

# AZ9891H

## 25 AMP SUB-MICRO TWIN H-BRIDGE AUTOMOTIVE RELAY



### FEATURES

- Up to 25 Amp switching capability in a very compact size
- Vibration and shock resistant
- Designed for power windows, door locks and wiper motors, seat adjusters, and more
- Epoxy sealed for automatic wave soldering
- ISO/TS 16949, ISO14001
- Cost effective
- Dual (Twin) H-Bridge relay

### CONTACTS

<b>Arrangement</b>	DPDT (2 Form C) (Twin) H-Bridge
<b>Ratings</b>	Resistive load:  Max. switched power: 400 W Max. switched current: 25 A Max. switched voltage: 16 VDC  Rated load: 25 A at 14 VDC, locked motor
<b>Material</b>	Silver tin oxide
<b>Resistance</b>	< 25 milliohms initially (6 V, 1 A voltage drop method)

### COIL

<b>Power</b>	
<b>At Pickup Voltage (typical)</b>	230 mW
<b>Max. Continuous Dissipation</b>	2.2 W at 20°C (68°F) ambient
<b>Temperature Rise</b>	40°C (72°F) at nominal coil voltage
<b>Max Temperature</b>	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. Specifications subject to change without notice.

### GENERAL DATA

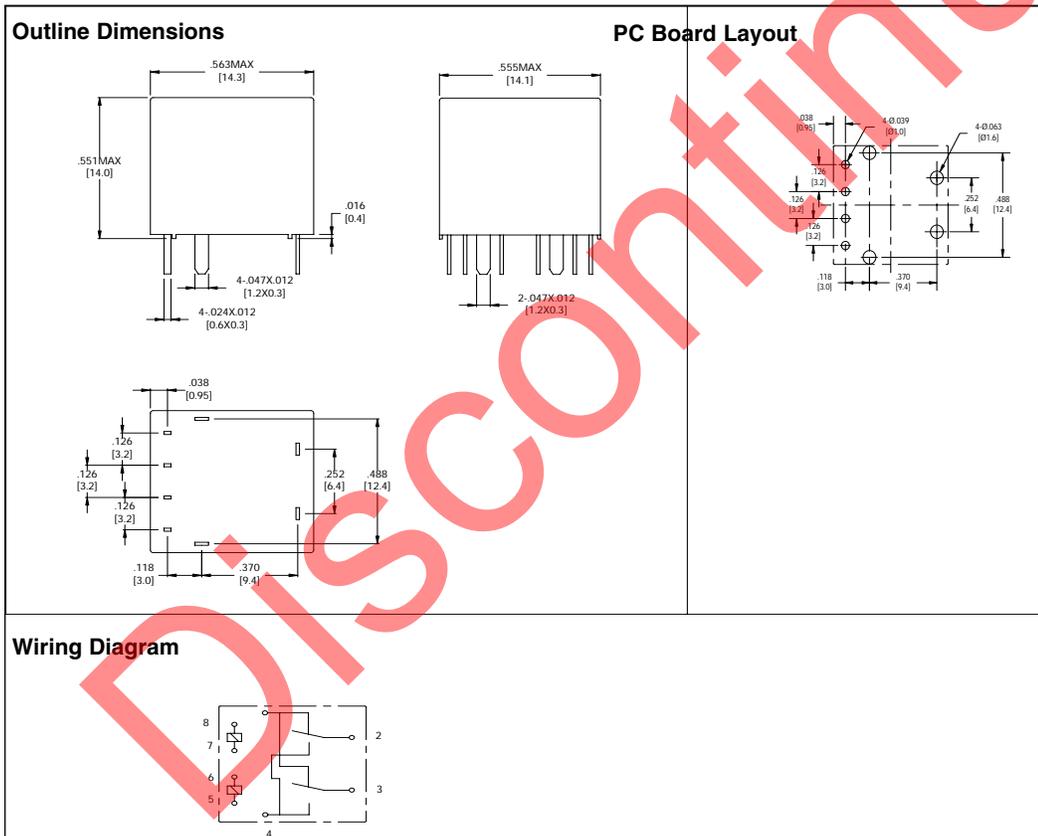
<b>Life Expectancy</b> <b>Mechanical</b> <b>Electrical</b>	Minimum operations 1 x 10 <sup>6</sup> 1 x 10 <sup>5</sup> at 25 A 14 VDC locked motor
<b>Operate Time</b>	3 ms typical at nominal coil voltage
<b>Release Time</b>	1.5 ms typical at nominal coil voltage (with no coil suppression)
<b>Dielectric Strength</b> (at sea level for 1 min.)	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 8.3% of nominal coil voltage
<b>Ambient Temperature</b> <b>Operating</b> <b>Storage</b>	At nominal coil voltage -40°C (-40°F) to 105°C (221°F) -40°C (-40°F) to 155°C (311°F)
<b>Vibration</b>	4.5g at 10-500 Hz
<b>Shock</b>	10g operational, 100g destructive
<b>Enclosure</b>	P.B.T. polyester
<b>Terminals</b>	Tinned copper alloy, P.C.
<b>Max. Solder Temp</b>	270°C (518°F)
<b>Max. Solder Time</b>	5 seconds
<b>Max. Solvent Temp</b>	80°C (176°F)
<b>Max. Immersion Time</b>	30 Seconds
<b>Weight</b>	7.5 grams

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## RELAY ORDERING DATA

STANDARD RELAYS - 2 Form C (Twin)				
COIL SPECIFICATIONS				ORDER NUMBER
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance $\pm 10\%$	2 Form C (DPDT)
12	6.5	18.0	180	AZ9891H-2C-12DE
12	7.2	20.0	225	AZ9891H-2C-12DSE

## MECHANICAL DATA



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

# AMERICAN ZETTLER, INC.

2/26/13

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This specification provides an overview of the most significant part features. Any individual applications and operating conditions are not taken into consideration. It is recommended to test the product under application conditions. Responsibility for the application remains with the customer. Proper operation and service life cannot be guaranteed if the part is operated outside the specified limits.