

MINIATURE POWER RELAY

FEATURES

- AC coils
- Dielectric strength 5000 Vrms
- Low cost
- Flux tight package
- 10 Amp switching - single pole contacts
- Isolation spacing greater than 8mm
- Molded materials: all 94V-0
- UL and Canadian file E43203



CONTACTS

Arrangement	SPST (1 Form A) SPDT (1 Form C)
Ratings	<p>Resistive load: Max. switched power: 300 W, 2500 VA Max. switched current: 10 A Max. switched voltage: 150 VDC/400 VAC</p> <p>Inductive load: (cosϕ =0.4) Max. switched power: 150W or 1875VA Max. Switched current: 10A Max. switched voltage: 125VDC or 400 VAC</p> <p><small>Note: If switching voltage is greater than 30 VDC, special precautions must be taken. Please contact the factory.</small></p>
Rated Load UL, CUR	10 A 250 VAC, resistive 1/2 HP 277 VAC
Min. Load	5 VDC, .01 A
Material	Silver alloy
Resistance	30 milliohms initially (6V, 1A method)

COIL

Power At Pickup Voltage (typical)	576 mW
Max. Continuous Dissipation	1.5 W at 20°C (68°F) ambient 1.2 W at 40°C (104°F) ambient
Temperature Rise	36°C (65°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. Specifications subject to change without notice.

GENERAL DATA

Life Expectancy Mechanical Electrical	Minimum operations 1 x 10 ⁷ 1 x 10 ⁵ at rated load
Operate Time (typical)	8 ms at nominal coil voltage
Release Time (typical)	5 ms at nominal coil voltage (with no coil suppression)
Dielectric Strength (at sea level for 1 min.)	5000 Vrms coil to contact 1000 Vrms between open contacts
Insulation Resistance	1000 megohms min. at 20°C, 500 VDC 50% RH
Dropout	Greater than 30% of nominal coil voltage
Ambient Temperature Operating Storage	At nominal coil voltage -40°C (-40°F) to 70°C (158°F) -40°C (-40°F) to 105°C (221°F)
Vibration	0.062" DA at 10–55 Hz
Shock	10 g
Enclosure	PC (94V-0)
Terminals	Tinned copper alloy, P.C.
Max. Solder Temp.	270°C (518°F)
Max. Solder Time	5 seconds
Weight	17 grams

RELAY ORDERING DATA

COIL SPECIFICATIONS - AC Coil					ORDER NUMBER	
Nominal Coil VAC	Must Operate VAC	Max. Continuous VAC	Nominal Current mA $\pm 10\%$	Coil Resistance $\pm 10\%$	Form A (SPST)	Form C (SPDT)
6	4.8	7.8	150.0	16	AZ683-1A-6A	AZ683-1C-6A
12	9.6	15.6	75.0	65	AZ683-1A-12A	AZ683-1C-12A
24	19.2	31.2	37.5	260	AZ683-1A-24A	AZ683-1C-24A
50	40.0	65.0	18.0	1130	AZ683-1A-50A	AZ683-1C-50A
110	88.0	143.0	10.6	4600	AZ683-1A-110A	AZ683-1C-110A
220	176.0	286.0	5.3	20200	AZ683-1A-220A	AZ683-1C-220A

MECHANICAL DATA

Terminal Number	Dimensions	Tol.: ± 0.005 (0.13)
1, 5	.023 (0.58) x .023 (0.58)	
2	0.016 (0.4) x 0.040 (1.015)	
3	0.017 (0.431) x 0.040 (1.015)	
4	0.011 (0.279) x 0.040 (1.015)	

WIRING DIAGRAM (Bottom View)

PC BOARD LAYOUT (Bottom View)

Dimensions in inches with metric equivalents in parentheses. Tolerance: ± 0.010 "