### **AZ8462**

# MICROMINIATURE POLARIZED RELAY

#### **FEATURES**

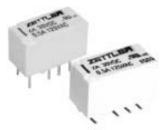
- SMT and DIP mounting available
- Microminiature size: up to 50% less board area than previous generation telecom relays
- High dielectric and surge voltage:
   2.5KV surge (per Bellcore TA-NWT-001089); "V" Version 6KV surge and 3KV dielectric strength.
   1.5KV surge (per FCC Part 68)
  - 1,000Vrms, open contacts
- Monostable and bistable (latching) versions available
- Low power consumption: 79mW 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	DPDT (2 Form C) Bifurcated crossbar contacts	
Ratings	Resistive load: Max. switched power: 60W or 62.5VA Max. switched current: 2A Max. switched voltage: 220VDC or 250VAC	
Rated Load UL/CUR	0.5A at 125VAC general use 2.0A at 30VDC	
Material	Silver nickel, gold plated	
Resistance	< 100 milliohms max (at 10mA, 30mV)	

### **COIL (Polarized)**

Power At Pickup Voltage (typical)	79mW (3–24VDC) 152mW (48VDC)
Max. Continuous Dissipation Temperature Rise	0.32W at 20°C (68°F) At 30° C (54°F) nominal coil voltage
Temperature	Max. 115°C (239°F)



#### **GENERAL DATA**

Life Expectancy Mechanical Electrical	Minimum operations 1 x 10 <sup>8</sup> at 3Hz 1 x 10 <sup>5</sup> at 0.5A, 125VAC, Res. 1 x 10 <sup>5</sup> at 2.0A, 30VDC, Res.			
Operate Time (max)	4ms at nominal coil voltage			
Release Time (max)	4ms at nominal coil voltage (with no coil suppression)			
Dielectric Strength (at sea level)	See table			
Dropout	Greater than 10% of nominal coil voltage			
Insulation Resistance	109 ohms min. at 25°C, 500VDC, 50% RH			
Ambient Temperature Operating Storage	At nominal coil voltage -40°C (-40°F) to 85°C (185°F) -40°C (-40°F) to 115°C (239°F)			
Vibration	Operational, 3.3mm DA, 10–55 Hz Non-destructive, 5.5mm DA, 10–55 Hz			
Shock	Operational, 75 g min., 11ms Non-destructive, 100 g min., 11ms			
Max. Solder Temp.	260°C (500°F) for 5 seconds			
Max. Solvent Temp.	80°C (176°F)			
Max. Immersion Time	30 seconds			
Weight (approx.)	2 grams			
Enclosure	P.B.T. polyester			
Terminals Tinned copper alloy, P.C.				

### **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.

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#### **RELAY ORDERING DATA**

