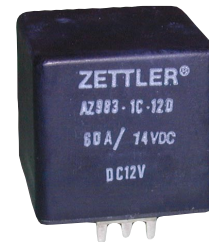


# AZ983

## 80 AMP AUTOMOTIVE RELAY

### FEATURES

- 80 Amp contact rating
- High momentary carry current
- High operating temperature (85°C)
- SPST N.O. (1 Form A), SPDT (1 Form C), SPST N.C. (1 Form B)
- PCB terminals
- Epoxy sealed version available



### CONTACTS

|                    |  |
|--------------------|--|
| <b>Arrangement</b> | SPST (N.O.) (1 Form A)<br>SPDT (1 Form C), SPST (N.C.) (1 Form B)  |
| <b>Ratings</b>     | Resistive load:<br>Max. switched power: 1120 W (SPST) Form A<br>840 W (N.O.) Form C<br>840 W (N.C.) Form C,<br>Form B<br><br>Max. switched current: 80 A (SPST) Form A<br>60 A (N.O.) Form C<br>60 A (N.C.) Form C,<br>Form B<br><br>Max. switched voltage: 30 VDC |
| <b>Material</b>    | Silver tin oxide   |
| <b>Resistance</b>  | < 50 milliohms initially<br>(24 V, 1 A voltage drop method)  |

### COIL

|                             |                                      |
|-----------------------------|--------------------------------------|
| <b>Power</b>                |                                      |
| At Pickup Voltage (typical) | 0.76 W                               |
| Max. Continuous Dissipation | 3.0 W at 20°C (68°F)                 |
| Temperature Rise            | 68°C (122°F) at nominal coil voltage |
| <b>Temperature</b>          | Max.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><br><b>Mechanical</b><br><b>Electrical</b> | Minimum operations<br>1 x 10 <sup>7</sup><br>1 x 10 <sup>5</sup> at 80 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<br>(with no coil suppression)                           |
| <b>Dielectric Strength</b><br>(at sea level for 1 min.)          | 500 Vrms coil to contact<br>500 Vrms contact to contact                              |
| <b>Insulation Resistance</b>                                     | 100 megohms min. at 500 VDC, 20°C<br>50% RH  |
| <b>Dropout</b>   | Greater than 10% of nominal coil voltage   |
| <b>Ambient Temperature</b><br><b>Operating</b><br><b>Storage</b> | -40°C (-40°F) to 85°C (185°F)<br>-40°C (-40°F) to 105°C (221°F)                      |
| <b>Vibration</b>   | 0.062" (1.5 mm) DA at 10-55 Hz   |
| <b>Shock</b>   | 10 g   |
| <b>Enclosure</b>   | P.B.T. polyester   |
| <b>Terminals</b>   | Copper alloy<br>PCB  |
| <b>Weight</b>  | 40 grams   |

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2003-06-24

# AZ983

## RELAY ORDERING DATA

| COIL SPECIFICATIONS |                  |                     |                            | ORDER NUMBER* |              |
|---------------------|------------------|---------------------|----------------------------|---------------|--------------|
| Nominal Coil VDC    | Must Operate VDC | Max. Continuous VDC | Coil Resistance $\pm 10\%$ | SPST          | SPDT         |
| 6                   | 3.9              | 7.8                 | 20                         | AZ983-1A-6D   | AZ983-1C-6D  |
| 12                  | 7.8              | 15.6                | 80                         | AZ983-1A-12D  | AZ983-1C-12D |
| 24                  | 15.6             | 31.2                | 320                        | AZ983-1A-24D  | AZ983-1C-24D |

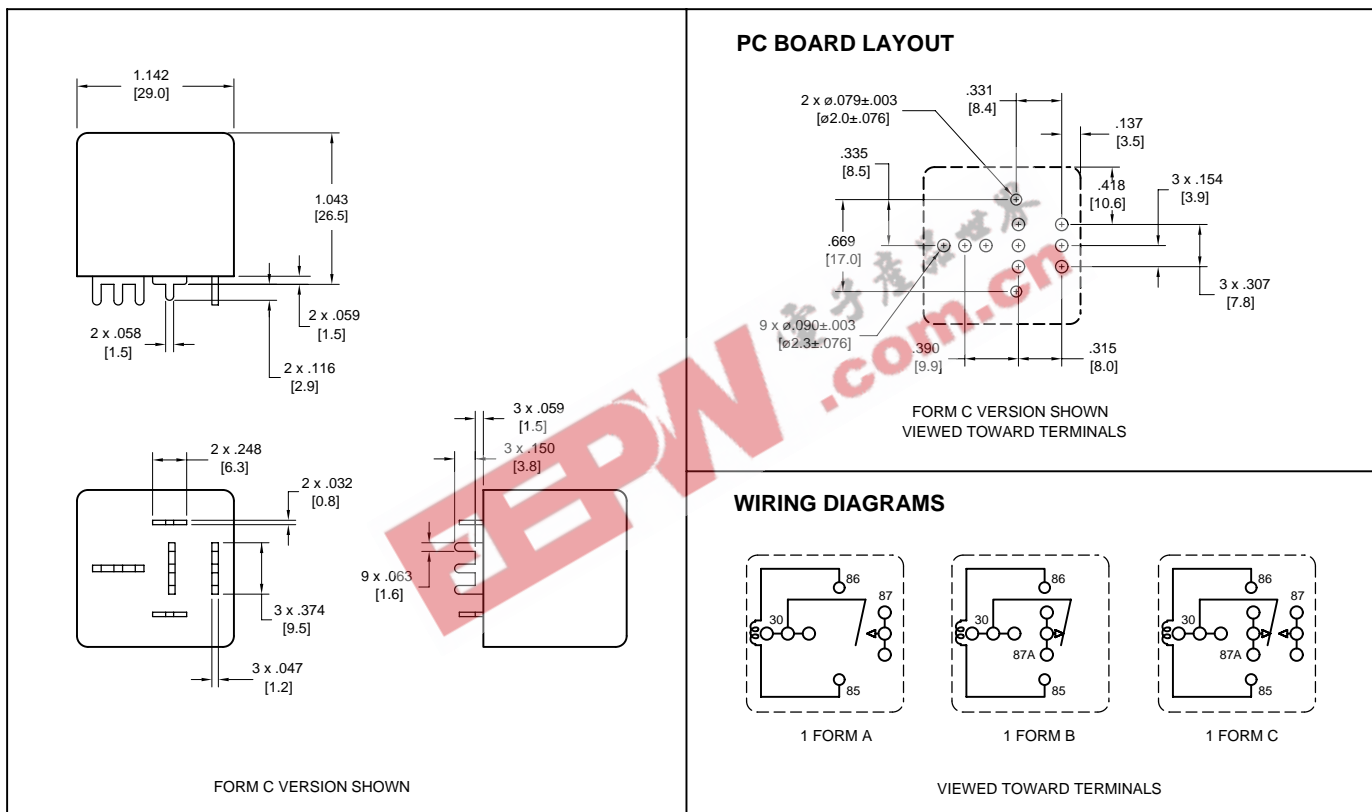
\* For SPST (N.C.) (1 Form B) relay, substitute "1B" for "1A".

Add suffix "R" for resistor in parallel with coil. Resistor values: 6V: 180  $\Omega$ , 12V: 680  $\Omega$ , 24V: 2700  $\Omega$ .

Add suffix "D" for diode across coil option (+ pole at terminal #86).

Add suffix "E" for epoxy sealed version.

## MECHANICAL DATA



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

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