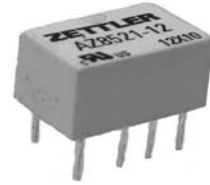


# AZ8521

## SUBMINIATURE SIGNAL RELAY

### FEATURES

- Conforms to IEC60950/EN41003 spacing and high break-down voltage
- Monostable and bistable (latching) coil versions available
- High dielectric and surge voltage:  
2.5 KV surge (per FCC Part 68) and meets Telcordia
- Low power consumption: 64 mW pickup
- Stable contact resistance for low level signal switching
- UL , CUR E43203



### GENERAL DATA

<b>Life Expectancy</b> Mechanical Electrical	Minimum operations 1 x 10 <sup>8</sup> at 3Hz 1 x 10 <sup>5</sup> at 0.5 A, 125 VAC, Res. 1 x 10 <sup>5</sup> at 2.0 A, 30 VDC, Res.
<b>Operate Time (typical)</b>	3 ms at nominal coil voltage
<b>Release Time (typical)</b>	3 ms at nominal coil voltage (with no coil suppression)
<b>Bounce (typical)</b>	At 10 mA contact current 1 ms at operate or release
<b>Capacitance</b>	< 1 pF at 10 KHz—open contacts < 1 pF at 10 KHz—adjacent contact sets
<b>Dielectric Strength (at sea level)</b>	See table
<b>Dropout</b>	Greater than 10% of nominal coil voltage
<b>Insulation Resistance</b>	10 <sup>9</sup> ohms min. at 25°C, 500 VDC, 50% RH
<b>Ambient Temperature Operating Storage</b>	At nominal coil voltage -40°C (-40°F) to 85°C (185°F) -40°C (-40°F) to 115°C (239°F)
<b>Vibration</b>	Functional 10–55 Hz 3.3mm DA Destructive 10-55Hz 5.0mm DA
<b>Shock</b>	Functional, 735 m/s <sup>2</sup> Destructive, 980 m/s <sup>2</sup>
<b>Max. Solder Temp. Temp./Time</b>	350°C (662°F) for 3 seconds 260°C (500°F) for 10 seconds
<b>Max. Solvent Temp.</b>	80°C (176°F)
<b>Max. Immersion Time</b>	30 seconds
<b>Weight</b>	0.8 grams
<b>Enclosure</b>	P.B.T. polyester
<b>Terminals</b>	Tinned copper alloy, P.C.

### CONTACTS

<b>Arrangement</b>	DPDT (2 Form C)
<b>Ratings</b>	Resistive load: Max. switched power: 60 W or 62.5 VA Max. switched current: 2.0 A Max. switched voltage: 220 VDC or 250 VAC
<b>Rated Load UL/CSA</b>	0.5 A at 125 VAC 2.0 A at 30 VDC 0.5 A at 125 VDC
<b>Material</b>	Silver alloy; gold clad
<b>Resistance</b>	< 70 milliohms initially at 6 V, 1 A

### COIL (Polarized)

<b>Power At Pickup Voltage (typical)</b>	56 mW - Latching coils 79 mW (3–12 VDC) - Standard coils 130 mW (24 VDC) - Standard coils
<b>Max. Continuous Dissipation</b>	1.0 W at 20°C (68°F) 0.78 W at 40°C (104°F)
<b>Temperature Rise</b>	At nominal coil voltage 18°C (32°F) (3–12 VDC) 25°C (45°F) (24 VDC)
<b>Temperature</b>	Max. 115°C (239°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.

