

AZ21501P

50 AMP MINIATURE LATCHING POWER RELAY

FEATURES

- 1 Form A, B and C contacts available
- Single coil latching
- Lower cost 30A & 40A contacts available
- Class F high temperature standard
- Epoxy sealed versions available
- UL, CUR E44211



CONTACTS

Arrangement	SPST (1 Form A, or B) SPDT (1 Form C)
Ratings	Resistive load: Max. switched power: 1200 W or 13850 VA Max. switched current: 50 A Max. switched voltage: 277 VAC, 110 VDC
UL, CUR	30A / 40A / 50A at 277VAC, 6k cycles, 25°C
Material	silver tin oxide
Resistance	< 50 milliohms initially (24 V, 1 A voltage drop method)

COIL

Power At Pickup Voltage (typical)	30A, 40A : 576mW 50A : 960mW
Max. Temperature	Max. 155°C (311°F) Class F

GENERAL DATA

Life Expectancy Mechanical Electrical	Minimum operations 1 x 10 ⁶ See contact ratings.
Set Time	15ms
Reset Time	15ms
Dielectric Strength (at sea level for 1 min.)	1500 Vrms contact to contact 2500 Vrms contact to coil
Insulation Resistance	1000 megohms min. at 20°C, 500 VDC 50% RH
Ambient Temperature Operating	-40°C (-40°F) to 85°C (185°F)
Vibration	0.059" DA at 10–55 Hz
Shock	20 g
Enclosure	P.B.T. polyester
Terminals	Tinned copper alloy, P.C.,
Max. Solder Temp.	270°C (518°F)
Max. Solder Time	5 seconds
Max. Solvent Temp.	80°C (176°F)
Max. Immersion Time	30 seconds
Weight	28 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

COIL SPECIFICATIONS – SINGLE COIL LATCHING					ORDER NUMBER*
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance $\pm 10\%$		
			30A, 40A	50A	
5	4.0	6.0	28	16.7	AZ21501P-1A-5D
12	9.6	14.4	160	96	AZ21501P-1A-12D
24	19.2	28.8	640	384	AZ21501P-1A-24D
48	38.4	57.6	2560	1536	AZ21501P-1A-48D

*Substitute "-1B" or "-1C" in place of "-1A" for 1 Form B or 1 Form C respectively. For 30A version, add "H" after "-1A", "-1B", or "-1C". For 40A version, add "J" after "-1A", "-1B", or "-1C". Substitute "DE" in place of "D" for epoxy sealed version.

MECHANICAL DATA

Outline Dimensions

0.146 \pm 0.020 max.
(3.7 \pm 0.5) max.

0.020 (0.5)

3-0.016x0.0318 (0.4)x(0.8)

2-0.031x0.059 max.
(0.80x1.5) max.

2-0.047x0.047 max.
(1.20x0.80) max.

0.807 max.
20.5 max.

0.5 (12.7)

0.094 (2.4)

1.087 max. (27.6) max.

1.004 (25.5)

0.787 (20)

0.689 (17.5)

1.279 max. (32.5) max.

0.209 (5.3)

PC Board Layout

0.606 (15.4)

0.303 (7.7)

0.15 (3.8)

0.551 (14)

3- ϕ 0.098 ϕ (2.5)

2- ϕ (1.1) ϕ 0.043

0.701 (17.8)

0.1 (2.54)

Mounting (Bottom view)

Wiring Diagram

Form 1A Form 1B Form 1C

Tolerance: $\pm .010$ "