# **AZ9431**

# 15 AMP MINIATURE PC BOARD RELAY

### **FEATURES**

- High performance
- · Low seated height
- 6 kV surge version available
- Flux tight and sealed versions available
- Class B insulation (130°C) standard, Class F (155°C) available
- UL, CUR file E43203



Arrangement	SPST N.O. (1 Form A) SPDT (1 Form C)				
Ratings Medium Duty Heavy Duty	Max. switched power: 240 W or 1200 VA Max. switched current: 10 A Max. switched voltage: 150* VDC or 300 VAC Max. switched power: 360 W or 2500 VA Max. switched current: 15 A Max. switched voltage: 150* VDC or 300 VAC				
UL/CUR Ratings Medium Duty Heavy Duty	10 A at 120 VAC, General Use 10 A at 24 VDC, General Use 10 A at 250 VAC, General Use 15 A at 120 VAC, General Use 15 A at 24 VDC, General Use *Note: If switching voltage is greater than 30 VDC, special precautions must be taken. Please contact the factory.				
Material	Medium Duty: Silver cadmium oxide Heavy Duty: Silver tin oxide				
Resistance	< 100 milliohms initially (24 V, 1 A method)				

## COIL

Power At Pickup Voltage Max Continuous Dissipation	203 mW 1.7 W at 20°C (68°F)
Temperature Rise (at nominal coil voltage)	22°C (40°F)
Temperature	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. Unsealed relays should not be dip cleaned.
- 4. Specifications subject to change without notice.



#### **GENERAL DATA**

Life Expectancy Mechanical Electrical	1 x 10 <sup>6</sup> 1 x 10 <sup>5</sup> at 10 A 120 VAC res.			
Operate Time	10 ms max.			
Release Time	5 ms max. (with no coil suppression)			
Dielectric Strength (at sea level for 1 min.)	3000 Vrms contact to coil (6 kV version) 1500 Vrms contact to coil 1000 Vrms across contacts			
Insulation Resistance	100 megohms min. at 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 100°C(212°F) -40°C(-40°F) to 155°C(311°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	10 g			



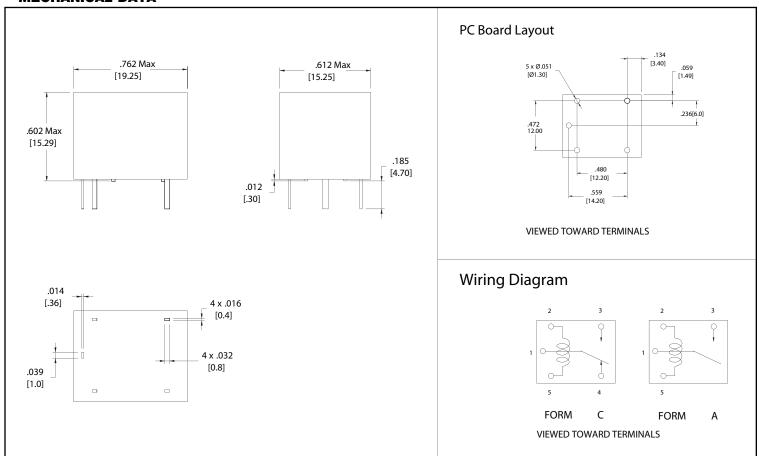
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#### **RELAY ORDERING DATA**

STANDARD	RELAYS						
COIL SPECIFICATIONS			ORDER NUMBER*				
Nominal Coil	Max. Continuous	Coil Resistance	Must Operate	Medium Duty	10 Amp contact)	Heavy duty (15 Amp contact)	
VDC	VDC	±10%	VDC	Unsealed	Sealed	Unsealed	Sealed
5	10.9	70	3.8	AZ9431-1C-5D	AZ9431-1C-5DE	AZ9431-1CH-5D	AZ9431-1CH-5DE
6	13.0	100	4.5	AZ9431-1C-6D	AZ9431-1C-6DE	AZ9431-1CH-6D	AZ9431-1CH-6DE
9	19.5	225	6.8	AZ9431-1C-9D	AZ9431-1C-9DE	AZ9431-1CH-9D	AZ9431-1CH-9DE
12	26.0	400	9.0	AZ9431-1C-12D	AZ9431-1C-12DE	AZ9431-1CH-12D	AZ9431-1CH-12DE
18	39.1	900	13.5	AZ9431-1C-18D	AZ9431-1C-18DE	AZ9431-1CH-18D	AZ9431-1CH-18DE
24	52.1	1,600	18.0	AZ9431-1C-24D	AZ9431-1C-24DE	AZ9431-1CH-24D	AZ9431-1CH-24DE
48	104.3	6,400	36.0	AZ9431-1C-48D	AZ9431-1C-48DE	AZ9431-1CH-48D	AZ9431-1CH-48DE

<sup>\*</sup>Substitute "1A" or "1AH" in place of "1C" or "1CH" to indicate 1 Form A. Add suffix "F" for Class F version. Add "H" to AZ9431 for 6 kV version.

## **MECHANICAL DATA**



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



AMERICAN ZETTLER, INC.

www.azettler.com