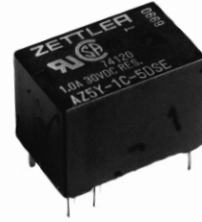


SUBMINIATURE PC BOARD RELAY

FEATURES

- Subminiature size for high density packaging
- Coil sensitivity to 100mW
- Extremely low cost
- Coils to 24VDC
- Epoxy sealed for automatic wave soldering
- 1 Amp and 2 Amp contacts
- Life expectancy to 10 million operations
- Meets FCC Part 68.302 1500V lightning surge
- Meets FCC Part 68.304 1000V dielectric
- UL file E43203; CSA file 74120



CONTACTS

Arrangement	SPDT (1 Form C) Welded crossbar construction
Ratings	Resistive load:
Light Duty	Max. switched power: 30W or 60VA Max. switched current: 1A Max. switched voltage: 150VDC or 300VAC UL Rating: 1A at 30VDC 0.5A at 120VAC
Heavy Duty	Max. switched power: 60W or 120VA Max. switched current: 2A Max. switched voltage: 150VDC or 300VAC UL Rating: 2A at 30VDC 1A at 120VAC
Material	
Light Duty	Silver palladium, gold clad
Heavy Duty	Silver nickel
Resistance	< 50 milliohms initially

COIL

Power At Pickup Voltage (typical)	Standard coil: 220mW Sensitive coil: 100mW
Max. Continuous Dissipation	1.1W at 20°C (68°F) ambient 0.8W at 40°C (104°F) ambient
Temperature Rise	Standard: 40°C (72°F) at nominal coil voltage Sensitive: 22°C (40°F) at nominal voltage
Temperature	Max. 105°C (221°F)

NOTES

<ol style="list-style-type: none"> 1. All values at 20°C (68°F). 2. Relay may pull in with less than "Must Operate" value. 3. Other coil resistances and sensitivities available upon request. 4. Specifications subject to change without notice.
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GENERAL DATA

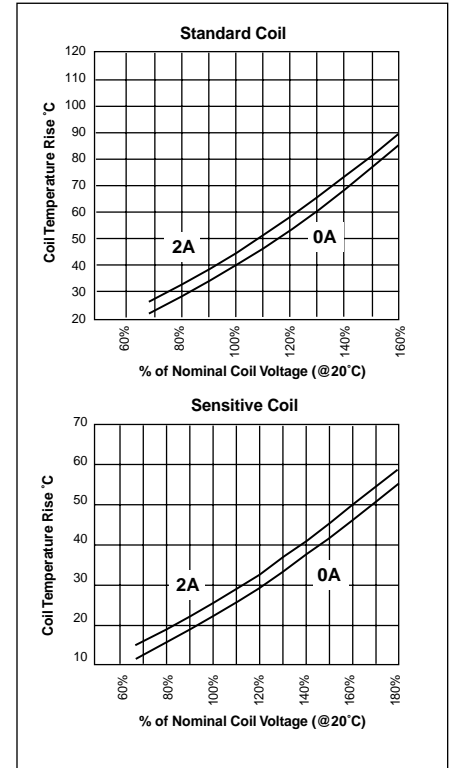
Life Expectancy	Minimum operations 10 million operations
Mechanical	Standard Duty: 5 x 10 ⁵ at 1A, 30VDC Res. 4 x 10 ⁵ at 0.5A, 120VAC Res.
Electrical	Heavy Duty: 2 x 10 ⁵ at 2A, 30VDC Res. 2 x 10 ⁵ at 1A, 120VAC Res.
Operate Time (typical)	Standard: 3ms at nominal coil voltage Sensitive: 5ms at nominal coil voltage
Release Time (typical)	1ms at nominal coil voltage (with no coil suppression)
Capacitance	Coil to contact: 3.0pF Contact to contact: 3.0pF
Bounce (typical)	At 10mA contact current 2ms at operate 8ms at release
Dielectric Strength (at sea level for 1 min.)	1250Vrms coil to contact 500Vrms between open contacts Meets FCC Part 68.302 1500V lightning surge Meets FCC Part 68.304 1000V dielectric
Insulation Resistance	100 megohms min. at 20°C, 500VDC, 50% RH
Dropout	Greater than 10% of nominal coil voltage
Ambient Temperature Operating	At nominal coil voltage Standard: -25°C (-13°F) to 60°C (140°F) Sensitive: -25°C (-13°F) to 75°C (167°F)
Storage	Both: -25°C (-13°F) to 105°C (221°F)
Vibration	0.062" DA at 10–55 Hz
Shock	Standard: 10g Sensitive: 6g
Enclosure	P.B.T. polyester
Terminals	Tinned copper alloy
Max. Solder Temp.	270°C (518°F)
Max. Solder Time	5 seconds
Max. Immersion Time	30 seconds
Weight	3.5 grams

