#### Subminiature PC board relays



**AZ957** subminiature PC board relays • Subminiature size for high density packaging • **DC coils: up to 24 V DC •** Life expectancy to 10 million operations • for PCB mounting • Epoxy sealed for automatic wave soldering and cleaning • Meets FCC Part 68.302 1500 V lightning surge • Meets FCC Part 68.304 1000 V dielectric • UL, CUR-E43203 • For surface mounting SMT version available

### Contacts

| Contacto  |  |  |  |
|---|--|--|--|
| Contact number & arrangement                        | 1C/O SPDT (1 Form C) Bifurcated crossbar contacts  |  |  |
| Contact material                                    | AgPd/Au <b>①</b>                                   |  |  |
| Resistive load                                      |  |  |  |
| max. switching power                                | 30 W / 62,5 VA                                     |  |  |
| max. switching current                              | 1 A  |  |  |
| max. switching voltage                              | 60 V DC 125 V AC                                   |  |  |
| rated load  | UL: 1 A / 30 V DC 0,3 A / 60 V DC 0,5 A / 125 V AC |  |  |
| Resistance  | $\leq 100 \text{ m}\Omega$ initially               |  |  |
| Coil (Polarized)                                    |  |  |  |
| Rated voltage DC                                    | 1,5-3-5-6-9-12-24 V                                |  |  |
| Must release voltage                                | ≥ 0,1 U <sub>n</sub>                               |  |  |
| Power consumption DC                                | 0,15 W   |  |  |
| Power at pickup voltage (typical value)             | 96 mW sensitive coil                               |  |  |
| Max. continuous dissipation                         | 0,5 W 20°C   |  |  |
| Temperature rise at U <sub>n</sub> coil             | 25 °C sensitive coil                               |  |  |
| Temperature   | max. 105 °C  |  |  |
| General data  |  |  |  |
| Electrical life: • AC1                              | 10 <sup>5</sup> 0,5 A, 120 V AC                    |  |  |
| Mechanical life                                     | 107  |  |  |
| Operating time (typical value) at Un coil           | 5 ms sensitive coil                                |  |  |
| Release time (typical value) at U <sub>n</sub> coil | 1 ms (with no coil suppression)                    |  |  |
| Bounce (typical)                                    | 2 ms NO; 8 ms NC                                   |  |  |
| Capacitance   | 7,0 pF contact to coil                             |  |  |
|   | 7,0 pF contact to contact                          |  |  |
| Dielectric strength insulation                      | 1 250 Vrms contact to coil                         |  |  |
| (at sea level for 1 min.)                           | 400 Vrms contact to contact                        |  |  |
| Insulation resistance 20 °C, 500 V DC, 50% RH       | min. 100 MΩ  |  |  |
| Dimensions (L x W x H)                              | 12,8 x 7,8 x 10,3 mm                               |  |  |
| Weight  | 2,2 g  |  |  |
| Enclosure   | poliester P.E.T.                                   |  |  |
| Terminals   | alloy Cu-Sn  |  |  |
| Ambient temperature                                 |  |  |  |
| • storing   | -25+105 °C   |  |  |
| • operating (at U <sub>n</sub> coil)                | -40+80 °C sensitive coil                           |  |  |
| Cover protection category                           | IP 67  |  |  |
| Shock resistance                                    | 10 g   |  |  |
| Vibration resistance                                | stable amplitude to 1,0 mm DA at 1055 Hz           |  |  |
| Solder bath temperature                             | max. 270 °C  |  |  |
| Solvent temperature                                 | max. 80 °C   |  |  |
| Immersion Time                                      | max. 30 s  |  |  |
| Soldering time                                      | max. 5 s   |  |  |

 $\ensuremath{\boldsymbol{\theta}}$  Min. current / voltage: 10  $\mu A$  / 10 mV

**Notes:** All values at 20 °C • Relays should not operate when the limit values are exceeded • Relay adjustment may be affected by undue pressure on relay case • Specifications subject to change without notice.





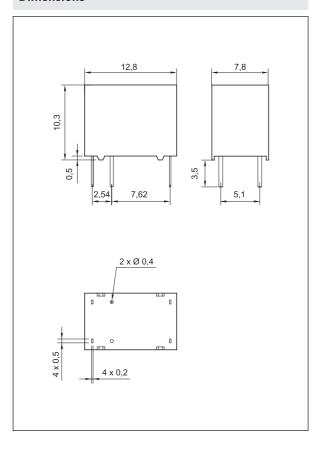
## Subminiature PC board relays

## Coil data - sensitive version

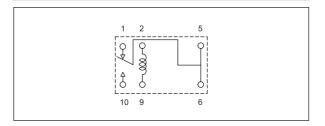
Table 1

| Relay code      | Nominal Coil<br>V DC | Max. Continuous<br>V DC | Coil Resistance<br>±10%<br>Ω | Must Operate<br>V DC |
|-----------------|----------------------|-------------------------|------------------------------|----------------------|
| AZ957-1C-1,5DSE | 1,5                  | 2,7                     | 15                           | 1,2                  |
| AZ957-1C-3DSE   | 3,0                  | 5,5                     | 60                           | 2,4                  |
| AZ957-1C-5DSE   | 5,0                  | 9,1                     | 167                          | 4,0                  |
| AZ957-1C-6DSE   | 6,0                  | 11,0                    | 240                          | 4,8                  |
| AZ957-1C-9DSE   | 9,0                  | 16,4                    | 540                          | 7,2                  |
| AZ957-1C-12DSE  | 12,0                 | 21,9                    | 960                          | 9,6                  |
| AZ957-1C-24DSE  | 24,0                 | 43,8                    | 3 840                        | 19,2                 |

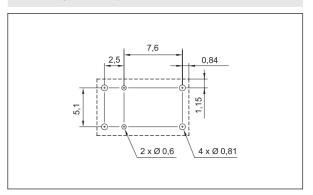
### **Dimensions**



# Connections diagram (pin side view)



## **Mounting holes layout**



## Ordering codes

See Coil data - Table 1

