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 3000 Vrms contact to coil
- Bifurcated contacts available
- Epoxy sealed
- Class B (130°C) standard
- Class F (155°C) versions available
- UL,CUR file E43203
- TUV 50243813-1

CONTACTS

Arrangement	SPST (1 Form A), single button contact or bifurcated
Ratings **UL Rating:**	Resistive load: Max. switched power: 150 W or 1250 VA Max. switched current: 5 A Max. switched voltage: 150* VDC or 250 VAC Single Button Contact 5 A at 30 VDC or 250 VAC Res., 40°C 50k cycles 5 A at 250 VAC, Gen. Use, 85°C 50k cycles 3 A at 30 VDC or 250 VAC Res., 85°C 100k cycles 1.5 FLA, 9 LRA, 240 VAC, AgNi 45°C 30k cycles 1/10 HP, 1.245 FLA, 277 VAC, AgSnO2 40°C 25k cycles B300, R300 Pilot Duty, 6k cycles, 85°C AgSnO2 C300 Pilot Duty, 6k cycles, 40°C AgSnO2 Bifurcated Contact 5 A at 30 VDC / 250 VAC Res., 50k cycles, 40°C AgNi 3 A at 30 VDC / 250 VAC Res., 100k cycles, 85°C AgNi Note: If switching voltage is greater than 30 VDC, special precautions must be taken. Please contact the factory.
Material	Silver tin oxide or silver nickel. Gold plating available.
Resistance	< 50 milliohms initially (1 A, 6 VDC method)

COIL

Power	
At Pickup Voltage (typical)	58mW (5 - 18VDC) 88mW (24VDC)
Max. Continuous Dissipation	1.3 W 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 10^5 at 5 A, 30 VDC or 250 VAC
Operate Time (typical)	10 ms at nominal coil voltage
Release Time (typical)	5 ms at nominal coil voltage (with no coil suppression)
Dielectric Strength (at sea level for 1 min.)	1000 Vrms between open contacts 3000 Vrms contact to coil
Insulation Resistance	1000 megohms min. at 20°C, 500 VDC, 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" DA at 10–55 Hz
Shock	10 g
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

AZ921-1AB-24DE A K F XXX

Special Code

May be followed by additional letters or numbers (does not affect construction)

Insulation System

Nil: Class B
F: Class F

Terminal Layout

Nil: 0.2 inch spacing
K: 0.3 inch spacing

Gold Plating

Nil: No gold plating
A: Gold plated contacts

Coil Voltage

5DE through 24DE: 5 through 24 VDC

Contact Configuration

–1A: AgNi, single contact, SPST-NO
–1AB: AgNi, bifurcated contact,gold plated
–1AE: AgSnO2, single contact, SPST-NO

Basic series designation - AZ921

Coil Specifications

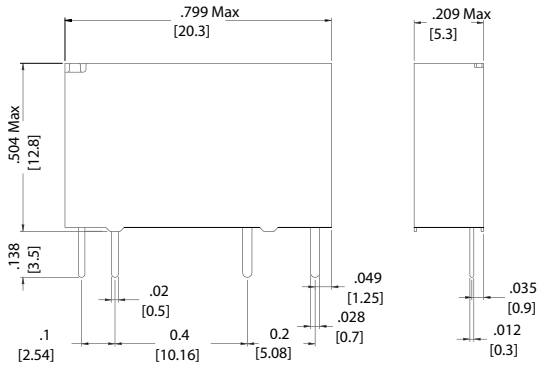
Nominal Coil VDC	Max. Continuous VDC	Coil Resistance ±10%	Must Operate VDC
5	16.5	208	3.5
6	19.9	300	4.2
9	29.8	675	6.3
12	39.8	1200	8.4
18	59.6	2700	12.6
24	65.0	3200	16.8

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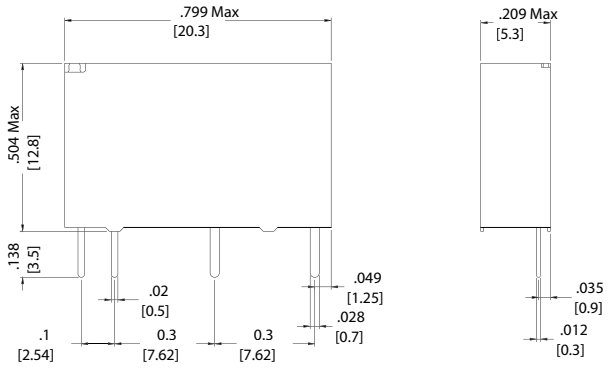
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MECHANICAL DATA

Standard

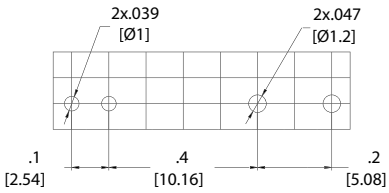


"K" Version

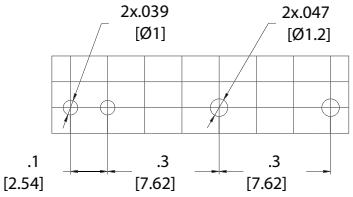


PCB BOARD LAYOUT

Standard

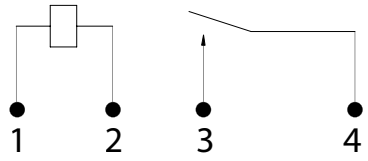


"K" Version



(Viewed Toward Terminals)

WIRING DIAGRAM



Dimensions in inches with metric equivalents in parentheses. Tolerance: ± .010"

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