</b>	Max. 130°C (266°F) Class B Max. 155°C (311°F) Class F

### NOTES

1. All values at 20°C (68°F).
2. Relay may pull in with less than "Must Operate" value.
3. Other coil resistances and sensitivities available upon request.
4. Unsealed relays should not be dip cleaned.
5. Specifications subject to change without notice.

### GENERAL DATA

<b>Life Expectancy</b>	Minimum operations
<b>Mechanical</b>	100 million operations
<b>Electrical</b>	1 x 10 <sup>5</sup> at 6 A, 120 VAC
<b>Operate Time (typical)</b>	5 ms at nominal coil voltage
<b>Release Time (typical)</b>	2 ms at nominal coil voltage (with no coil suppression)
<b>Dielectric Strength (at sea level for 1 min.)</b>	750 Vrms contact to contact 3000 Vrms contact to coil
<b>Insulation Resistance</b>	1000 megohms min. at 20°C, 500 VDC, 50% RH
<b>Dropout</b>	Greater than 5% of nominal coil voltage
<b>Ambient Temperature Operating</b>	At nominal coil voltage -55°C (-67°F) to 90°C (194°F) Class B -55°C (-67°F) to 115°C (239°F) Class F
<b>Storage</b>	-55°C (-67°F) to 130°C (266°F) Class B -55°C (-67°F) to 155°C (311°F) Class F
<b>Vibration</b>	0.062" DA at 10–55 Hz, 10 g at 55–110 Hz
<b>Shock</b>	10 g
<b>Enclosure</b>	PBT 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>	8 grams

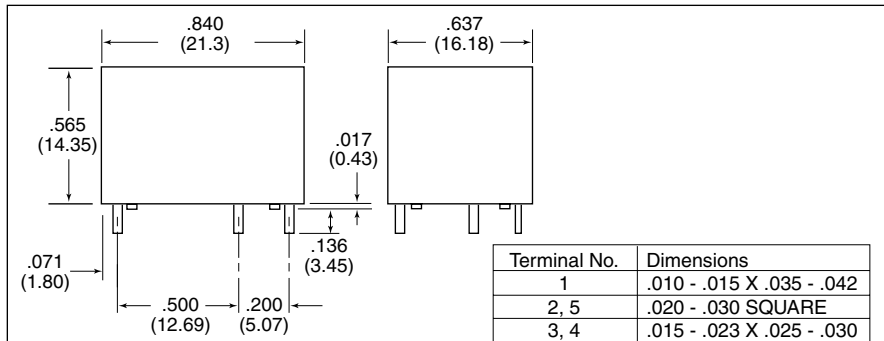


## RELAY ORDERING DATA

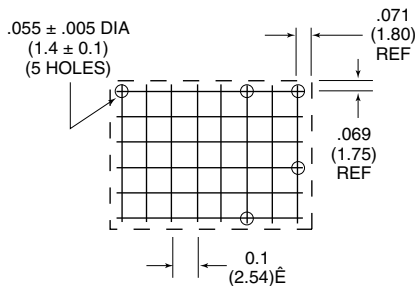
COIL SPECIFICATIONS					
STANDARD RELAYS: 1 Form C (SPDT)				ORDER NUMBER*	
Nominal Coil VDC	Max. VDC Continuous	Resistance $\pm 10\%$	Must Operate VDC	Unsealed	Epoxy Sealed
5	10.6	56	3.25	AZ8A-1CH-5D	AZ8A-1CH-5DE
6	12.6	80	3.90	AZ8A-1CH-6D	AZ8A-1CH-6DE
9	19.0	180	5.85	AZ8A-1CH-9D	AZ8A-1CH-9DE
12	25.0	320	7.80	AZ8A-1CH-12D	AZ8A-1CH-12DE
24	50.0	1,280	15.60	AZ8A-1CH-24D	AZ8A-1CH-24DE
48	87.0	3,800	28.80	AZ8A-1CH-48D	AZ8A-1CH-48DE
SENSITIVE RELAYS: 1 Form C (SPDT)				ORDER NUMBER*	
Nominal Coil VDC	Max. VDC Continuous	Resistance $\pm 10\%$	Must Operate VDC	Unsealed	Epoxy Sealed
5	12.6	80	3.25	AZ8A-1CH-5DS	AZ8A-1CH-5DSE
6	14.8	110	3.90	AZ8A-1CH-6DS	AZ8A-1CH-6DSE
9	22.4	250	5.85	AZ8A-1CH-9DS	AZ8A-1CH-9DSE
12	30.0	440	7.80	AZ8A-1CH-12DS	AZ8A-1CH-12DSE
24	60.0	1,780	15.60	AZ8A-1CH-24DS	AZ8A-1CH-24DSE

\*To indicate Class F version, add suffix "F". Other coil resistances and sensitivities available. Please contact the factory.

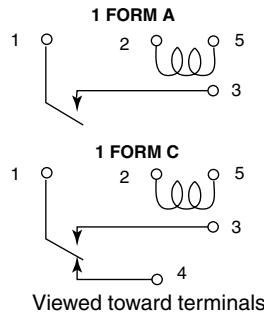
## MECHANICAL DATA



### PC BOARD LAYOUT

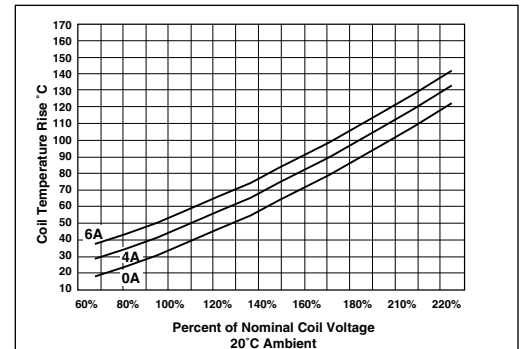


### WIRING DIAGRAM



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

## Coil Temperature Rise



## Maximum Switching Capacity

