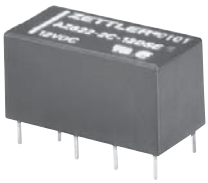
Subminiature DIP relays - single side stable



AZ822 subminiature DIP relays - single side stable • Low profile for compact board spacing • **DC coils: up to 48 V DC** • Life expectancy to 10 million operations • 2,54 mm pinning • Fits standard 16 pin IC socket • 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

Contacts

Contact number & arrangement	2C/O DPDT (2 Form C) Bifurcated crossbar contacts	
Contact material	AgPd/Au ❶	
Resistive load		
• max. switching power	60 W / 125 VA	
• max. switching current	2 A	
• max. switching voltage	220 V DC ❷	250 V AC
• rated load	UL: 1 A / 24 V DC	0,5 A / 120 V AC
Resistance	≤ 50 mΩ	

Coil (Polarized)

Rated voltage	DC	5-6-9-12-24-48 V
Must release voltage		≥ 0,1 U_n
Power consumption	DC	0,15...0,3 W
Power at pickup voltage (typical value)		74 mW coil 5-12 V U_n 98 mW coil 24 V U_n 147 mW coil 48 V U_n
Max. continuous dissipation		0,94 W 20°C
Temperature rise at U_n coil		15 °C
Temperature		max. 105 °C

General data

Electrical life:	• AC1	2×10^5 0,5 A, 120 V AC
	• DC1	5×10^5 1 A, 30 V DC
Mechanical life		10^8
Operating time (typical value) at U_n coil		5 ms
Release time (typical value) at U_n coil		2 ms (with no coil suppression)
Bounce (typical)		2 ms NO; 3 ms NC
Capacitance		1,2 pF contact to contact 1,6 pF between contact sets 1,5 pF contact to coil
Dielectric strength insulation (at sea level for 1 min.)		1 000 Vrms contact to coil 1 000 Vrms contact to contact 1 000 Vrms between contact sets
Dimensions (L x W x H)		20 x 9,8 x 12 mm
Weight		4,5 g
Enclosure		poliester P.B.T.
Terminals		alloy Cu-Sn
Ambient temperature		
• storing		-55...+105 °C
• operating (at U_n coil)		-55...+90 °C
Cover protection category		IP 67
Shock resistance		20 g
Vibration resistance		stable amplitude to 1,5 mm DA at 10...55 Hz
Solder bath temperature		max. 270 °C
Soldering time		max. 5 s

❶ Min. current / voltage: 10 µA / 10 mV
❷ At switching voltage above 30 V DC, contact Relpol S.A.

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.

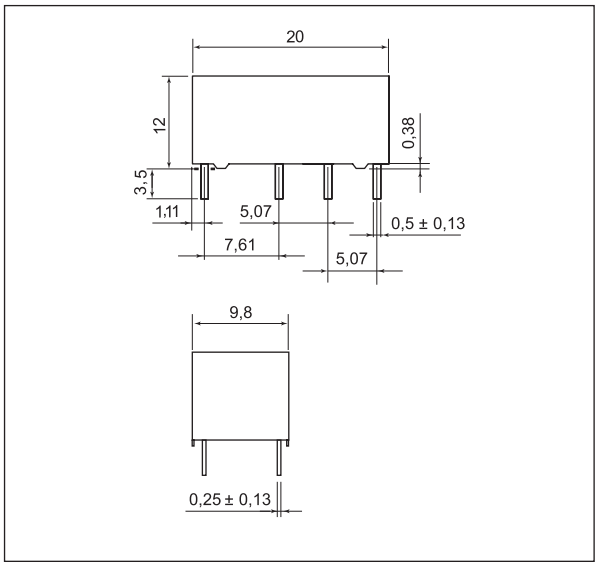
Subminiature DIP relays - single side stable