STANDARD VERSION				ORDER	ORDER NUMBER	
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance ± 10%	THT (Through Hole)	SMT*	
1.5	1.13	2.2	16.1	AZ8462-1.5	AZ8462S-1.5	
3	2.25	4.5	64.3	AZ8462-3	AZ8462S-3	
4.5	3.38	6.7	145	AZ8462-4.5	AZ8462S-4.5	
5	3.75	7.5	178	AZ8462-5	AZ8462S-5	
6	4.50	9	257	AZ8462-6	AZ8462S-6	
9	6.75	13.5	579	AZ8462-9	AZ8462S-9	
12	9.00	18	1028	AZ8462-12	AZ8462S-12	
24	18.00	36	4114	AZ8462-24	AZ8462S-24	
48	36.0	57.6	8533	AZ8462-48	AZ8462S-48	
SINGLE COIL LATCH	HING VERSION			<u>.                                      </u>		
Nominal Coil VDC	Set/Reset Voltage	Max. Continuous VDC	Coil Resistance ± 10%	THT (Through Hole)	SMT*	
1.5	1.13	2.7	22.5	AZ8462P1-1.5	AZ8462P1S-1.5	
3	2.25	5.4	90	AZ8462P1-3	AZ8462P1S-3	
4.5	3.38	8.1	203	AZ8462P1-4.5	AZ8462P1S-4.5	
5	3.75	9.0	250	AZ8462P1-5	AZ8462P1S-5	
6	4.50	10.8	360	AZ8462P1-6	AZ8462P1S-6	
9	6.75	16.2	810	AZ8462P1-9	AZ8462P1S-9	
12	9.00	21.6	1440	AZ8462P1-12	AZ8462P1S-12	
24	18.00	43.2	5760	AZ8462P1-24	AZ8462P1S-24	
DUAL COIL LATCHII	NG VERSION			<u> </u>		
Nominal Coil VDC	Set/Reset Voltage	Max. Continuous VDC	Coil Resistance ± 10%	THT (Through Hole)	SMT*	
1.5	1.13	2.2	11.2	AZ8462P2-1.5	AZ8462P2S-1.5	
3	2.25	4.5	45	AZ8462P2-3	AZ8462P2S-3	
4.5	3.38	6.7	101	AZ8462P2-4.5	AZ8462P2S-4.5	
5	3.75	7.5	125	AZ8462P2-5	AZ8462P2S-5	
6	4.50	9.0	180	AZ8462P2-6	AZ8462P2S-6	
9	6.75	13.5	405	AZ8462P2-9	AZ8462P2S-9	
12	9.00	18.0	720	AZ8462P2-12	AZ8462P2S-12	
24	18.00	36.0	2880	AZ8462P2-24	AZ8462P2S-24	

<sup>\*</sup>For Tape and Reel add suffix "TR." For SMT short leg add "1" after S.

### **INITIAL DIELECTRIC STRENGTH (minimum)**

	VRMS, 1 min.	Peak (V)	Rise Time (μS)	Decay Time* (9µS) (1/2 peak)
Between open contacts	1,000	1,500	10	160
Between contact sets	1,500	-	1	-
Between coil and contacts	2,000	2,500	2	10

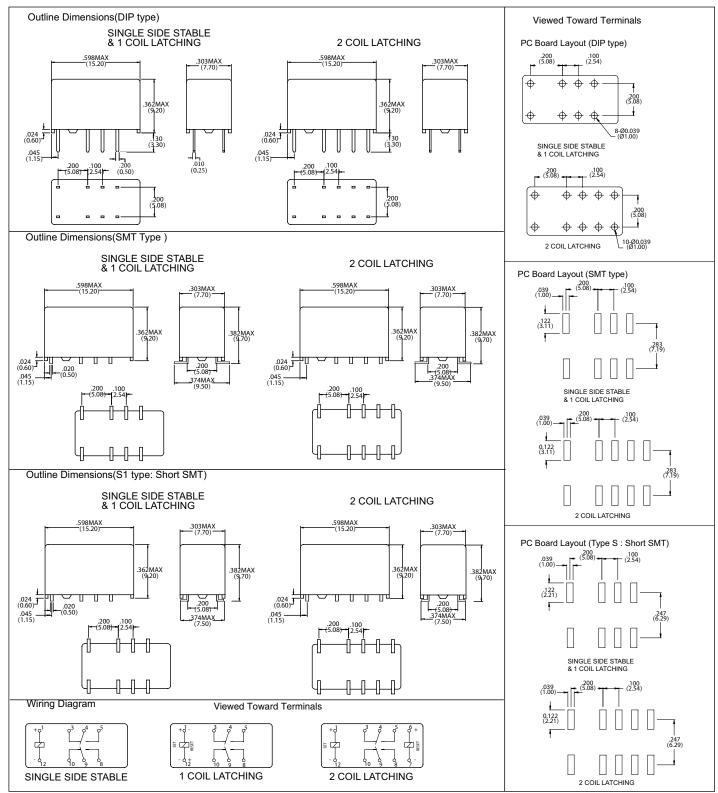
<sup>\*</sup> Decay time measured from beginning of surge.

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**SURGE** 

For 3KV dielectric strength (coil and contact) add '-V' after AZ8462. only for standard and single coil latching.

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Dimensions in inch with millimeters in brackets below. Tolerance: ± .010"

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