

AZ951/AZ952

SUBMINIATURE POWER RELAY

FEATURES

- Subminiature size for high density packaging
- Coil sensitivity to 116 mW
- Extremely low cost
- Coils to 24 VDC
- Epoxy sealed for automatic wave soldering
- 1 Amp, 3 Amp & 5 Amp contacts
- Life expectancy to 10 million operations
- UL, CUR file E43203



CONTACTS

Arrangement	SPDT (1 Form C)
Ratings	Resistive load:
Light Duty	Max. switched power: 30 W or 125 VA Max. switched current: 1 A Max. switched voltage: 150 VDC or 300 VAC UL Rating: 1 A at 30 VDC 1 A at 125 VAC
Medium Duty	Max. switched power: 90 W or 375 VA Max. switched current: 3 A Max. switched voltage: 150 VDC or 300 VAC UL Rating: 3 A at 30 VDC 3 A at 125 VAC
Heavy Duty	Max. switched power: 150 W or 625 VA Max. switched current: 5 A Max. switched voltage: 150 VDC or 300 VAC UL Rating: 5 A at 30 VDC 5 A at 125 VAC 270 VA, 120 VAC Pilot Duty N.O. 30k cycles, N.C. 6k cycles
Material	Light and Medium Duty: Silver, gold plated Heavy Duty: Silver nickel gold plated
Resistance	< 100 milliohms initially

COIL

Power	
At Pickup Voltage (typical)	Standard Coil: 253 mW Sensitive coil: 116 mW
Max Continuous Dissipation	0.8 W at 20°C (68°F) ambient 0.6 W at 40°C (104°F) ambient
Temperature Rise	At nominal coil voltage: Standard: 54°C (97°F) Sensitive: 30°C (54°F)
Max. Temperature	105°C (221°F)

GENERAL DATA

Life Expectancy	Minimum operations
Mechanical	1 x 10 ⁷
Electrical	1 x 10 ⁵ at 3 A 120 VAC Res.
Operate Time (typical)	5 ms at nominal coil voltage
Release Time (typical)	1 ms at nominal coil voltage (with no coil suppressions)
Dielectric Strength (at sea level for 1 min.)	1250 Vrms coil to contact 750 Vrms between open contacts
Insulation Resistance	100 megohms min. at 20°C, 500 VDC
Dropout	Greater than 10% of nominal coil voltage
Ambient Temperature	At nominal coil voltage
Operating	Standard: -25°C (-13°F) to 55°C (131°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 10–55Hz
Shock	15 g
Enclosure	P.B.T. polyester
Terminals	Tinned copper alloy
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	3.5 grams

NOTES

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.



AMERICAN ZETTLER, INC.

www.azettler.com

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

5/25/05W

AZ951/AZ952

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		
5	6.7	56	3.75	AZ951-1C-5DE	AZ952-1C-5DE
6	8.0	80	4.50	AZ951-1C-6DE	AZ952-1C-6DE
12	16.0	320	9.00	AZ951-1C-12DE	AZ952-1C-12DE
24	32.0	1280	18.00	AZ951-1C-24DE	AZ952-1C-24DE

SENSITIVE RELAYS — Light Duty Type					
COIL SPECIFICATIONS				ORDER NUMBER	
Nominal Coil VDC	Max. Continuous VDC	Coil Resistance $\pm 10\%$	Must Operate VDC		
5	8.5	120	3.75	AZ951-1C-5DSE	AZ952-1C-5DSE
6	10.4	180	4.50	AZ951-1C-6DSE	AZ952-1C-6DSE
9	15.3	400	6.75	AZ951-1C-9DSE	AZ952-1C-9DSE
12	20.5	700	9.00	AZ951-1C-12DSE	AZ952-1C-12DSE
24	41.0	2800	18.00	AZ951-1C-24DSE	AZ952-1C-24DSE

STANDARD RELAYS — Medium Duty Type					
COIL SPECIFICATIONS				ORDER NUMBER	
Nominal Coil VDC	Max. Continuous VDC	Coil Resistance $\pm 10\%$	Must Operate VDC		
5	6.7	56	3.75	AZ951-1CM-5DE	AZ952-1CM-5DE
6	8.0	80	4.50	AZ951-1CM-6DE	AZ952-1CM-6DE
12	16.0	320	9.00	AZ951-1CM-12DE	AZ952-1CM-12DE
24	32.0	1280	18.00	AZ951-1CM-24DE	AZ952-1CM-24DE

