

# 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 2000 Vrms contact to coil
- Bifurcated contacts available
- Epoxy sealed for automatic wave soldering and cleaning
- Class B (130°C) standard
- Class F (155°C) versions available
- 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
<b>UL Rating:</b> <b>TÜV Rating</b>	5 A at 30 VDC or 250 VAC General Use, 100k cycles [1] 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  Note: If switching voltage is greater than 30 VDC, special precautions must be taken. Please contact the factory.
<b>Material</b>	Silver nickel, silver tin oxide or silver cadmium oxide, gold plating available
<b>Resistance</b>	< 50 milliohms initially (1 A, 6 VDC method)

### COIL

<b>Power</b>	
<b>At Pickup Voltage (typical)</b>	58 mW (5-18 V and 24 V sensitive coils) 88 mW (24 V coil)
<b>Max. Continuous Dissipation</b>	1.3 W at 20°C (68°F) ambient
<b>Temperature Rise</b>	12°C (22°F) at nominal coil voltage (5-18 V coils) 17°C (31°F) at nominal coil voltage (24 V coil)
<b>Temperature</b>	Max. 130°C (266°F) Class B Max. 155°C (311°F) Class F

### GENERAL DATA

<b>Life Expectancy</b> <b>Mechanical</b> <b>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</b> <b>Operating</b> <b>Storage</b>	At nominal coil voltage -40°C (-40°F) to 120°C (248°F) -40°C (-40°F) to 130°C (266°F)
<b>Vibration</b>	0.062" 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

### 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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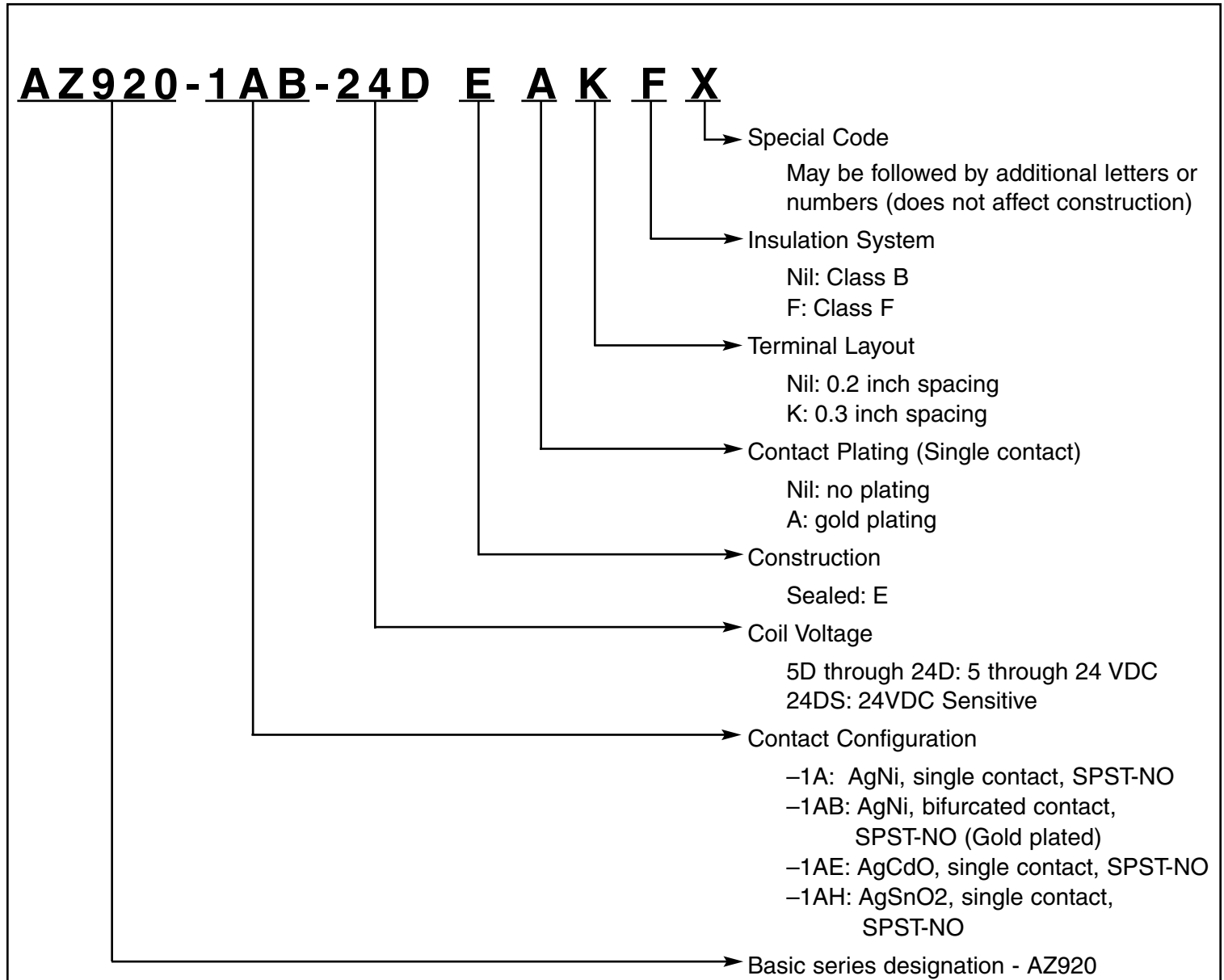
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2/20/08W