AZ5

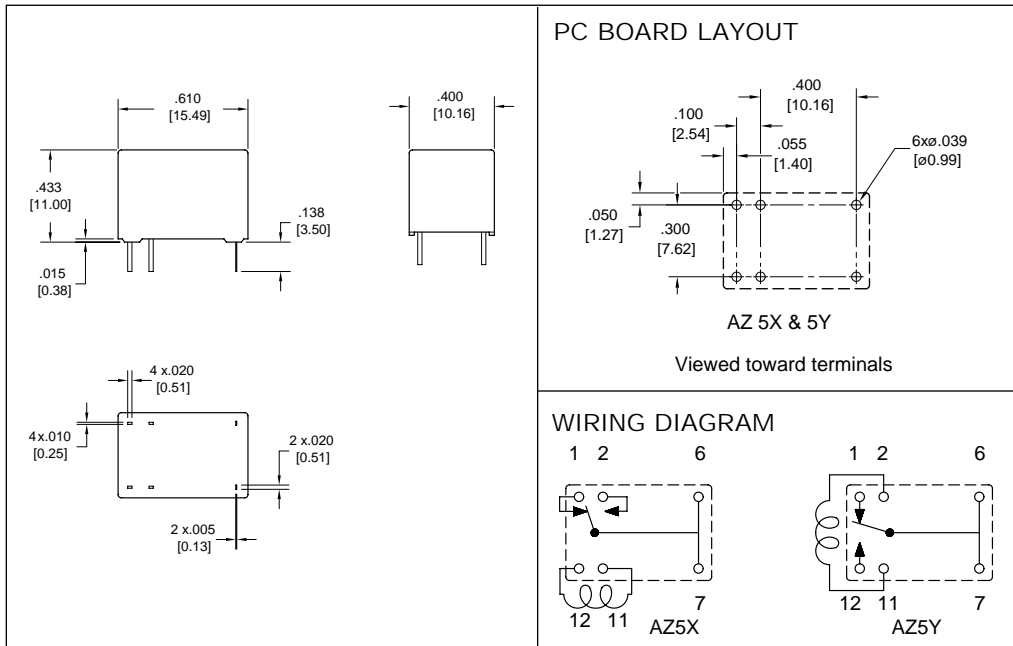
RELAY ORDERING DATA

STANDARD RELAYS: Light Duty Type					
COIL SPECIFICATIONS				ORDER NUMBER	
Nominal Coil VDC	Max. Continuous VDC	Coil Resistance $\pm 10\%$	Must Operate VDC	AZ5X Footprint	AZ5Y Footprint
5	6.8	56	3.5	AZ5X-1C-5DE	AZ5Y-1C-5DE
6	8.1	80	4.2	AZ5X-1C-6DE	AZ5Y-1C-6DE
9	12.2	180	6.3	AZ5X-1C-9DE	AZ5Y-1C-9DE
12	16.2	320	8.4	AZ5X-1C-12DE	AZ5Y-1C-12DE
24	32.4	1,280	16.8	AZ5X-1C-24DE	AZ5Y-1C-24DE
SENSITIVE RELAYS: Light Duty Type					
COIL SPECIFICATIONS				ORDER NUMBER	
Nominal Coil VDC	Max. Continuous VDC	Coil Resistance $\pm 10\%$	Must Operate VDC	AZ5X Footprint	AZ5Y Footprint
5	10.0	120	3.5	AZ5X-1C-5DSE	AZ5Y-1C-5DSE
6	12.0	180	4.2	AZ5X-1C-6DSE	AZ5Y-1C-6DSE
9	18.0	405	6.3	AZ5X-1C-9DSE	AZ5Y-1C-9DSE
12	24.0	700	8.4	AZ5X-1C-12DSE	AZ5Y-1C-12DSE
24	48.0	2,800	16.8	AZ5X-1C-24DSE	AZ5Y-1C-24DSE
STANDARD RELAYS: Heavy Duty Type					
COIL SPECIFICATIONS				ORDER NUMBER	
Nominal Coil VDC	Max. Continuous VDC	Coil Resistance $\pm 10\%$	Must Operate VDC	AZ5X Footprint	AZ5Y Footprint
5	6.8	56	3.5	AZ5X-1CH-5DE	AZ5Y-1CH-5DE
6	8.1	80	4.2	AZ5X-1CH-6DE	AZ5Y-1CH-6DE
9	12.2	180	6.3	AZ5X-1CH-9DE	AZ5Y-1CH-9DE
12	16.2	320	8.4	AZ5X-1CH-12DE	AZ5Y-1CH-12DE
24	32.4	1,280	16.8	AZ5X-1CH-24DE	AZ5Y-1CH-24DE

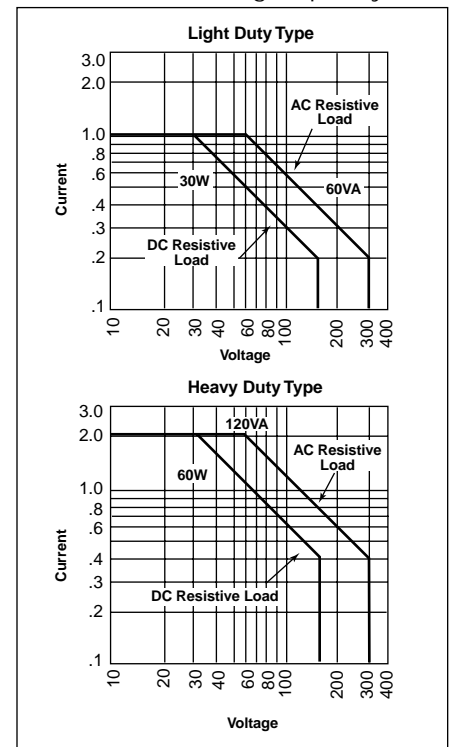
Coil Temperature Rise



MECHANICAL DATA



Maximum Switching Capacity



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

AMERICAN ZETTLER, INC.

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