

# AZ7621P

## MINIATURE LATCHING POWER RELAY

### FEATURES

- 16 A switching capability
- SPST-N.O. (1 Form A ) and SPDT (1 Form C) contact arrangements
- Single coil latching and dual coil latching versions
- High Dielectric strength 5 kV<sub>RMS</sub>
- Compact size, low height 15.7 mm
- Epoxy sealed versions available
- Gold plated versions optional
- RoHS compliant
- UL, CUR file E43203



### CONTACTS

<b>Arrangement</b>	SPST-N.O. (1 Form A) SPDT (1 Form C)
<b>Ratings (max.)</b> switched power switched current switched voltage	(resistive load) 4000 VA 16 A 440 VAC  Note: If switching voltage is greater than 30 VDC, special precautions must be taken. Please contact the factory.
<b>Rated Loads</b> UL, CUR	16 A at 250 VAC, resistive, 50k cycles, 85°C
<b>Contact materials</b>	AgSnO <sub>2</sub> - silver tin oxide gold plating available
<b>Minimum switching</b> non gold plated gold plated	100 mA / 6 V 50 mA / 6 V
<b>Initial resistance</b>	< 50 mΩ

### COIL

<b>Nominal coil DC voltages</b>	see coil voltage specifications tables
<b>Power at pickup voltage</b> single coil latching dual coil latching	(typ.) 196 mW 294 mW (24 VDC coil: 318 mW)
<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. Relay has fixed coil polarity.
4. Initial state of contacts may be changed during transportation or shock.
5. Pulse width should be minimum three times the specified set/reset time.
6. Do not power set and reset coil simultaneously (dual coil versions).
7. Relay adjustment may be affected if undue pressure is exerted on relay case.
8. Specifications subject to change without notice.

### GENERAL DATA

<b>Life Expectancy</b> mechanical electrical	(minimum operations) 5 x 10 <sup>6</sup> 5 x 10 <sup>4</sup> at 16 A 250 VDC resistive
<b>Set Time</b> <b>Reset Time</b>	10 ms (max.) at nominal coil voltage 10 ms (max.) at nominal coil voltage
<b>Dielectric Strength</b> coil to contacts between open contacts	(at sea level for 1 min.) 5 kV <sub>RMS</sub> 1 kV <sub>RMS</sub>
<b>Isolation spacing</b> creepage	≥ 8.4 mm
<b>Insulation Resistance</b>	1000 MΩ (min.) at 20°C, 500 VDC, 50% RH
<b>Temperature Range</b> operating	(at nominal coil voltage) -40°C (-40°F) to 85°C (185°F)
<b>Vibration resistance</b> operating	1.5 mm (0.138") DA at 10–55 Hz
<b>Shock</b> operating	10 g
<b>Terminals</b>	Tinned copper alloy, P. C.
<b>Soldering</b> max. temperature max. time	260°C (500°F) 5 seconds
<b>Cleaning</b> max. solvent temp. max. immersion time	80°C (176°F) 30 seconds
<b>Dimensions</b> length width height	29.0 mm (1.14") 12.7 mm (0.50") 15.7 mm (0.62")
<b>Weight</b>	13 grams
<b>Compliance</b>	UL 508, RoHS

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This product specification to be used only together with the application notes which can be downloaded from [www.ZETTLERelectronics.com/pdfs/relais/ApplicationNotes.pdf](http://www.ZETTLERelectronics.com/pdfs/relais/ApplicationNotes.pdf)

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## COIL VOLTAGE SPECIFICATIONS

