

# AZ2501L

## 60 AMP LATCHING POWER RELAY

### FEATURES

- 60 Amp switching
- Heavy loads to 15000 VA
- Inrush current 500A/2ms max.
- 4 kV dielectric
- Manual switch standard
- UL, CUR file E44211



### CONTACTS

<b>Arrangement</b>	SPST (1 Form A) (1 Form B)
<b>Ratings</b>	Resistive load: Max. switched power: 15000 VA Max. switched current: 60 A Max. switched voltage: 440 VAC Max. continuous current: 20 A
<b>UL/CUR</b>	20 A at 277 VAC, Resistive, 85°C, 100k cycles 20 A at 30 VDC, Resistive, 85°C, 100k cycles 60 A at 250 VAC, General use, 85°C 30k cycles 5000 W at 250 VAC, Tungsten, 30k cycles 24 FLA/ 144 LRA at 120 VAC Definite Purpose, 30K 20 A at 277 VAC, Standard Ballast, 30k cycles 16 A at 277 VAC, Electronic Ballast, 30k cycles
<b>Material</b>	Silver tin oxide
<b>Resistance</b>	< 50 milliohms initially (24 V, 1 A voltage drop method)

### COIL

<b>Power At Pickup Voltage (typical)</b>	.92 W single coil 1.8 W dual coil
<b>Temperature</b>	

### 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> <b>Mechanical</b> <b>Electrical</b>	Minimum operations 1 x 10 <sup>6</sup> 3 x 10 <sup>4</sup> at rated load
<b>Set and Reset</b>	
<b>Pulse Duration</b>	50 ms minimum
<b>Set Time (typical)</b>	15 ms at nominal coil voltage
<b>Reset Time (typical)</b>	15 ms at nominal coil voltage
<b>Dielectric Strength (at sea level for 1 min.)</b>	4000 Vrms coil to contact 1500 Vrms between open contacts
<b>Insulation Resistance</b>	1000 megohms min. at 20°C, 500 VDC, 50% RH
<b>Creepage Distance</b>	8 mm
<b>Ambient Temperature Operating</b>	At nominal coil voltage -40°C (-40°F) to 85°C (158°F)
<b>Vibration</b>	0.059" DA at 10–55 Hz
<b>Shock</b> <b>Operating</b> <b>Non-Operating</b>	10 g 100 g
<b>Enclosure</b>	P.B.T. polyester
<b>Terminals</b>	Tinned copper alloy
<b>Max. Solder Temp.</b>	270°C (518°F)
<b>Max. Solder Time</b>	5 seconds
<b>Weight</b>	32 grams

# AZ2501L

## RELAY ORDERING DATA

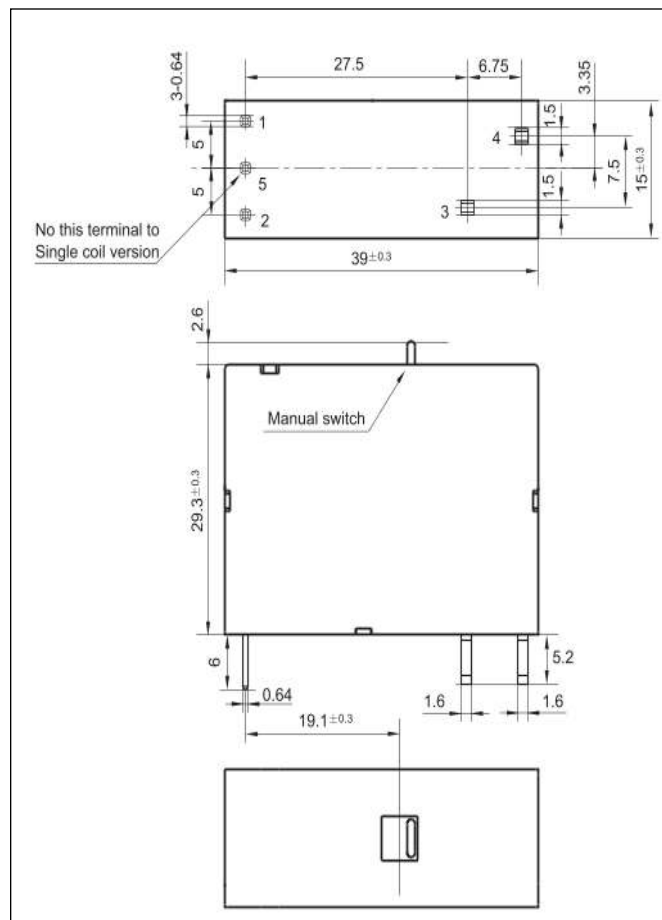
COIL SPECIFICATIONS -Standard Single Coil				ORDER NUMBER*	
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC [1]	Coil Resistance $\pm 10\%$	1 Form A	1 Form B
6	4.8	7.8	22	AZ2501LP1-1A-6D	AZ2501LP1-1B-6D
12	9.6	15.6	100	AZ2501LP1-1A-12D	AZ2501LP1-1B-12D
24	19.2	31.2	360	AZ2501LP1-1A-24D	AZ2501LP1-1B-24D
48	38.4	62.4	1600	AZ2501LP1-1A-48D	AZ2501LP1-1B-48D

