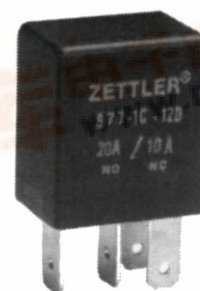


# AZ977

## 20 AMP MINIATURE POWER RELAY FOR AUTOMOTIVE USE

### FEATURES

- Low Cost
- Up to 20 Amp switching capability in a compact size
- Coils to 24 VDC
- Small footprint
- 1 Form A and C contacts available
- Vibration and shock resistant
- Designed for high in-rush applications



### CONTACTS

Arrangement	SPST (1 Form A) 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  * If switching voltage is greater than 30 VDC, special precautions must be taken. Please contact the factory.
Minimum Load	5 VDC, 0.1 A
Material	AgSnO <sub>2</sub>
Resistance	< 50 milliohms initially (6 V, 1 A voltage drop method)

### COIL

Power	
At Pickup Voltage (typical)	534 mW (Standard) 432 mW (Sensitive)
Max. Continuous Dissipation	2.6 W at 20°C (68°F) ambient
Temperature Rise	60°C (108°F) at nominal coil voltage
Max Temperature	155°C (311°F)

### GENERAL DATA

Life Expectancy Mechanical Electrical	Minimum operations 1 x 10 <sup>6</sup> 1 x 10 <sup>5</sup> at rated load
Operate Time (max.)	10 ms max. at nominal coil voltage
Release Time (max.)	7 ms max. at nominal coil voltage (with no coil suppression)
Dielectric Strength (at sea level for 1 min.)	500 VDC coil to contact 500 VDC between open contacts
Insulation Resistance	100 megohms min. at 20°C, 500 VDC 50% RH
Dropout	Greater than 8.3% of nominal coil voltage
Ambient Temperature Operating Storage	At nominal coil voltage -40°C (-40°F) to 115°C (239°F) -40°C (-40°F) to 155°C (311°F)
Vibration	0.062" DA at 10-55 Hz
Shock	10 g
Enclosure	P.B.T. polyester
Terminals	Tinned copper alloy, P.C.
Weight	16 grams

### 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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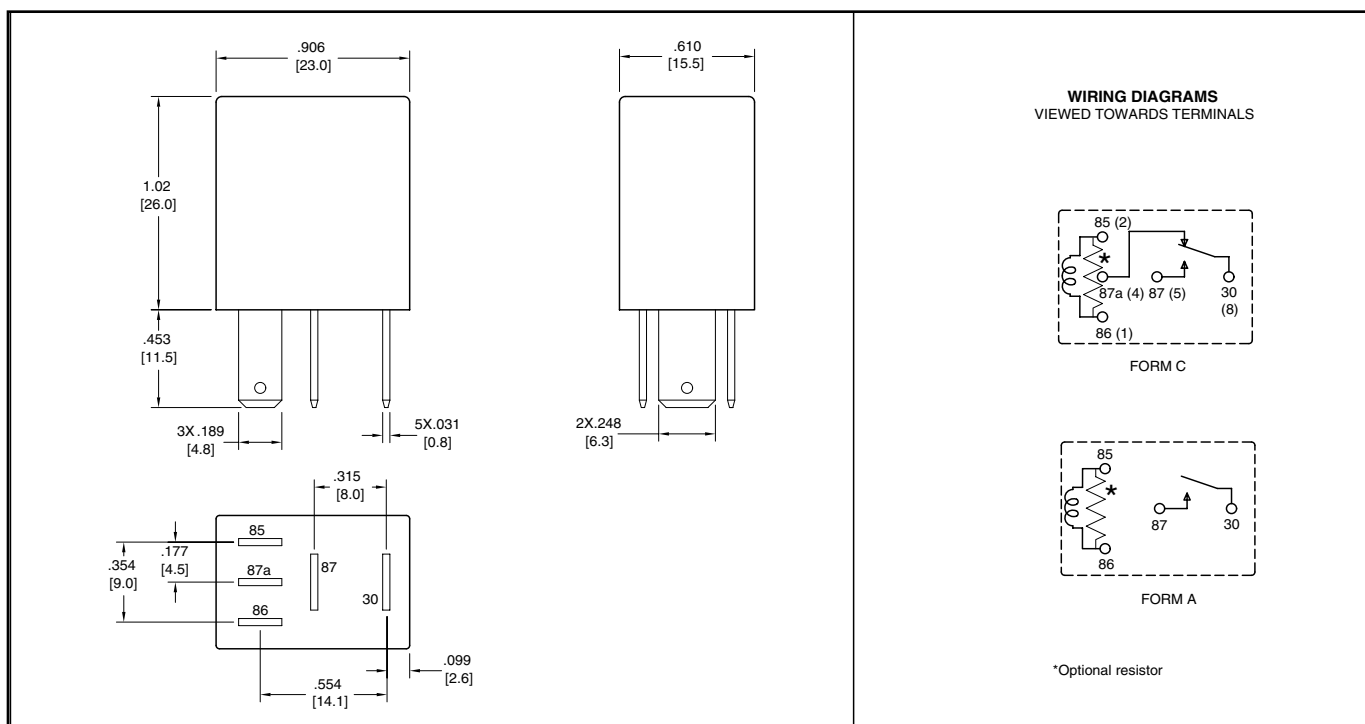
## RELAY ORDERING DATA

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	25	AZ977-1A-6D	AZ977-1C-6D
12	7.2	15.6	97	AZ977-1A-12D	AZ977-1C-12D
24	14.4	31.2	384	AZ977-1A-24D	AZ977-1C-24D

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	32	AZ977-1A-6DS	AZ977-1C-6DS
12	7.2	15.6	123	AZ977-1A-12DS	AZ977-1C-12DS
24	14.4	31.2	483	AZ977-1A-24DS	AZ977-1C-24DS

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

## MECHANICAL DATA



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