### **AZ984**

# 20 AMP 280-ISO AUTOMOTIVE RELAY

#### **FEATURES**

- Up to 20 Amp switching in a compact size
- SPST (1 Form A), SPDT (1 Form C)
- · Vibration and shock resistant
- Designed for high in-rush applications (120 A)
- Coil suppression available
- ISO/TS 16949, ISO9001, ISO14000
- Tested in accordance with SAE J2544



#### **CONTACTS**

| Arrangement | SPST (1 Form A)<br>SPDT (1 Form C)  |  |  |  |  |  |
|-------------|---|--|--|--|--|--|
| Ratings     | Resistive load:  Max. switched power: 280 W Max. switched current: 20 A Max. switched voltage: 150 VDC*  Rated load: 20 A at 14 VDC (1 Form A) 20/10 A at 14 VDC (1 Form C)  * If switching voltage is greater than 30 VDC, special |  |  |  |  |  |
|             | precautions must be taken. Please contact the factory   |  |  |  |  |  |
| Material    | Silver tin oxide  |  |  |  |  |  |
| Resistance  | < 50 milliohms initially<br>(6 V, 1 A voltage drop method)  |  |  |  |  |  |

#### COIL

| Power                          |                                      |  |  |
|--------------------------------|--------------------------------------|--|--|
| At Pickup Voltage (typical)    | 534 mW                               |  |  |
| Max. Continuous<br>Dissipation | 3.8 W at 20°C (68°F) ambient         |  |  |
| Temperature Rise               | 60°C (108°F) at nominal coil voltage |  |  |
| Max Temperature                | 180°C (356°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**

| Life Expectancy<br>Mechanical<br>Electrical   | Minimum operations 1 x 10 <sup>6</sup> 1 x 10 <sup>5</sup> at 20 A 14 VDC Res.              |  |  |
|---|---|--|--|
| Operate Time (max.)                           | 4 ms max. at nominal coil voltage   |  |  |
| Release Time (max.)                           | 1.5 ms max. at nominal coil voltage (with no coil suppression)                              |  |  |
| Dielectric Strength (at sea level for 1 min.) | 500 VAC coil to contact<br>500 VAC between open contacts                                    |  |  |
| Insulation Resistance                         | 100 megohms min. at 20°C, 500 VDC 50% RH  |  |  |
| Dropout                                       | Greater than 10% of nominal coil voltage  |  |  |
| Ambient Temperature<br>Operating<br>Storage   | At nominal coil voltage<br>-40°C (-40°F) to 125°C (257°F)<br>-40°C (-40°F) to 180°C (356°F) |  |  |
| Vibration                                     | 0.062" DA at 10-55 Hz   |  |  |
| Shock   | 10 g  |  |  |
| Enclosure                                     | P.B.T. polyester  |  |  |
| Terminals                                     | Tinned copper alloy   |  |  |
| Weight  | 21 grams  |  |  |



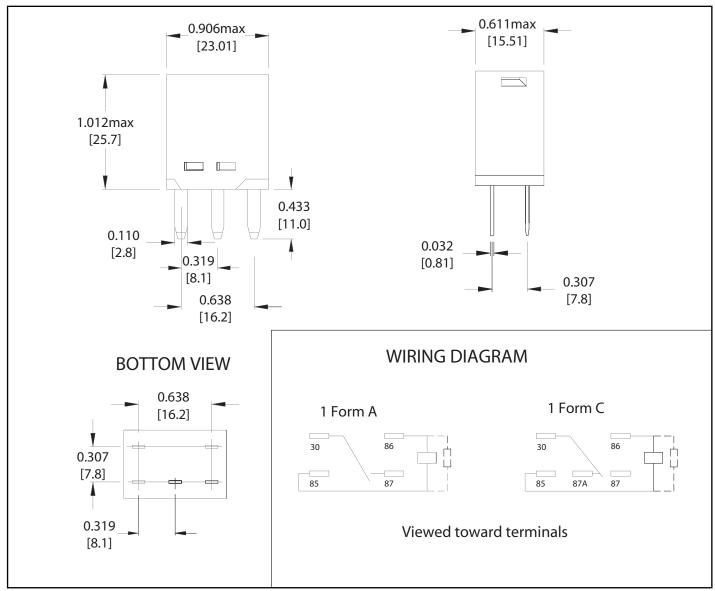
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#### **RELAY ORDERING DATA**

| STANDARD RELAYS                   |                     |                     |                          |               |               |  |  |  |
|-----------------------------------|---------------------|---------------------|--------------------------|---------------|---------------|--|--|--|
| COIL SPECIFICATIONS ORDER NUMBER* |                     |                     |                          |               |               |  |  |  |
| Nominal Coil<br>VDC               | Must Operate<br>VDC | Max. Continuous VDC | Coil Resistance<br>± 10% | Form A (SPST) | Form C (SPDT) |  |  |  |
| 12                                | 7.2                 | 20.4                | 109                      | AZ984-1A-12D  | AZ984-1C-12D  |  |  |  |

<sup>\*</sup>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"