SENSITIVE RELAYS — Medium Duty Type					
COIL SPECIFICATIONS				ORDER NUMBER	
Nominal Coil VDC	Max. Continuous VDC	Coil Resistance $\pm 10\%$	Must Operate VDC		
5	8.5	120	3.75	AZ951-1CM-5DSE	AZ952-1CM-5DSE
6	10.4	180	4.50	AZ951-1CM-6DSE	AZ952-1CM-6DSE
9	15.3	400	6.75	AZ951-1CM-9DSE	AZ952-1CM-9DSE
12	20.5	700	9.00	AZ951-1CM-12DSE	AZ952-1CM-12DSE
24	41.0	2800	18.00	AZ951-1CM-24DSE	AZ952-1CM-24DSE

STANDARD RELAYS — Heavy Duty Type					
COIL SPECIFICATIONS				ORDER NUMBER	
Nominal Coil VDC	Max. Continuous VDC	Coil Resistance $\pm 10\%$	Must Operate VDC		
5	6.7	56	3.75	AZ951-1CH-5DE	AZ952-1CH-5DE
6	8.0	80	4.50	AZ951-1CH-6DE	AZ952-1CH-6DE
12	16.0	320	9.00	AZ951-1CH-12DE	AZ952-1CH-12DE
24	32.0	1280	18.00	AZ951-1CH-24DE	AZ952-1CH-24DE



AMERICAN ZETTLER, INC.

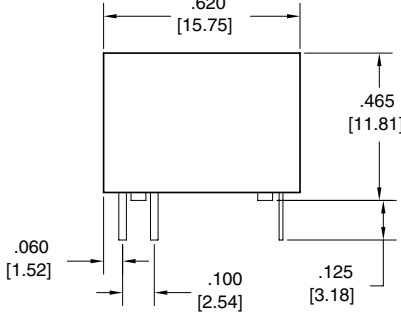
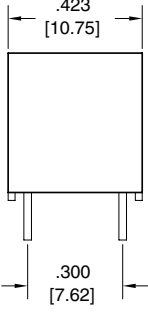
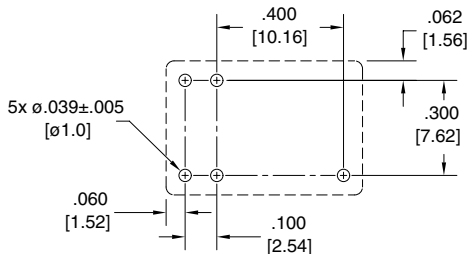
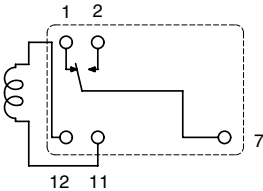
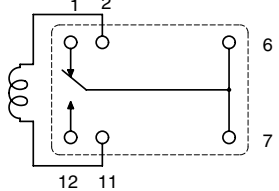
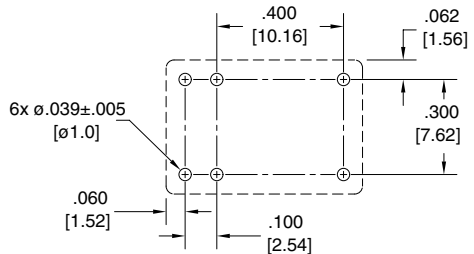
www.azettler.com

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

5/25/05W

AZ951/AZ952

MECHANICAL DATA

		AZ951 PC BOARD LAYOUT  VIEWED TOWARD TERMINALS
AZ951 WIRING DIAGRAM  VIEWED TOWARD TERMINALS	AZ952 WIRING DIAGRAM  VIEWED TOWARD TERMINALS	AZ952 PC BOARD LAYOUT  VIEWED TOWARD TERMINALS

Dimensions in inches with metric equivalents in parentheses. Tolerance: ± 0.010 "



AMERICAN ZETTLER, INC. www.azettler.com

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

5/25/05W