

# AZ9801

## 70 AMP SUPER-ISO AUTOMOTIVE RELAY

### FEATURES

- 70 Amp contact rating – “Super ISO”
- High momentary carry current (500 A)
- High operating temperature (125°C)
- SPST (1 Form A)
- Quick connect terminals
- ISO/TS 16949, ISO9001, ISO14000
- Tested in accordance with SAE J2544
- Epoxy sealed version available



### CONTACTS

<b>Arrangement</b>	SPST (1 Form A)
<b>Ratings</b>	Resistive load: Max. switched power: 980 W Max. switched current: 70 A Max. switched voltage: 50 VDC
<b>Material</b>	Silver tin oxide
<b>Resistance</b>	< 50 milliohms initially (24 V, 1 A voltage drop method)

### COIL

<b>Power</b>	
At Pickup Voltage (typical)	0.68 W
Max. Continuous Dissipation	4.0 W at 20°C (68°F)
Temperature Rise	56°C (101°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> Mechanical Electrical	Minimum operations 1 x 10 <sup>7</sup> 1 x 10 <sup>5</sup> at 70 A 14 VDC Res.
<b>Operate Time (typical)</b>	10 ms at nominal coil voltage
<b>Release Time (typical)</b>	7 ms at nominal coil voltage (with no coil suppression)
<b>Dielectric Strength (at sea level for 1 min.)</b>	500 Vrms coil to contact 500 Vrms contact to contact
<b>Insulation Resistance</b>	100 megohms min. at 500 VDC, 20°C 50% RH
<b>Dropout</b>	Greater than 10% of nominal coil voltage
<b>Ambient Temperature</b> Operating Storage	-40°C (-40°F) to 125°C (257°F) -40°C (-40°F) to 155°C (311°F)
<b>Vibration</b>	18g 10-500 Hz
<b>Shock</b>	30 g
<b>Enclosure</b>	P.B.T. polyester
<b>Terminals</b>	Copper alloy Quick Connect Note: Allow suitable slack on leads when wiring, and do not subject the terminals to excessive force.
<b>Weight</b>	40 grams



**AMERICAN ZETTLER, INC.**

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

75 COLUMBIA • ALISO VIEJO, CA 92656 • PHONE: (949) 831-5000 • FAX: (949) 831-8642 • E-MAIL: SALES@AZETTLER.COM

# AZ9801

## RELAY ORDERING DATA

COIL SPECIFICATIONS – STANDARD				
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance ± 10%	ORDER NUMBER*
6	3.2	9	22.5	AZ9801-1A-6D
12	7.2	18	90	AZ9801-1A-12D
24	14.4	37	360	AZ9801-1A-24D
COIL SPECIFICATIONS – HI COIL POWER				
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance ± 10%	ORDER NUMBER*
6	3.2	7	18	AZ9801-1A-6DH
12	7.2	14	72	AZ9801-1A-12DH
24	14.4	28	288	AZ9801-1A-24DH

\* For parallel resistor add "R" to end of part number. Parallel resistor values: 180W for 12 V coil and 2700W for 24 V coil. Add suffix "E" for epoxy sealed version.

## HARDWARE ORDERING DATA

DESCRIPTION	ORDER NUMBER
Socket	ST980

## MECHANICAL DATA

Outline Dimensions	Wiring Diagrams
<p>Outline Dimensions</p> <p>1.03 [26.2]            .980 [24.9]            .705 [17.9]            .327 [8.3]            .561 [16.8]            2x.031 [.8]            2x.047 [1.2]            30            85            87            86            1.03 [26.2]            3x.598 [15.2]            2x.441 [11.2]            2x.374 [9.5]            2x.248 [6.3]</p>	<p>SPST (N.O.)</p> <p>VIEWED TOWARD TERMINALS</p>
<p>Socket, SPST - ST980</p> <p>.761 [19.33]            .206 [5.23]            .292 [7.43]            .697 [17.72]            .319 [8.12]            .632 [16.05]            .729 [18.53]            .967 [24.56]            .903 [22.94]            1.265 [32.13]            1.147 [29.12]</p>	<p>Note: Recommended socket hardware:</p> <p>Coil Terminals: Amp 42281-1 (1/4") 14-18 Awg            Contact Terminals: Amp 280756-4 (3/8") 10-12 Awg</p>

Dimensions in inches with metric equivalents in parentheses. Tolerance: ± .010"



**AMERICAN ZETTLER, INC.**

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

75 COLUMBIA • ALISO VIEJO, CA 92656 • PHONE: (949) 831-5000 • FAX: (949) 831-8642 • E-MAIL: SALES@AZETTLER.COM