

# AZ9891

## 30 AMP SUB-MICRO AUTOMOTIVE RELAY

### FEATURES

- Up to 30 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, ISO9001, ISO14000
- Tested in accordance with SAE J2544
- Cost effective
- Single and Dual (Twin) relay versions



### CONTACTS

<b>Arrangement</b>	SPDT (1 Form C) DPDT (2 Form C) (Twin)
<b>Ratings</b>	Resistive load:  Max. switched power: 480 W Max. switched current: 30 A Max. switched voltage: 16 VDC  Rated load: 25 A at 16 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 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>	10 ms typical at nominal coil voltage
<b>Release Time</b>	5 ms typical at nominal coil voltage
<b>Dielectric Strength (at sea level for 1 min.)</b>	500 VAC coil to contact 500 VAC between open contacts
<b>Insulation Resistance</b>	1000 megohms min. at 20°C, 500 VDC 85% RH (at 40°C)
<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>	3 seconds
<b>Max. Solvent Temp</b>	80°C (176°F)
<b>Max. Immersion Time</b>	30 Seconds
<b>Weight</b>	4.1 grams

**AMERICAN ZETTLER, INC.**

[www.azettler.com](http://www.azettler.com)

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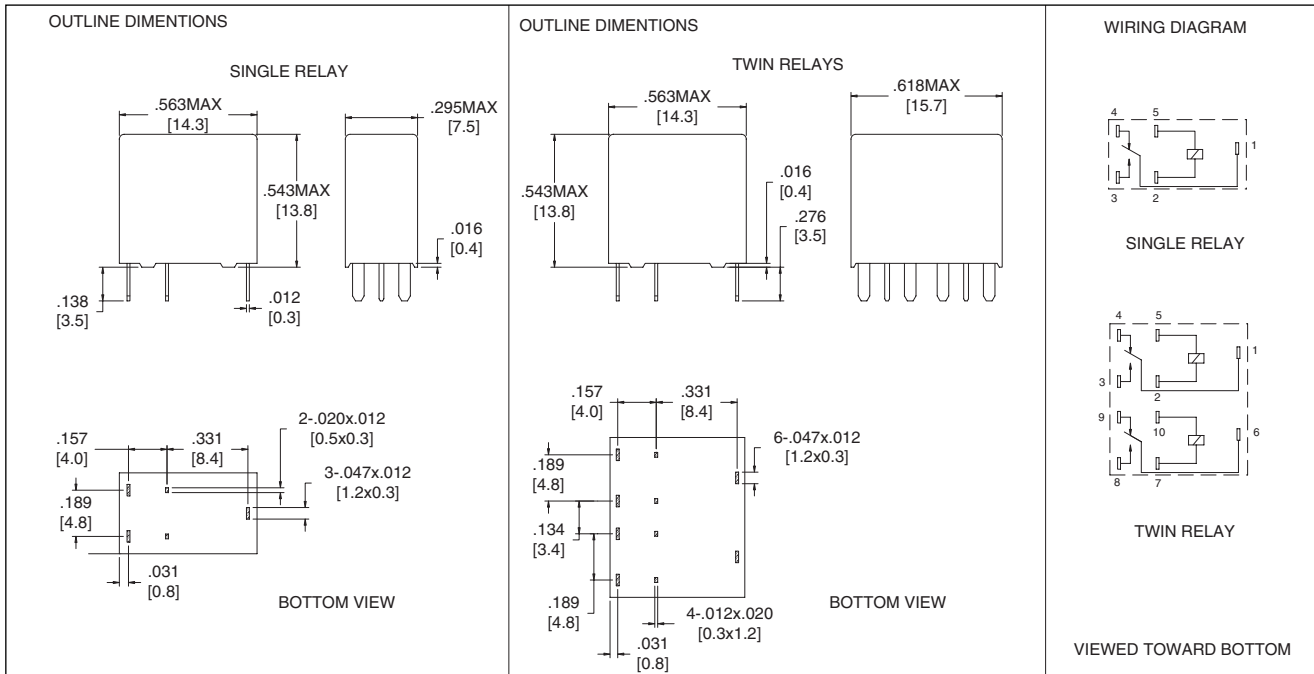
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## RELAY ORDERING DATA

STANDARD RELAYS - 1 Form C				
COIL SPECIFICATIONS				ORDER NUMBER
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance $\pm 10\%$	1 Form C (SPDT)
12	6.5	18.0	180	AZ9891-1C-12DE
12	7.2	20.0	225	AZ9891-1C-12DSE

STANDARD RELAYS - 2 Form C				
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	AZ9891-2C-12DE
12	7.2	20.0	225	AZ9891-2C-12DSE

## MECHANICAL DATA



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

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