# AZ920

## RELAY ORDERING DATA



### Coil Specifications

Nominal Coil VDC	Max. Continuous VDC	Coil Resistance ±10%	Must Operate VDC
5	16.5	208	3.5
6	19.9	300	4.2
9	29.8	675	6.3
12	39.8	1200	8.4
18	59.6	2700	12.6
24	65.0	3200	16.8
24(Sensitive)	79.6	4800	16.8



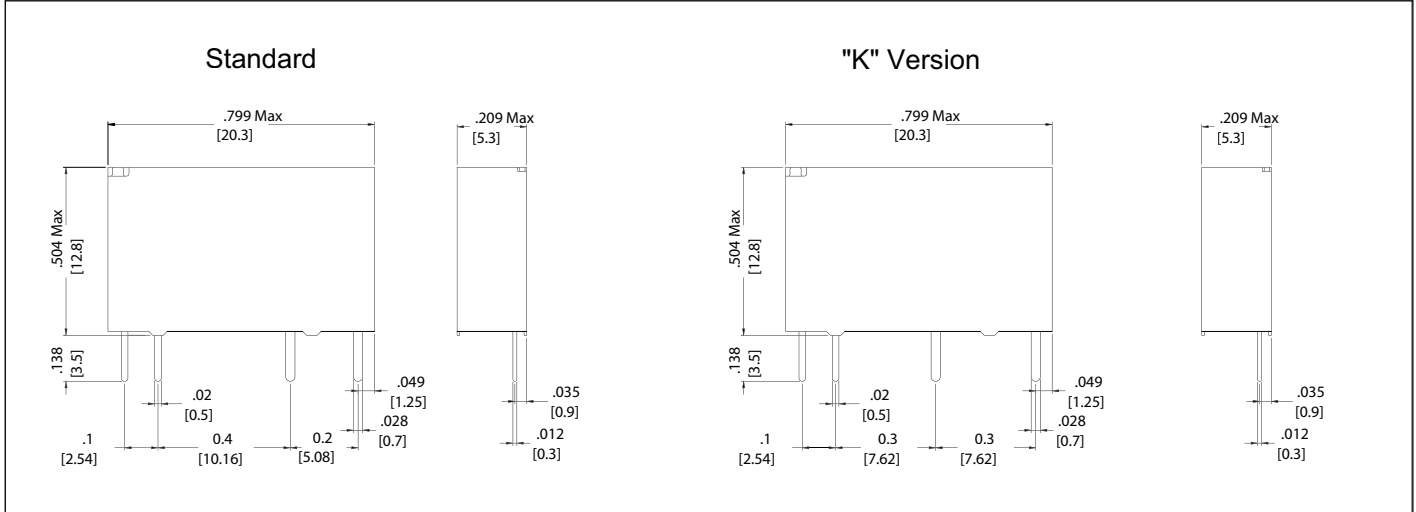
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## MECHANICAL DATA

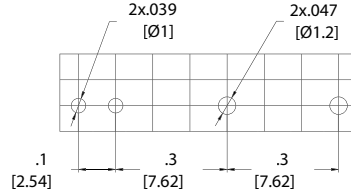
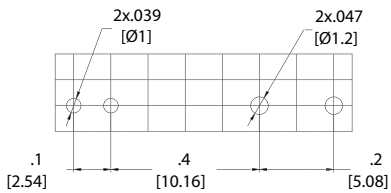


## PCB BOARD LAYOUT

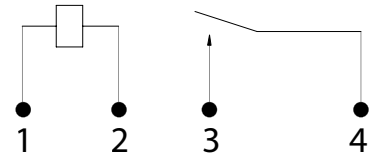
## WIRING DIAGRAM

### Standard

### "K" Version



(Viewed Toward Terminals)



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

