# AZ956.

## MICROMINIATURE POLARIZED RELAY

### FEATURES

- Microminiature size: up to 50% less board area than previous generation telecom relays
- Meets FCC Part 68.302 1500 V lightning surge
- Low power consumption: 36 mW pickup
- Stable contact resistance for low level signal switching
- Epoxy sealed for automatic wave soldering and cleaning
- UL, CUR file E43203
- All plastics meet UL94 V-0, 30 min. oxygen index

CONTACTS					
Arrangement	SPDT (1 Form C) Bifurcated crossbar contacts				
Ratings	Resistive load: Max. switched power: 30 W or 60 VA Max. switched current: 1.0 A Max. switched voltage: 150 VDC or 125 VAC				
Rated Load UL	0.5 A at 120 VAC 1.0 A at 30 VDC				
Material	Palladium nickel with gold-rhodium overlay				
Resistance	< 50 milliohms initally (6 V, 10 mA method)				

### COIL (Polarized)

Power	
At Pickup Voltage (typical)	36 mW
Max. Continuous Dissipation	0.5 W at 20°C (68°F)
Temperature Rise	At nominal coil voltage 8°C (15°F)
Temperature	Max. 105°C (221°F)

### NOTES

- 1. All values at 20°C (68°F).
- 2. Relay may pull in with less than "Must Operate" value.
- 3. Relay has fixed coil polarity.
- 4. Specifications subject to change without notice.

GENERAL DATA							
Life Expectancy Mechanical Electrical	Minimum operations 1 x 10 <sup>9</sup> 2.5 x 10 <sup>5</sup> at 0.4 A, 125 VAC, resistive 3 x 10 <sup>6</sup> at 1.0 A, 24 VDC, resistive						
Operate Time (typical)	1 ms at nominal coil voltage						
Release Time (typical)	0.4 ms at nominal coil voltage (with no coil suppression)						
Bounce (typical)	At 10 mA contact current 1 ms at operate or release						
Dielectric Strength (at sea level)	1500 Vrms contact to coil 500 Vrms between open contacts						
Dropout	Greater than 10% of nominal coil voltage						
Insulation Resistance	10º ohms min. at 25°C, 500 VDC, 50% RH						
Ambient Temperature Operating Storage	At nominal coil voltage -40°C (-40°F) to 70°C (158°F) -40°C (-40°F) to 105°C (221°F)						
Vibration	Operational, 40 g, 10–200 Hz						
Shock	Operational, 50 g min., 11 ms Non-destructive, 150 g min., 11 ms						
Max. Solder Temp. Temp./Time	Vapor phase: 215°C, 40 Sec. Infrared: 215°C, 40 Sec. Double wave: 260°C, 10 Sec.						
Max. Solvent Temp.	80°C (176°F)						
Max. Immersion Time	30 seconds						
Weight	1.8 grams						
Enclosure	P.B.T. polyester						
Terminals	Tinned copper alloy, P.C.						

## AMERICAN ZETTLER, INC.

www.azettler.com

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### **RELAY ORDERING DATA**

STANDARD RELAYS						Order Number	
Nominal Coil	minal Coil Max. Continuous		C Coil Resistance ± 10%		Must Operate	тнт	SMT
VDC	THT	SMT	THT	SMT	VDC	Through Hole	OWN
1.5	4.5	4.0	36	28	1.13	AZ956–1.5DE	AZ956S-1.5DE
3	8.8	8.0	137	113	2.25	AZ956-3DE	AZ956S-3DE
5	14.5	13.3	370	313	3.75	AZ956–5DE	AZ956S–5DE
9	25.5	23.9	1165	1013	6.75	AZ956–9DE	AZ956S-9DE
12	35	35	2250	1800	9.00	AZ956–12DE	AZ956S-12DE
15	42	42	3100	2813	11.30	AZ956–15DE	AZ956S-15DE
24	50	50	4500	4500	18.00	AZ956–24DE	AZ956 <mark>S-2</mark> 4DE

#### **MECHANICAL DATA** SMT THT .512 MAX. (13) .531 MAX .31 MAX (7.9) .30 MAX. (13.5)(7.62) .272 MAX (6.9) .315 MAX. (8) .02 (0.5) Л 1 .08 MAX .012 MAX (.3) .016 ( .008 Ø (.2) 006 (2) 0%8 (.15) .41 MAX (10.3) .138 MAX. (3.5) PC BOARD LAYOUT PC BOARD LAYOUT Viewed toward terminals Viewed toward terminals .100 TYP. (2.54) .0315 DIA. ± .002 (.8 ± .05) (1.26) 100 T INDEX MARK .3 (7.62) INDEX .134 (3.4) .004 (.10) .047 \_ .100 (2.54) (1.2) Wiring Diagram 1 3 5 Viewed toward terminals Q C Q INDEX MARK Q 0 8 10

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

## AMERICAN ZETTLER, INC.

7/24/02

#### PHONE: (949) 831-5000

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This specification provides an overview of the most significant part features. Any individual applications and operating conditions are not taken into consideration. It is recommended to test the product
under application conditions. Responsibility for the application remains with the customer. Proper operation and service life cannot be guaranteed if the part is operated outside the specified limits.