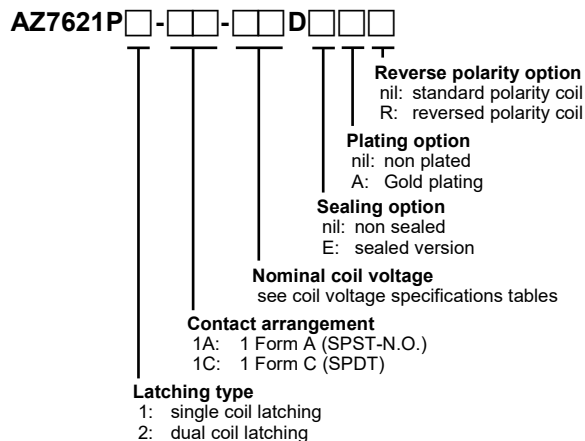
### Single coil latching

Nominal Coil VDC	Must Operate VDC	Coil Power mW	Resistance Ohm $\pm 10\%$
5	3.5	400	63
6	4.2		90
9	6.3		203
12	8.4		360
24	16.8		1440

### Dual coil latching

Nominal Coil VDC	Must Operate VDC	Coil Power mW	Resistance Ohm $\pm 10\%$
5	3.5	600	42
6	4.2		60
9	6.3		135
12	8.4		240
24	16.8		886

## ORDERING DATA

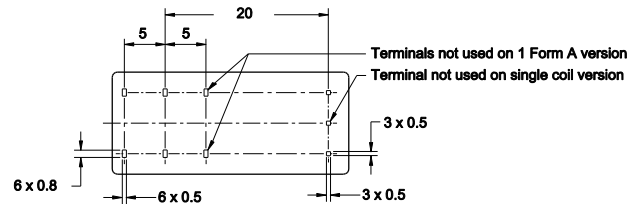
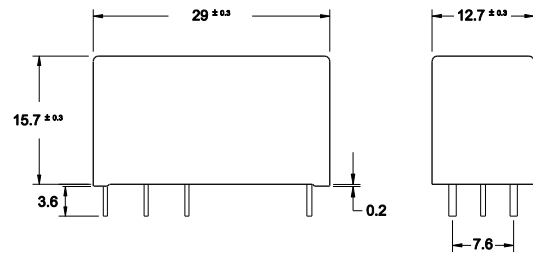


### Example ordering data

AZ7621P1-1A-12D	Single coil latching, 1 Form A contact arrangement, 12 VDC nominal coil voltage, non sealed, non gold plated, standard coil polarity
AZ7621P2-1C-5DEA	Dual coil latching, 1 Form C contact arrangement, 5 VDC nominal coil voltage, sealed, gold plated, standard coil polarity
AZ7621P2-1A-9DR	Dual coil latching, 1 Form A, 9 VDC nominal coil voltage, non sealed, non gold plated, reversed coil polarity

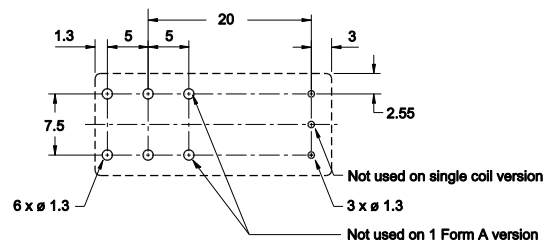
## MECHANICAL DATA

Dimensions in mm.



## PC BOARD LAYOUT

Viewed towards terminals.  
Dimensions in mm.

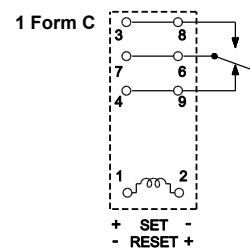
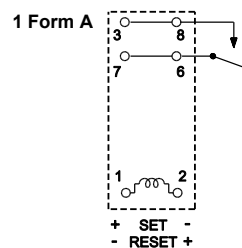


## WIRING DIAGRAMS

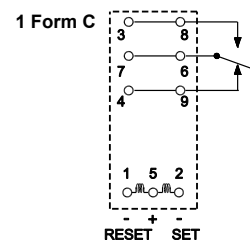
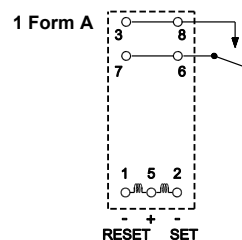
Viewed towards terminals, shown in reset condition.

Note: The diagrams show the standard coil polarity. The polarity is reversed for types with reverse polarity option 'R'.

### Single coil latching type



### Dual coil latching type



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