# **AZ9421A** \_

# 20 AMP MINIATURE AUTOMOTIVE RELAY

## **FEATURES**

- High switching capacity 20 Amps
- DC coils to 24 VDC
- Epoxy sealed versions available
- Class F insulation for high temperature operation
- QS9000, ISO9001, ISO14001
- Tested in accordance with SAE J2544
- Extremely cost effective



Arrangement	SPST (1 Form A) SPDT (1 Form C)		
Ratings Medium Duty	Resistive load  Max. switched power: 420 W or 2500 VA  Max. switched current: 20 A  Max. switched voltage: 30 VDC or 250 VAC		
Material	Silver tin oxide		
Resistance	<100 milliohms initially (24 V, 1 A voltage drop method)		

#### COIL

Power			
At Pickup Voltage (typical)	450 mW		
Max Continuous Dissipation	1.3 W at 20°C (68°F) ambient		
Temperature Rise	40°C (72°F) at nominal coil voltage		
Temperature	Max. 155°C (311°F)		

#### **NOTES**

- 1. All values at 20°C (68°F).
- 2. Relay may pull in with less than "Must Operate" value.
- 3. Unsealed relays should not be dip cleaned.
- 4. Specifications subject to change without notice.



### **GENERAL DATA**

Life Expectancy Mechanical Electrical	Minimum operations 1x10 <sup>7</sup> 1 x 10 <sup>5</sup> at 20 A 14 VDC Res.			
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.)	2500 Vrms contact to coil 1000 Vrms across contacts			
Insulation Resistance	100 megohms min. at 20°C, 500 VDC, 50% RH			
Dropout	Greater than 10% of nominal coil voltage			
Ambient Temperature	At nominal coil voltage			
Operating	-40°C(-40°F) to 85°C(185°F)			
Storage	-55°C(-67°F) to 155°C(311°F)			
Vibration	0.039" DA at 10-55Hz			
Shock	10 g operational, 100 g damage			
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	10 g			



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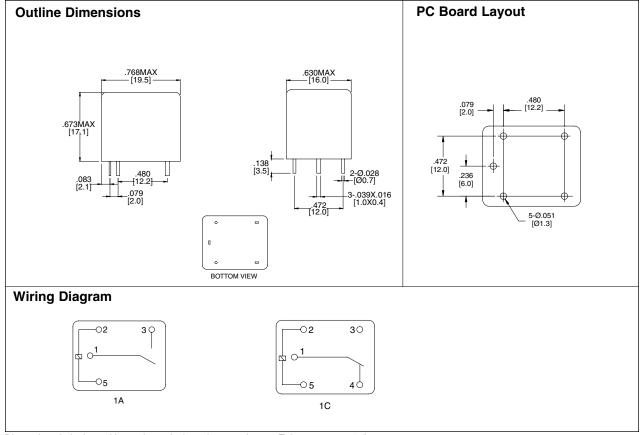
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#### **RELAY ORDERING DATA**

STANDARD RELAYS							
COIL SPECIFICATIONS			ORDER NUMBER*				
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance ±10%	Unsealed	Sealed		
6	4.5	7.8	45	AZ9421A-1CT-6D	AZ9421A-1CT-6DE		
12	9.0	15.6	180	AZ9421A-1CT-12D	AZ9421A-1CT-12DE		
24	18.0	31.2	720	AZ9421A-1CT-24D	AZ9421A-1CT-24DE		

<sup>\*</sup>Substitute "1AT" in place of "1CT" to indicate 1 Form A contact.

#### **MECHANICAL DATA**



Dimensions in inches with metric equivalents in parentheses. Tolerance: ±0.010"