

## SPDT SUBMINIATURE RELAY

### FEATURES

- Subminiature size for high density packaging
- Epoxy sealed for automatic wave soldering
- DIL pitch terminals
- High sensitivity coils with 96 mW pickup power
- RoHS compliant
- UL, CUR file E43203



### CONTACTS

<b>Arrangement</b>	SPDT (1 Form C)
<b>Ratings (max.)</b>	(resistive load)
switched power	30 W or 62.5 VA
switched current	1 A
switched voltage	60 VDC* or 125 VAC
	* Note: If switching voltage is greater than 30 VDC, special precautions must be taken. Please contact the factory.
<b>Rated Loads</b>	
UL	0.5 A at 125 VAC, resistive, 100k cycles 1 A at 30 VDC, resistive, 100k cycles 0.3 A at 60 VDC, resistive, 100k cycles
<b>Contact materials</b>	AgNi/Au - silver nickel (gold plated)
<b>Minimum switching</b>	50 mA / 6 V
<b>Initial resistance</b>	< 100 mΩ

### COIL

<b>Nominal coil DC voltages</b>	see coil voltage specifications tables
<b>Dropout</b>	> 10% of nominal coil voltage
<b>Power at pickup voltage</b>	(typ.)
standard coil	128 mW
sensitive coil	96 mW
<b>Max. continuous dissipation</b>	600 mW at 20°C (68°F) ambient
<b>Max. temperature</b>	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. Specifications subject to change without notice.

### GENERAL DATA

<b>Life Expectancy</b>	(minimum operations)
mechanical	$5 \times 10^6$
electrical	$1 \times 10^5$
<b>Operate Time</b>	5 ms (max.) at nominal coil voltage
<b>Release Time</b>	5 ms (max.) at nominal coil voltage, without coil suppression
<b>Dielectric Strength</b>	(at sea level for 1 min.) 1000 V <sub>RMS</sub> coil to contact 400 V <sub>RMS</sub> between open contacts
<b>Insulation Resistance</b>	1000 MΩ (min.) at 20°C, 500 VDC, 50% RH
<b>Temperature Range</b>	(at nominal coil voltage)
operating	Standard: -40°C (-40°F) to 70°C (158°F) Sensitive: -40°C (-40°F) to 80°C (176°F)
storage	Both: -40°C (-40°F) to 105°C (221°F)
<b>Vibration resistance</b>	3.3 mm (0.130") DA at 10–55 Hz
<b>Shock resistance</b>	10 g operating
<b>Terminals</b>	Tinned copper alloy, P. C.
<b>Soldering</b>	
max. Temperature	260°C (500°F)
max. Time	5 seconds
<b>Cleaning</b>	
max. Solvent Temp.	80°C (176°F)
max. Immersion Time	30 seconds
<b>Dimensions</b>	
length	12.5 mm (0.49")
width	7.5 mm (0.30")
height	10.0 mm (0.39")
<b>Weight</b>	2.2 grams
<b>Compliance</b>	IEC 61810-1, UL 508, RoHS
<b>Packing unit in pcs</b>	20 per tray / 1000 per carton box

At nominal coil voltage  
Standard: -40°C (-40°F) to 70°C (158°F)  
Sensitive: -40°C (-40°F) to 80°C (176°F)  
Both: -40°C (-40°F) to 105°C (221°F)

## COIL VOLTAGE SPECIFICATIONS

### Standard Coil

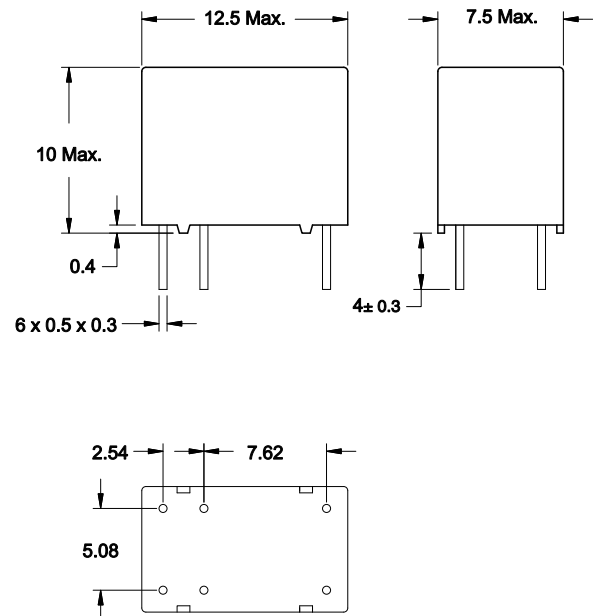
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Resistance Ohm $\pm 10\%$
3	2.4	4.5	45
5	4.0	7.5	125
6	4.8	9.0	180
9	7.2	13.5	405
12	9.6	18.0	720
24	19.2	36.0	2880

### Sensitive Coil

Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Resistance Ohm $\pm 10\%$
3	2.4	6.0	60
5	4.0	10.0	167
6	4.8	12.0	240
9	7.2	18.0	540
12	9.6	24.0	960
24	19.2	48.0	3840

## MECHANICAL DATA

Dimensions in mm.



## ORDERING DATA

**AZ9571** -  -  **D**

**Sealing**  
E: sealed

**Coil option**  
nil: standard coil  
S: sensitive coil

**Nominal coil voltage**  
see coil voltage specifications tables

**Contact arrangement**  
1C: 1 Form C (SPDT)

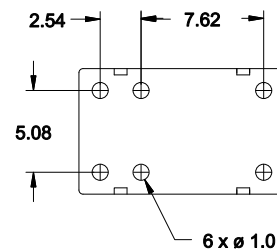
### Example ordering data

AZ9571-1C-5DE 5 VDC nominal coil voltage, standard coil, sealed

AZ9571-1C-12DSE 12 VDC nominal coil voltage, sensitive coil, sealed

## PC BOARD LAYOUT

Viewed towards terminals.  
Dimensions in mm.



## WIRING DIAGRAMS

Viewed towards terminals, shown in de-energized condition.

