



# AMERICAN ZETTLER, INC.

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**American Zettler Introduces 40 Amp 280-ISO Automotive Miniature Relays**  
*The AZ9841 Series Relays for Automotive Use, Contain More Power in a Smaller Package*

**Aliso Viejo, Calif., March 16, 2010** – To continue its commitment to advancing relay technology and innovative design, American Zettler, Inc. introduces the AZ9841 Series 40 Amp miniature power relay for automotive use.

Built in American Zettler's ISO TS16949 factory, the new AZ9841 series are offered with SPST (1 form A), SPDT (1 form C) and a 35 A continuous N.O. rating at 35° C. "We saw a need in the automotive marketplace for a compact, high-powered relay that can handle the demands of cars today," said Dave West, VP of Sales, American Zettler, Inc. "This new relay fits the bill, giving customers the highest switching capability in the 280 ISO package."

Applications include headlights, magnetic clutches, radiator fans, blowers, fog lamps, tail lights, heaters, defoggers and horns. Relays are available with 6, 12 or 24 volt DC coils with optional shunt resistors and silver tin oxide contacts. The small and hardy relays can survive an ambient operating temperature as high as 125° C.

Pricing for the AZ9841, 12V, 40 A version starts at \$1.24 per 1,000 pieces. To learn more, visit [www.azettler.com](http://www.azettler.com).



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## **About American Zettler, Inc.**

Headquartered in Aliso Viejo, Calif., American Zettler, Inc. produces over forty different types of relays to meet the many requirements of commercial and industrial applications. Because of their high reliability, American Zettler relays are used in a wide range of demanding applications including telecommunications systems, computer peripheral and office automation equipment, home appliances, security systems, test and measurement devices, industrial controls and many other types of electric and electronic equipment. Additionally, American Zettler works closely with a computerized distribution network with stocking facilities in virtually every major industrial area in the world. For more information please visit [www.azettler.com](http://www.azettler.com).

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## RELAY PROFILE

Relay	AZ9841
Relay Description	Miniature Automotive PCB Relay
Features/Benefits	40 Amp Switching High operating temperature (125°C) ISO/TS 16949 6, 12 or 24 VDC coil available
Relay Applications	Blower motors, cooling fans, defoggers, fuel pumps, lifts, lighting, and more
Relay Availability	Sample quantity available upon request
Relay Cross Reference	See below

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## CROSS REFERENCE AZ9841

Tyco	VJ28
Omron	G8V-RH
Panasonic	ACV

# AZ9841

## 40 AMP 280-ISO AUTOMOTIVE RELAY

### FEATURES

- Up to 40 Amp switching in a compact size
- SPST (1 Form A), SPDT (1 Form C)
- Vibration and shock resistant
- 35 A Continuous N.O., Rating at 35°C
- ISO/TS 16949, ISO9001



### CONTACTS

<b>Arrangement</b>	SPST (1 Form A) SPDT (1 Form C)
<b>Ratings</b>	Resistive load:  Max. switched power: 560 W Max. switched current: N.O. 40A N.C. 30A Max. switched voltage: 75 VDC  Rated load: N.O 35 A at 14 VDC N.C. 25 A at 14 VDC  * If switching voltage is greater than 30 VDC, special precautions must be taken. Please contact the factory.
<b>Material</b>	Silver tin oxide
<b>Resistance</b>	< 100 milliohms initially (6 VDC, 1 A voltage drop method)

### 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>
<b>Operate Time (max.)</b>	5 ms max. at nominal coil voltage
<b>Release Time (max.)</b>	2 ms max. at nominal coil voltage
<b>Dielectric Strength</b> <b>(at sea level for 1 min.)</b>	500 VAC coil to contact 500 VAC between open contacts
<b>Insulation Resistance</b>	100 megohms min. at 20°C, 500 VDC 50% RH
<b>Dropout</b>	Greater than 10% of nominal coil voltage
<b>Ambient Temperature</b> <b>Operating</b> <b>Storage</b>	At nominal coil voltage -40°C (-40°F) to 125°C (257°F) -40°C (-40°F) to 105°C (211°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>	Tinned copper alloy
<b>Weight</b>	21 grams

