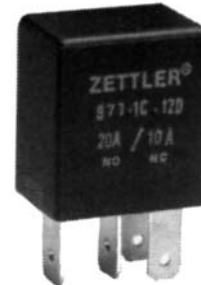


AZ977

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* * Note: If switching voltage is greater than 30 VDC, special precautions must be taken. Please contact the factory. Rated load: 20 A at 14 VDC
Material	Silver tin oxide
Resistance	< 50 milliohms initially

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 ⁶ 1 x 10 ⁵ at 20 A 14 VDC Res.
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.)	1000 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 85°C (185°F) -40°C (-40°F) to 105°C (221°F)
Vibration	0.062" (1.5 mm) DA at 10-55 Hz
Shock	10 g
Enclosure	P.B.T. polyester
Terminals	Quick connects Note: Allow suitable slack on leads when wiring and do not subject the terminals to excessive force.
Weight	18.5 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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This product specification to be used only together with the application notes
which can be downloaded from <http://www.ZETTLERelectronics.com/pdfs/relais/ApplicationNotes.pdf>

2011-07-28

AZ977

RELAY ORDERING DATA

STANDARD RELAYS				ORDER NUMBER*	
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

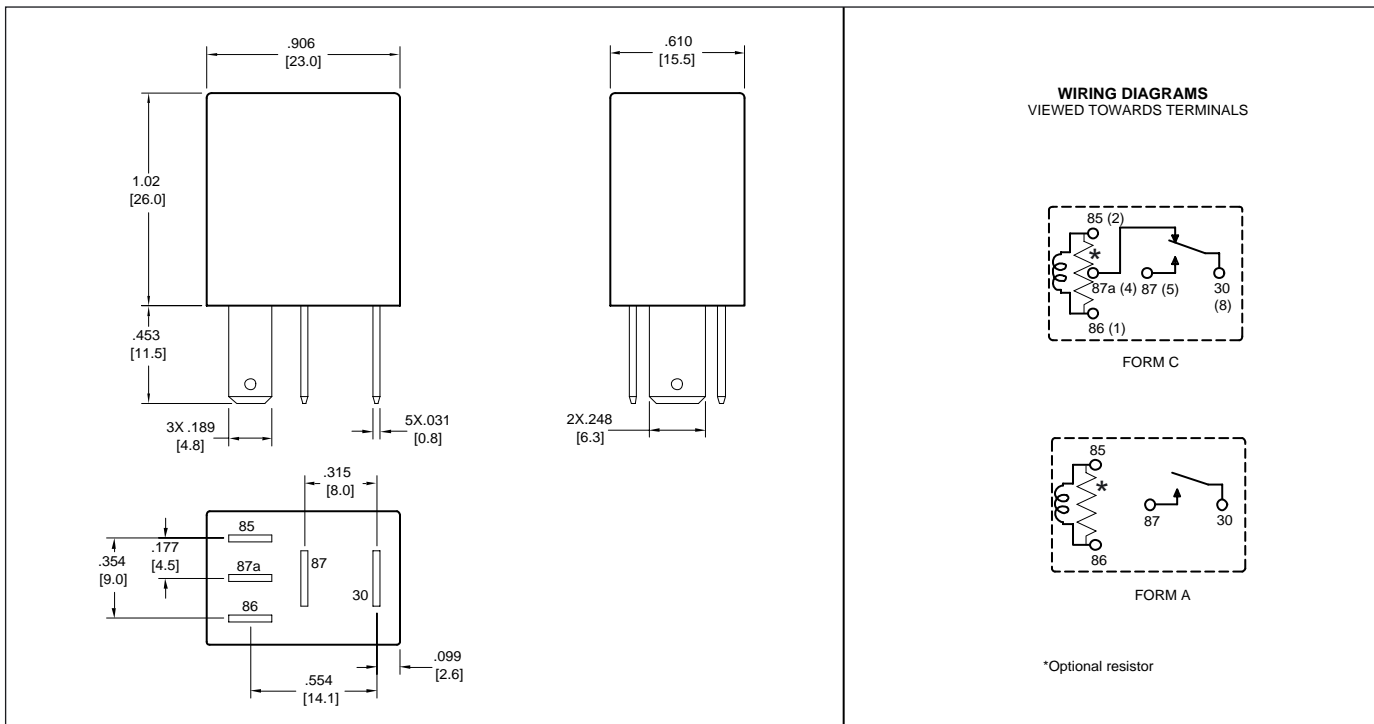
SENSITIVE RELAYS				ORDER NUMBER*	
COIL SPECIFICATIONS				ORDER NUMBER*	
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance $\pm 10\%$	Form A (SPST)	Form C (SPDT)
6	3.6	7.8	32	AZ977-1A-6DS	AZ977-1C-6DS
12	7.2	15.6	123	AZ977-1A-12DS	AZ977-1C-12DS
24	14.4	31.2	483	AZ977-1A-24DS	AZ977-1C-24DS

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

Add suffix "D" for diode across coil option (+ pole of power supply 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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