COIL SPECIFICATIONS -Standard Dual Coil				ORDER NUMBER*	
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC [1]	Coil Resistance $\pm 10\%$	1 Form A	1 Form B
6	4.8	7.8	11 + 11	AZ2501LP2-1A-6D	AZ2501LP2-1B-6D
12	9.6	15.6	50 + 50	AZ2501LP2-1A-12D	AZ2501LP2-1B-12D
24	19.2	31.2	180 + 180	AZ2501LP2-1A-24D	AZ2501LP2-1B-24D
48	38.4	62.4	800 + 800	AZ2501LP2-1A-48D	AZ2501LP2-1B-48D

\* For reverse polarity coil add suffix "R". **NOTE:** [1] Max. continuous voltage should not be applied for more than 30 seconds

(Bottom View)

## MECHANICAL DATA



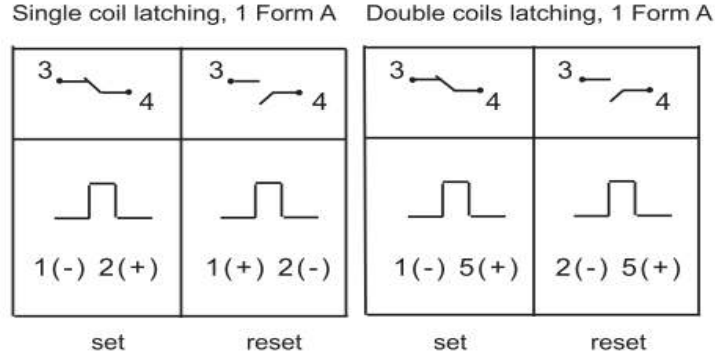
If no tolerance is shown: outline dimension  $\leq 1$ mm, tolerance is  $\pm 0.2$ mm; outline dimension  $> 1$ mm and  $\leq 5$ mm, tolerance is  $\pm 0.3$ mm; outline dimension  $> 5$ mm, tolerance is  $\pm 0.4$ mm.

# AMERICAN ZETTLER, INC.

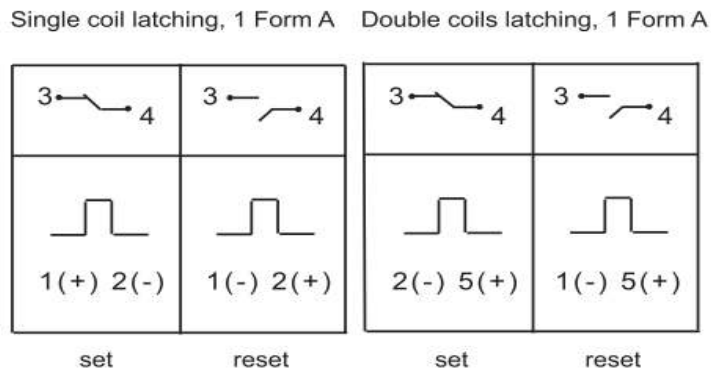
8/07/17

# AZ2501L

Positive polarity



Negative polarity



NOTE:

Regarding Standard Polarity type:

1. "Single Coil Latching Version"

- (1) After energizing 1 (-) and 2 (+), 50ms pulse, terminal 3 and 4 is connected.
- (2) After energizing 2 (-) and 1 (+), 50ms pulse, terminal 3 and 4 is disconnected.

2. "Double Coil Latching Version"

- (1) After energizing 5 (+) and 1 (-), 50ms pulse, terminal 3 and 4 is connected.
- (2) After energizing 5 (+) and 2 (-), 50ms pulse, terminal 3 and 4 is disconnected.

Regarding Reverse Polarity type:

1. "Single Coil Latching Version"

- (1) After energizing 1 (+) and 2 (-), 50ms pulse, terminal 3 and 4 is connected.
- (2) After energizing 2 (+) and 1 (-), 50ms pulse, terminal 3 and 4 is disconnected.

2. "Double Coil Latching Version"

- (1) After energizing 5 (+) and 2 (-), 50ms pulse, terminal 3 and 4 is connected.
- (2) After energizing 5 (+) and 1 (-), 50ms pulse, terminal 3 and 4 is disconnected.

**AMERICAN ZETTLER, INC.**

8/07/17