Coil data

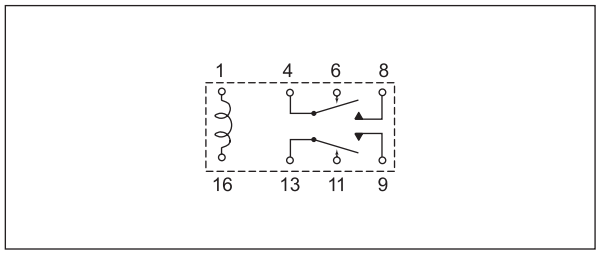
Table 1

Relay code	Nominal Coil V DC	Max. Continuous V DC	Coil Resistance ±10% Ω	Must Operate V DC
AZ822-2C-5DSE	5,0	12,5	167	3,5
AZ822-2C-6DSE	6,0	15,0	240	4,2
AZ822-2C-9DSE	9,0	22,5	540	6,3
AZ822-2C-12DSE	12,0	30,0	960	8,4
AZ822-2C-24DSE	24,0	52,9	2 880	16,8
AZ822-2C-48DSE	48,0	84,9	7 680	33,6

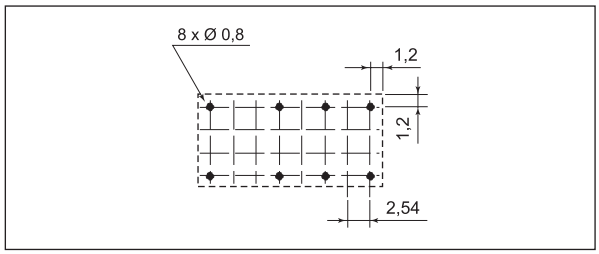
Dimensions



Connections diagram (pin side view)



Mounting holes layout



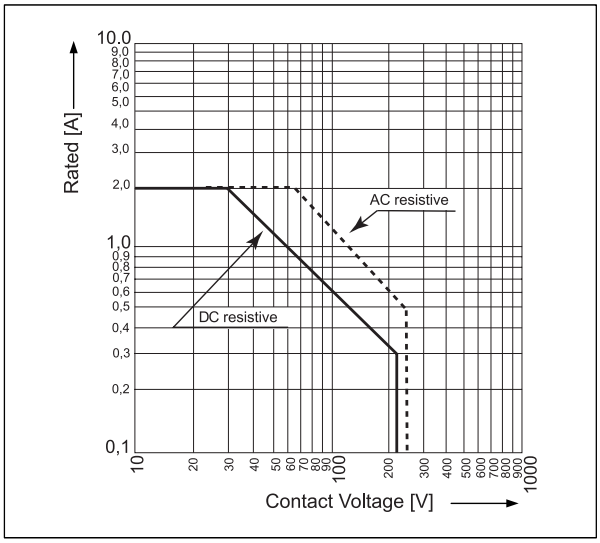
Typical contact life expectancy

Voltage	Current	Number of operations	
		Resistive load	Inductive load
50 mV	1 mA	1x 10^7	1 x 10^7
30 V DC	1,0 A	5 x 10^5	15 x 10^4
30 V DC	0,7 A	1 x 10^6	3 x 10^5
30 V DC	0,3 A	3 x 10^6	1 x 10^6
60 V DC	0,5 A	5 x 10^5	—
60 V DC	0,3 A	1 x 10^6	—
60 V DC	0,2 A	3 x 10^6	—
30 V AC	2,0 A	5 x 10^5	15 x 10^4
30 V AC	1,3 A	1 x 10^6	3 x 10^5
30 V AC	0,7 A	3 x 10^6	1 x 10^6
60 V AC	1,0 A	5 x 10^5	15 x 10^4
60 V AC	0,7 A	1 x 10^6	3 x 10^5
60 V AC	0,3 A	3 x 10^6	1 x 10^6
125 V AC	0,5 A	5 x 10^5	15 x 10^4
125 V AC	0,3 A	1 x 10^6	3 x 10^5
125 V AC	0,2 A	3 x 10^6	1 x 10^6

Notes: 1. Relays operated at nominal coil voltage
2. Inductive load tests are at 0,7 power factor.
3. Table represents typical life figures and are not guaranteed minimums.

Maximum switching capacity

Fig. 1



Ordering codes

See **Coil data** - Table 1