### COIL

<b>Power</b> <b>At nominal voltage</b> <b>(typical)</b>	Sensitive - 0.9W Standard - 1.3W
<b>Max. Continuous</b> <b>Dissipation</b>	1.52 W/2.23 W at 20°C (68°F) ambient
<b>Temperature Rise</b>	48°C (108°F) at nominal coil voltage
<b>Temperature</b>	Max 125°C (257°F)

### 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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# AZ9841

## RELAY ORDERING DATA

SENSITIVE RELAYS					
COIL SPECIFICATIONS				ORDER NUMBER*	
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance $\pm 10\%$	Form A (SPST)	Form C (SPDT)
6	3.6	7.8	40	AZ9841-1A-6DS	AZ9841-1C-6DS
12	7.2	15.6	160	AZ9841-1A-12DS	AZ9841-1C-12DS
24	14.4	31.2	640	AZ9841-1A-24DS	AZ9841-1C-24DS

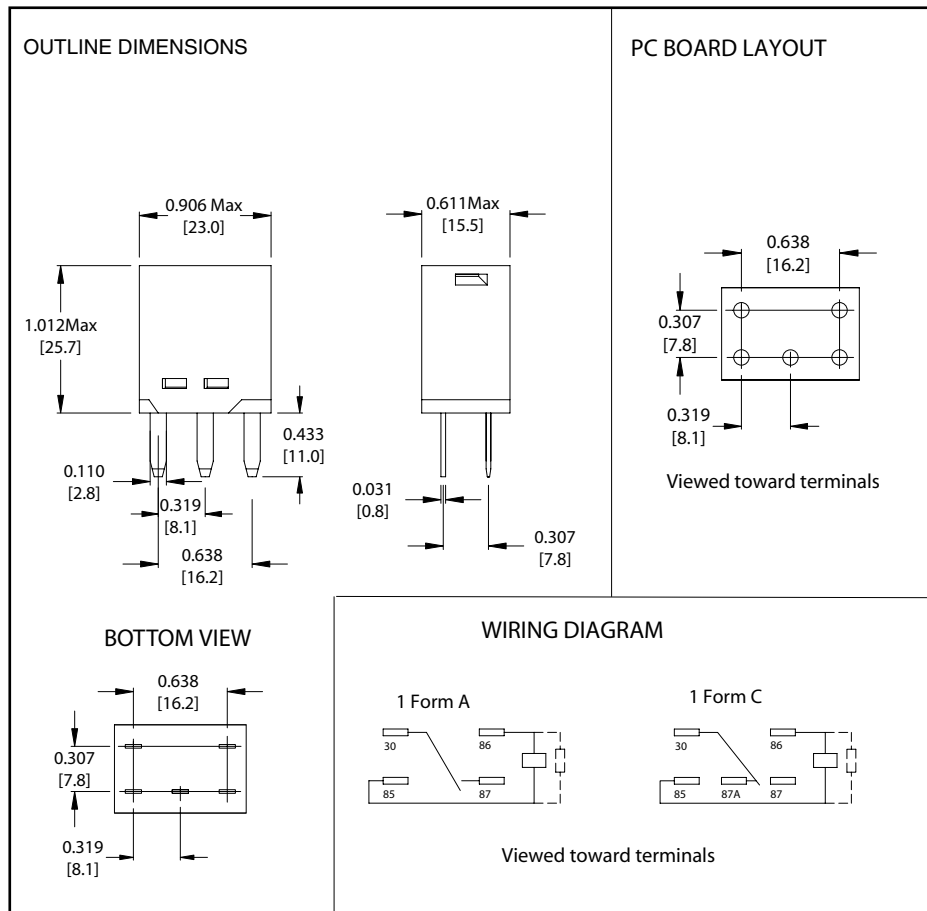
\*Add suffix "R" for a 680 ohm resistor in parallel with coil.

## RELAY ORDERING DATA

STANDARD RELAYS					
COIL SPECIFICATIONS				ORDER NUMBER*	
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance $\pm 10\%$	Form A (SPST)	Form C (SPDT)
6	3.6	7.8	27	AZ9841-1A-6D	AZ9841-1C-6D
12	7.2	15.6	109	AZ9841-1A-12D	AZ9841-1C-12D
24	14.4	31.2	436	AZ9841-1A-24D	AZ9841-1C-24D

\*Add suffix "R" for a 680 ohm resistor in parallel with coil.

## MECHANICAL DATA



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



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