

# AZ9831

## 70 AMP MINI-ISO AUTOMOTIVE RELAY

### FEATURES

- PCB terminals
- 70 Amp contact rating
- High operating temperature (85°C)
- SPST N.O. (1 Form A)
- ISO/TS 16949, ISO14001
- Tested in accordance with SAE J2544



### CONTACTS

<b>Arrangement</b>	SPST (N.O.) (1 Form A)
<b>Ratings</b>	Resistive load: Max. switched power: 1000 W Max. switched current: 70 A Max. switched voltage: 75 VDC
<b>Material</b>	Silver tin oxide
<b>Resistance</b>	< 50 milliohms initially (24 V, 1 A voltage drop method)

### COIL

<b>Power</b>	
<b>At Pickup Voltage (typical)</b>	0.80 W
<b>Max. Continuous Dissipation</b>	3.2 W at 20°C (68°F)
<b>Temperature Rise</b>	68°C (122°F) at nominal coil voltage
<b>Temperature</b>	Max. 155°C (311°F)

### GENERAL DATA

<b>Life Expectancy</b> <b>Mechanical</b> <b>Electrical</b>	Minimum operations 1 x 10 <sup>7</sup> 1 x 10 <sup>5</sup> at 70 A 14 VDC Res.
<b>Operate Time (typical)</b>	7 ms at nominal coil voltage
<b>Release Time (typical)</b>	5 ms at nominal coil voltage (with no coil suppression)
<b>Dielectric Strength (at sea level for 1 min.)</b>	500 Vrms coil to contact 500 Vrms contact to contact
<b>Insulation Resistance</b>	100 megohms min. at 500 VDC, 20°C 50% RH
<b>Dropout</b>	Greater than 15% of nominal coil voltage
<b>Ambient Temperature</b> <b>Operating</b> <b>Storage</b>	-40°C (-40°F) to 85°C (185°F) -40°C (-40°F) to 105°C (221°F)
<b>Vibration</b>	0.062" DA at 10-55 Hz
<b>Shock</b>	10 g
<b>Enclosure</b>	P.B.T. polyester
<b>Terminals</b>	Copper alloy PCB
<b>Weight</b>	31 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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75 COLUMBIA • ALISO VIEJO, CA 92656 • PHONE: (949) 831-5000 • FAX: (949) 831-8642 • E-MAIL: SALES@AZETTLER.COM

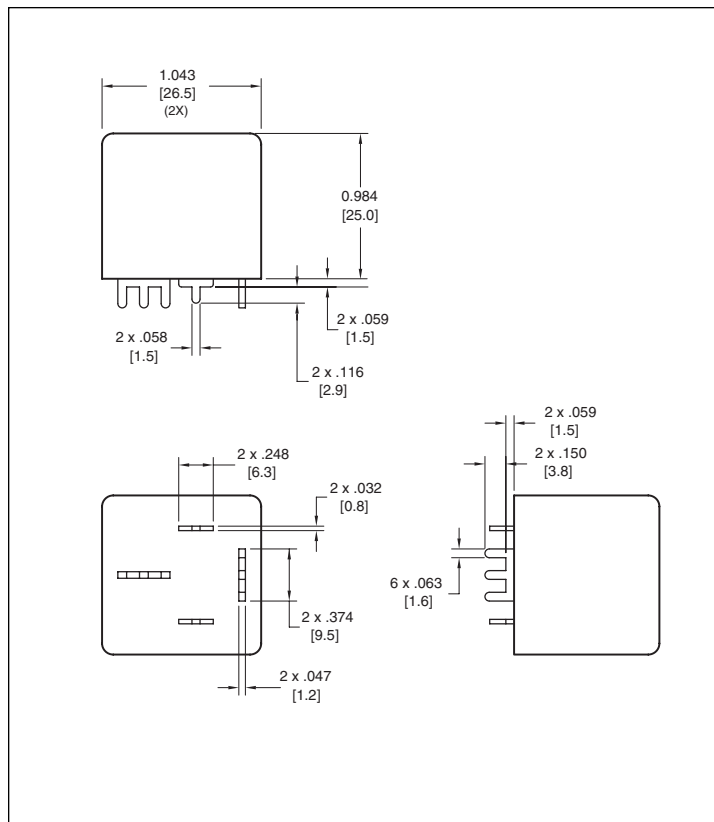
# AZ9831

## RELAY ORDERING DATA

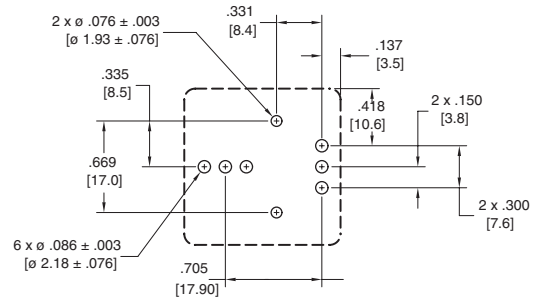
COIL SPECIFICATIONS				ORDER NUMBER*
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance $\pm 10\%$	SPST (N.O.)
6	3.9	7.8	19	AZ9831-1A-6D
12	7.8	15.6	76	AZ9831-1A-12D
24	15.6	31.2	303	AZ9831-1A-24D

\*Add suffix "R" for resistor in parallel with coil. Resistor values: 6V: 180 ohms, 12V: 680 ohms, 24V: 2700 ohms. Add suffix "D" for diode across coil ("+" pole of power supply at terminal #86).

## MECHANICAL DATA

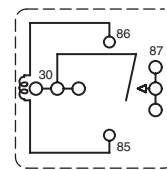


## PC BOARD LAYOUT



VIEWED TOWARD TERMINALS

## WIRING DIAGRAMS



1 FORM A

VIEWED TOWARD TERMINALS

Dimensions in inches with millimeters in brackets below. Tolerance:  $\pm .010$ "



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