# **AZ921**\_

## ULTRA-SENSITIVE SUBMINIATURE RELAY

### **FEATURES**

- 5 Amp switching capability
- Extremely small footprint utilizing only 0.16 square inch of PCB area
- Thin vertical profile only 0.2" wide
- Dielectric strength 3000Vrms contact to coil
- Bifurcated contacts available
- · Epoxy sealed
- Class B (130°C) standard
- Class F (155°C) versions available
- UL, CUR file E43203
- TÜV 50243813-1



Arrangement	SPST (1 Form A), single button contact or bifurcated		
Ratings	Resistive load: Max. switched power: 150W or 1250VA Max. switched current: 5A Max. switched voltage: 150VDC* or 250VAC Note: If switching voltage is greater than 30 VDC, special precautions must be taken. Please contact the factory.		
Rated Load UL, CUR	5A at 250VAC, Resistive, 50k cycles [1][2][3] 3A at 250VAC, Resistive, 100k cycles [1][2][3] 5A at 30VDC, Resistive, 50k cycles [1][2][3] 3A at 30VDC, Resistive, 100k cycles [1][2][3] B300 pilot duty [3] R300 pilot duty [3]		
TÜV	5A at 250VAC, Resistive, 50k cycles [3] 5A at 250VAC, Resistive, 100k cycles [1][2] 5A at 30VDC, Resistive, 50k cycles [3] 5A at 30VDC, Resistive, 100k cycles [1][2]		
Material	Silver nickel (single button contact) [1] Silver nickel, gold plated (bifurcated contact) [2] Silver tin oxide (single button contact) [3] Gold plating available		
Resistance	< 50 milliohms initially (1A, 6VDC method)		

### COIL

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



#### **GENERAL DATA**

Life Expectancy Mechanical Electrical	Minimum operations 20 million operations 1 X 10 <sup>5</sup> at 5A, 30VDC or 250VAC	
Operate Time (typical)	10ms at nominal coil voltage	
Release Time (typical)	5ms at nominal coil voltage (with no coil suppression)	
Dielectric Strength (at sea level for 1 min.)	1000Vrms between open contacts 3000Vrms contact to coil	
Insulation Resistance	1000 megohms min. at 20°C, 500VDC, 50% RH	
Dropout	Greater than 10% of nominal coil voltage	
Ambient Temperature Operating Storage	At nominal coil voltage -40°C (-40°F) to 85°C (185°F) -40°C (-40°F) to 130°C (266°F)	
Vibration	0.062" (1.5mm) DA at 10-55Hz	
Shock	10g	
Enclosure	P.B.T. polyester	
Terminals	Tinned copper alloy, P.C.	
Max. Solder Temp.	270°C (518°F)	
Max. Solder Time	5 seconds	
Max. Solvent Temp.	80°C (176°F)	
Max. Immersion Time	30 seconds	
Weight	3 grams	

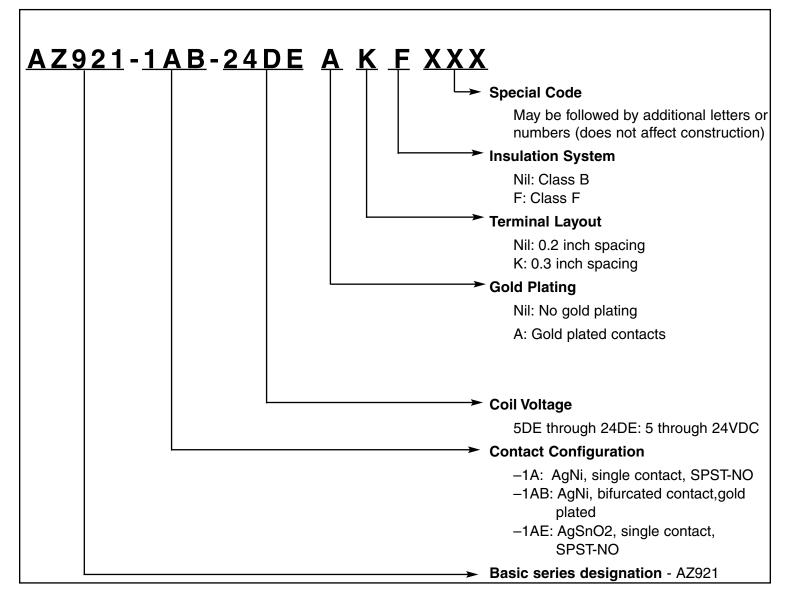
#### **NOTES**

- 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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### **RELAY ORDERING DATA**



Coil Specifications					
Nominal Coil VDC	Max. Continuous VDC	Coil Resistance Ohms ± 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		

## AMERICAN ZETTLER, INC.

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#### **MECHANICAL DATA**

