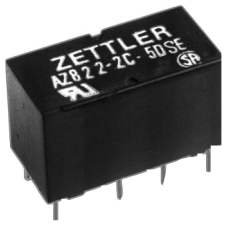
AZ822

SUBMINIATURE DIP RELAY

FEATURES

- Low profile for compact board spacing
- DC coils to 48 VDC
- Life expectancy to 10 million operations
- Standard PC 0.1" grid terminal spacing
- Fits standard 16 pin IC socket
- Epoxy sealed
- Meets FCC Part 68.302 1500 V lightning surge
- Meets FCC Part 68.304 1000 V dielectric
- UL, CUR file E43203



CONTACTS

Arrangement	DPDT (2 Form C) Bifurcated crossbar contacts
Ratings	Resistive load: Max. switched power: 60 W or 125 VA Max. switched current: 2 A Max. switched voltage: 220 VDC or 250 VAC **UL Rating:** 1 A at 24 VDC 0.5 A at 120 VAC
Material	Silver palladium, gold clad
Resistance	< 50 milliohms initially

COIL

Power	
At Pickup Voltage (typical)	74 mW 3 - 12 V coils 98 mW 15 - 24 V coils 147 mW 48 V coils
Max. Continuous Dissipation	0.94 W at 20°C (68°F)
Temperature Rise	15°C (27°F) at nominal coil voltage
Temperature	Max. 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 adjustment may be affected if undue pressure is exerted on relay case.
4. Specifications subject to change without notice.

GENERAL DATA

Life Expectancy **Mechanical** **Electrical**	Minimum operations 1 x 10^8 5 x 10^5 at 1 A 30 VDC (see table for additional figures)
Operate Time (typical)	5 ms at nominal coil voltage
Release Time (typical)	2 ms at nominal coil voltage (with no coil suppression)
Capacitance	Contact to contact: 1.2 pF Contact set to contact set: 1.6 pF Contact to coil: 1.5 pF
Bounce (typical)	At 10 mA contact current 2 ms at operate N.O. side 3 ms at operate N.C. side
Dielectric Strength (at sea level for 1 min.)	1000 Vrms contact to coil 1000 Vrms contact to contact 1000 Vrms between contact sets
Insulation Resistance	1000 megohms min. at 20°C, 500 VDC, 50% RH
Dropout	Greater than 5% of nominal coil voltage
Ambient Temperature **Operating** **Storage**	At nominal coil voltage -55°C (-67°F) to 90°C (194°F) -55°C (-67°F) to 105°C (221°F)
Vibration	0.062" (1.5 mm) DA at 10–55 Hz
Shock	20 g
Enclosure	P.B.T. polyester (UL94 V-0)
Terminals	Tinned copper alloy, P.C.
Max. Solder Temp.	270°C (518°F)
Max. Solder Time	5 seconds
Max. Solvent Temp.	80°C (176°F)
Max. Immersion Time	30 seconds
Weight	4.5 grams

ZETTLER electronics GmbH
Junkersstrasse 3, D-82178 Puchheim, Germany
Tel. +49 89 800 97 0 office@ZETTLERelectronics.com
Fax +49 89 800 97 200 www.ZETTLERelectronics.com

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China

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RELAY ORDERING DATA

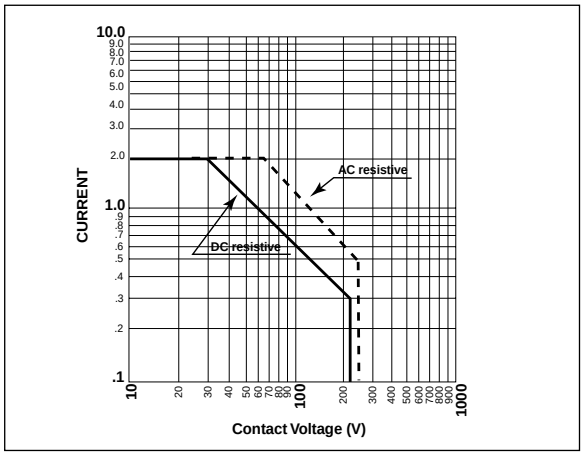
COIL SPECIFICATIONS				ORDER NUMBER
Nominal Coil VDC	Max. Continuous VDC	Coil Resistance ± 10%	Must Operate VDC	
3	7.5	60	2.1	AZ822–2C–3DSE
5	12.5	167	3.5	AZ822–2C–5DSE
6	15.0	240	4.2	AZ822–2C–6DSE
9	22.5	540	6.3	AZ822–2C–9DSE
12	30.0	960	8.4	AZ822–2C–12DSE
18	40.0	1,620	12.6	AZ822–2C–18DSE
24	52.9	2,880	16.8	AZ822–2C–24DSE
48	84.9	7,680	33.6	AZ822–2C–48DSE

TYPICAL CONTACT LIFE EXPECTANCY

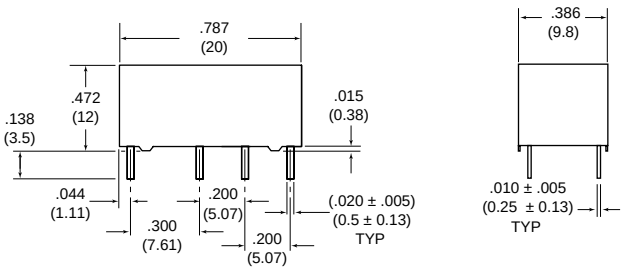
VOLTAGE	CURRENT	NUMBER OF OPERATIONS	
		RESISTIVE LOAD	INDUCTIVE LOAD
50 mV	1 mA	$1x\ 10^7$	1×10^7
30 VDC	1 A	5×10^5	15×10^4
30 VDC	0.7 A	1×10^6	3×10^5
30 VDC	0.3 A	3×10^6	1×10^6
60 VDC	0.5 A	5×10^5	—
60 VDC	0.3 A	1×10^6	—
60 VDC	0.2 A	3×10^6	—
30 VAC	2 A	5×10^5	15×10^4
30 VAC	1.3 A	1×10^6	3×10^5
30 VAC	0.7 A	3×10^6	1×10^6
60 VAC	1 A	5×10^5	15×10^4
60 VAC	0.7 A	1×10^6	3×10^5
60 VAC	0.3 A	3×10^6	1×10^6
125 VAC	0.5 A	5×10^5	15×10^4
125 VAC	0.3 A	1×10^6	3×10^5
125 VAC	0.2 A	3×10^6	1×10^6

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.

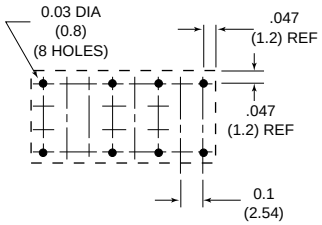
Maximum Switching Capacity



MECHANICAL DATA

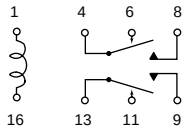


PC BOARD LAYOUT



Viewed toward terminals

WIRING DIAGRAM



Viewed toward terminals

Dimensions in inches with metric equivalents in parentheses. Tolerance: ± .010"

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