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# AZ8521

## RELAY ORDERING DATA

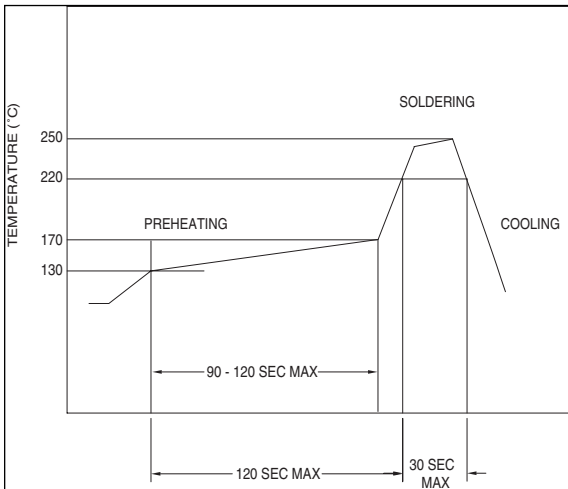
NON-LATCHING VERSION - STANDARD				ORDER NUMBER		
Nominal Coil VDC	Max. Continuous VDC	Coil Resistance $\pm 10\%$	Must Operate VDC	THT	SMT*	SMT Short Leg*
				1.5	2.25	16.1
3	4.5	64.3	2.25	AZ8521-3	AZ8521S-3	AZ8521S1-3
4.5	6.75	145	3.38	AZ8521-4.5	AZ8521S-4.5	AZ8521S1-4.5
5	7.5	178	3.75	AZ8521-5	AZ8521S-5	AZ8521S1-5
6	9	257	4.5	AZ8521-6	AZ8521S-6	AZ8521S1-6
9	13.5	579	6.75	AZ8521-9	AZ8521S-9	AZ8521S1-9
12	18	1028	9.00	AZ8521-12	AZ8521S-12	AZ8521S1-12
24	36	2504	18.00	AZ8521-24	AZ8521S-24	AZ8521S1-24

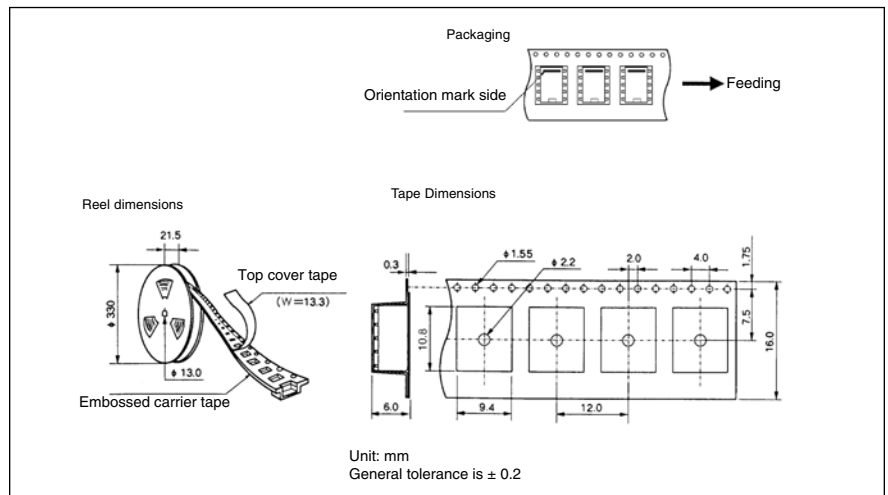
LATCHING VERSION				ORDER NUMBER		
Nominal Coil VDC	Max. Continuous VDC	Coil Resistance $\pm 10\%$	Must Operate VDC	THT	SMT*	SMT Short Leg*
				1.5	2.25	22.5
3	4.5	90	2.25	AZ8521P-3	AZ8521PS-3	AZ8521PS1-3
4.5	6.75	203	3.38	AZ8521P-4.5	AZ8521PS-4.5	AZ8521PS1-4.5
5	10	250	3.75	AZ8521P-5	AZ8521PS-5	AZ8521PS1-5
6	9	360	4.50	AZ8521P-6	AZ8521PS-6	AZ8521PS1-6
9	13.5	810	6.75	AZ8521P-9	AZ8521PS-9	AZ8521PS1-9
12	18	1440	9.00	AZ8521P-12	AZ8521PS-12	AZ8521PS1-12
24	36	4800	18.00	AZ8521P-24	AZ8521PS-24	AZ8521PS1-24

For SMT short leg add "1" after S. \*Tape and reel available (900 pcs/reel minimum) add suffix "TR"

