

# AZ920

## ULTRA-SENSITIVE SUBMINIATURE RELAY

### FEATURES

- Extremely small footprint utilizing only 0.16 square inch of PCB area
- Thin vertical profile only 0.2" wide
- Slim SIP package
- 1 Form A contact with up to 5 Amp switching capability
- High sensitivity, 58 mW pickup
- Dielectric strength 2500 Vrms contact to coil
- Epoxy sealed
- UL, CUR file E43203
- TÜV file R50018790



### CONTACTS

<b>Arrangement</b>	SPST (1 Form A) Single button contact or bifurcated
<b>Ratings</b>	Resistive load: Max. switched power: 150 W or 1250 VA Max. switched current: 5 A Max. switched voltage: 150* VDC or 250 VAC  *Note: If switching voltage is greater than 30 VDC, special precautions must be taken. Please contact the factory.
<b>Rated Load UL, CUR</b>	5 A at 30 VDC or 250 VAC General Use, 100k cycles [1]
<b>TÜV</b>	5 A at 30 VDC or 250 VAC Resistive, 100k cycles [1] 3 A at 30 VDC or 250 VAC General Use, 75k cycles[2] 3 A at 30 VDC or 250 VAC Resistive, 75k cycles [2]  [1] Single button contacts [2] Bifurcated contacts
<b>Material</b>	Silver nickel (single button or bifurcated contacts), or silver tin oxide (single button contacts), gold plating available
<b>Resistance</b>	< 50 milliohms initially

### GENERAL DATA

<b>Life Expectancy Mechanical Electrical</b>	Minimum operations 20 million operations 1 X 10 <sup>5</sup> at 5 A, 30 VDC or 250 VAC
<b>Operate Time (typical)</b>	6 ms at nominal coil voltage
<b>Release Time (typical)</b>	3 ms at nominal coil voltage (with no coil suppression)
<b>Dielectric Strength (at sea level for 1 min.)</b>	1000 Vrms between open contacts 2500 Vrms contact to coil
<b>Insulation Resistance</b>	1000 megohms min. at 20°C, 500 VDC, 50% RH
<b>Dropout</b>	Greater than 10% of nominal coil voltage
<b>Ambient Temperature Operating Storage</b>	At nominal coil voltage -40°C (-40°F) to 85°C (185°F) -40°C (-40°F) to 105°C (221°F)
<b>Vibration</b>	0.062" (1.5 mm) DA at 10–55 Hz
<b>Shock</b>	15 g
<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>	3 grams
<b>Packing unit in pcs</b>	100 per plastic tube / 1000 per carton box

### COIL

<b>Power At Pickup Voltage (typical)</b>	58 mW (5-18 V coils) 88 mW (24 V coil)
<b>Max. Continuous Dissipation</b>	1.3 W at 20°C (68°F) ambient
<b>Temperature Rise at nominal coil voltage</b>	12°C (22°F) 5-18 V coils 17°C (31°F) 24 V coil
<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. Specifications subject to change without notice.