### Temperature Profile



### Packaging Specifications



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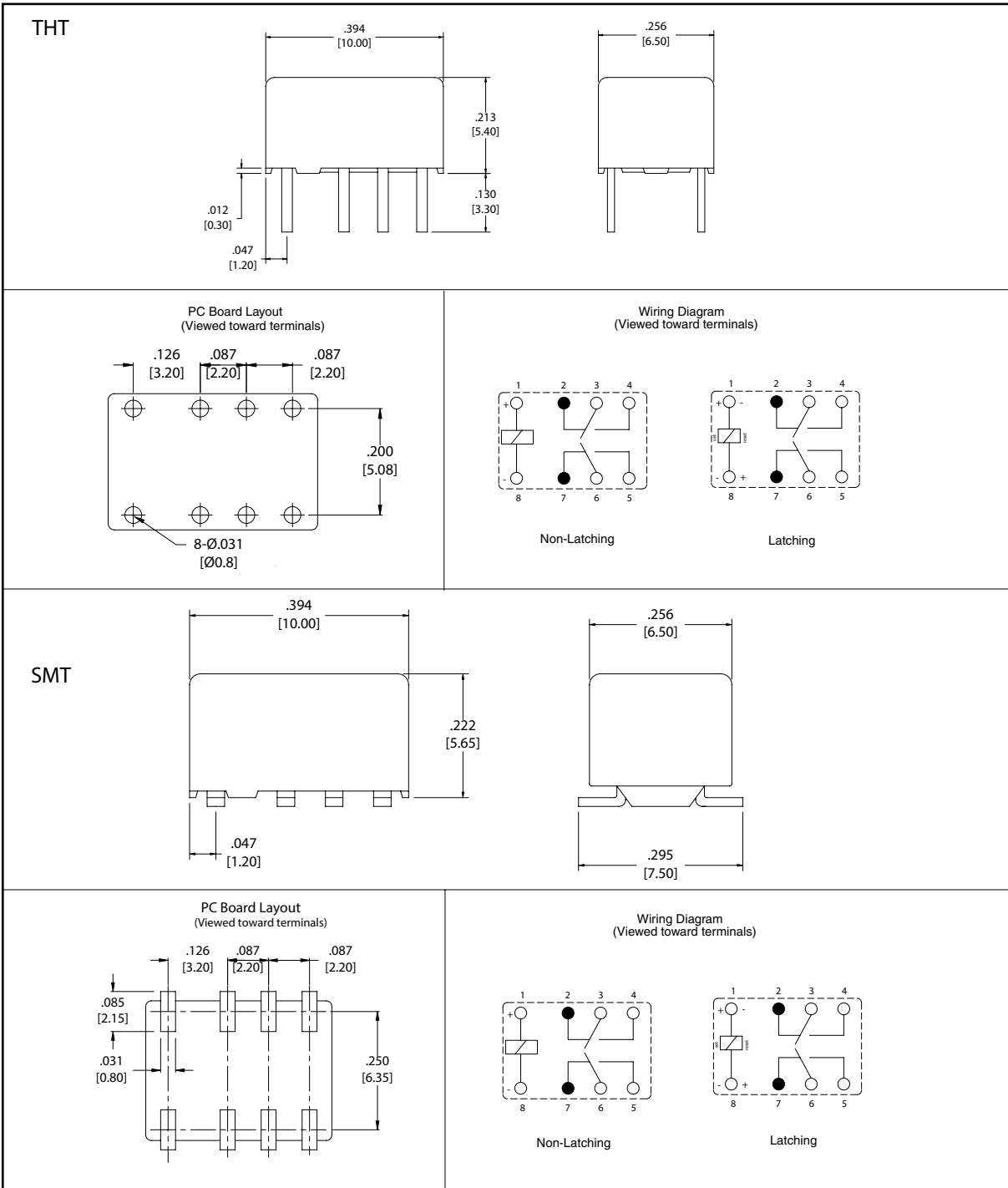
5/20/15

# AZ8521

	INITIAL DIELECTRIC STRENGTH (minimum)		SURGE	
	VRMS, 1 min.	Peak (V)	Rise Time ( $\mu$ S)	Decay Time* ( $9\mu$ S) (1/2 peak)
Between open contacts	1,000	1,500	10	160
Between contact sets	1,800	-	-	-
Between coil and contacts	1,600	2,500	2	10

\* Decay time measured from beginning of surge.

## Mechanical Data



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