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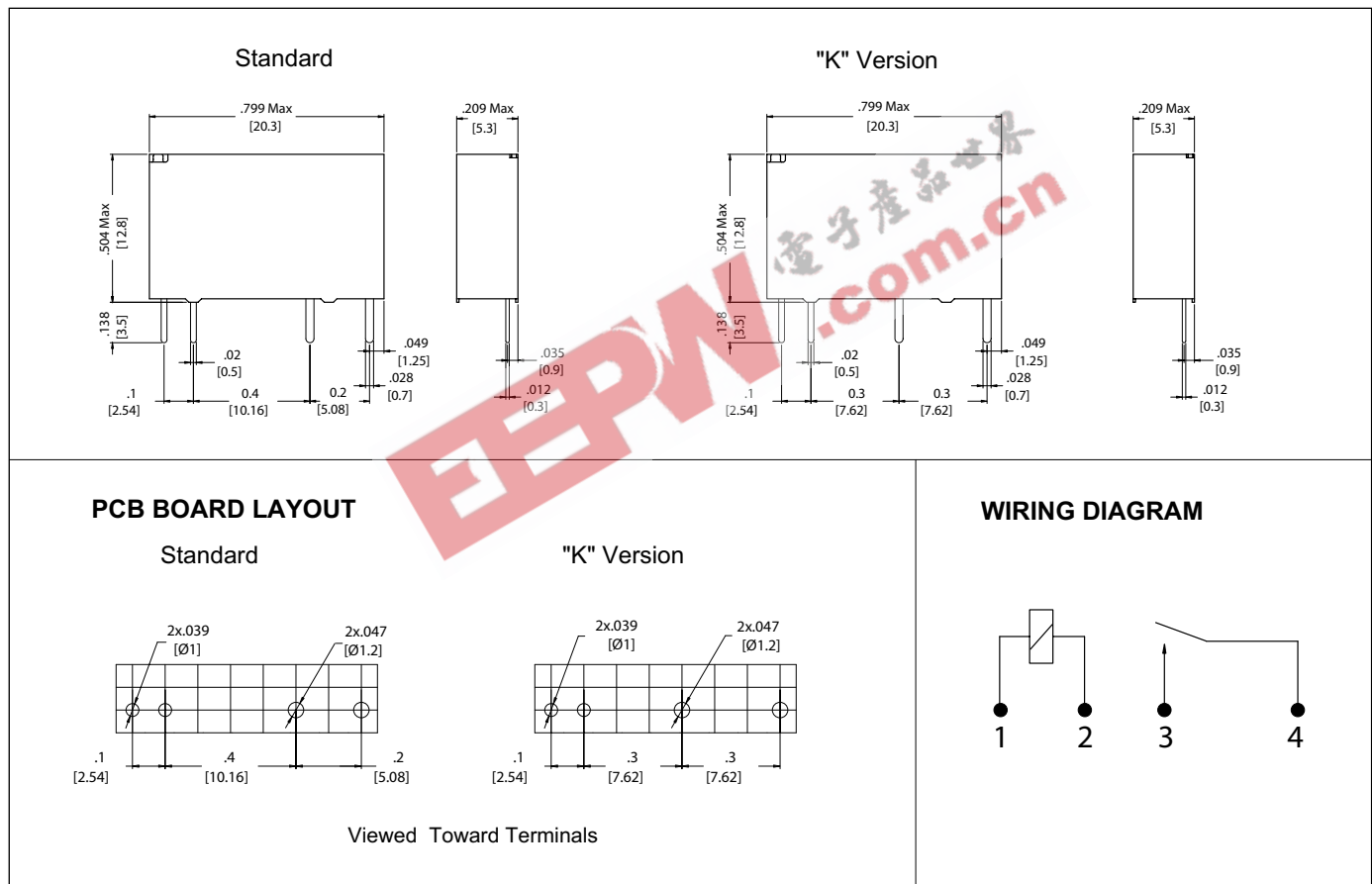
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## RELAY ORDERING DATA

COIL SPECIFICATIONS				
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance Ohm $\pm 10\%$	ORDER NUMBER*
5	3.5	16.5	208	AZ920-1A-5DE
6	4.2	19.9	300	AZ920-1A-6DE
9	6.3	29.8	675	AZ920-1A-9DE
12	8.4	39.8	1,200	AZ920-1A-12DE
18	12.6	59.6	2,700	AZ920-1A-18DE
24	16.8	65.0	3,200	AZ920-1A-24DE

\* Substitute "-1AB" in place of "-1A" for bifurcated silver nickel contacts. Substitute "-1AH" in place of "-1A" for silver tin oxide contacts. Add suffix "A" for gold plated contacts. Add suffix "K" for .3 inch terminal spacing. Add suffix "F" for Class F insulation.

## MECHANICAL DATA



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

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