### **AZ847** \_\_

# MICROMINIATURE POLARIZED RELAY

#### **FEATURES**

- Microminiature size: Height: .217 inches (5.5 mm);
   Length: .551 inches (14 mm); Width: .354 inches (9 mm)
- High sensitivity, 79 mW pickup
- Monostable and bistable (latching) two coil versions available
- Meets FCC Part 68.302 1500 V lightning surge
- DIP terminal layout, fits 10 pin IC socket
- Epoxy sealed for automatic wave soldering and cleaning
- UL file E43203, CSA 73363



Arrangement	DPDT (2 Form C) Bifurcated crossbar contacts			
Ratings	Resistive load:  Max. switched power: 60 W or 62.5 VA  Max. switched current: 2 A  Max. switched voltage: 220 VDC or 250 VAC  Max. carry current: 2 A			
Rated Load UL/CSA	0.5 A at 125 VAC res. 2.0 A at 30 VDC res. 0.3 A at 110 VDC res.			
Material	Silver palladium; gold clad			
Resistance	< 50 milliohms initially			

#### **COIL** (Polarized)

Power At Pickup Voltage (typical)	Single side stable: 70–150 mW Bistable (latching) two coil: 100–150 mW			
Max. Continuous Dissipation	700 mW at 20°C (68°F) ambient 530 mW at 40°C (104°F) ambient			
Temperature Rise	18°C (32°F) at nominal coil voltage			
Temperature	Max. 105°C (221°F)			

#### **NOTES**

- 1. All values at 20°C (68°F).
- 2. Relay has fixed coil polarity.
- 3. Relay may pull in with less than "Must Operate" value.
- 4. Relay adjustment may be affected if undue pressure is exerted on relay case.
- For complete isolation between the relay's magnetic fields, it is recommended that a .197" (5.0 mm) space be provided between adjacent relays
- 6. Specifications subject to change without notice.



#### **GENERAL DATA**

Life Expectancy Mechanical Electrical	Minimum operations 1 x 10 <sup>8</sup> 5 x 10 <sup>5</sup> at 1 A 30 VDC, Res. 2 x 10 <sup>5</sup> at 0.5 A 125 VAC, Res.			
Operate Time (typical)	2 ms at nominal coil voltage			
Release Time (typical)	1 ms at nominal coil voltage (with no coil suppression)			
Set Time (bistable versions)	2 ms at nominal coil voltage (typical)			
Reset Time (bistable versions)	2 ms at nominal coil voltage (typical)			
Dropout	Greater than 10% of nominal coil voltage			
Capacitance	Contact to contact: 0.5 pF Contact set to contact set: 1.5 pF Contact to coil: 1.0 pF			
Dielectric Strength (at sea level)	1000 Vrms between contact sets 1000 Vrms across contacts 1,250 Vrms contact to coil Meets FCC part 68.302 1500 V lightning surge			
Insulation Resistance	1000 megohms min. at 25°C, 500 VDC, 50% RH			
Ambient Temperature Operating Storage	At nominal coil voltage -40°C (-40°F) to 85°C (185°F) -40°C (-40°F) to 105°C (221°F)			
Vibration	.130" DA at 10-55 Hz			
Shock	50 g			
Enclosure	LCP			
Terminals	Tinned copper alloy, P.C.			
Max. Solder Temp.	260°C (500°F)			
Max. Solder Time	5 seconds			
Max. Solvent Temp.	80°C (176°F)			
Max. Immersion Time	30 seconds			
Weight	1.2 grams			



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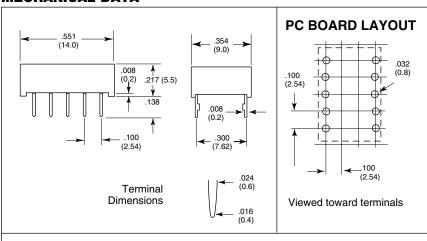
#### **RELAY ORDERING DATA**

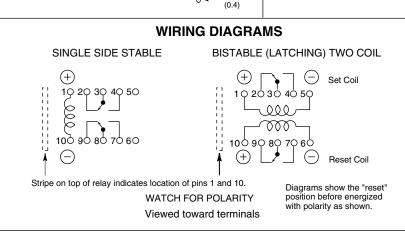
SINGLE SIDE STAE	BLE			
Nominal Coil VDC	Max. Continuous VDC	Coil Resistance ± 10%	Must Operate VDC	ORDER NUMBER
3	6.7	64.3	2.3	AZ847-3
5	11.2	178	3.8	AZ847-5
6	13.4	257	4.5	AZ847-6
9	20.1	579	6.8	AZ847-9
12	26.8	1,028	9.0	AZ847-12
24	44.9	2,880	18.0	AZ847–24

#### **BISTABLE (LATCHING) TWO COIL**

Nominal Coil	Max. Continuous	Coil Resistance ± 10%		Must Operate	ORDER NUMBER
VDC	VDC	Coil I	Coil II	VDC	
3	5.6	45	45	2.3	AZ847P2-3
5	9.4	125	125	3.8	AZ847P2-5
6	11.2	180	180	4.5	AZ847P2-6
9	16.8	405	405	6.8	AZ847P2-9
12	22.4	720	720	9.0	AZ847P2-12
24	36.7	1,920	1,920	18.0	AZ847P2-24

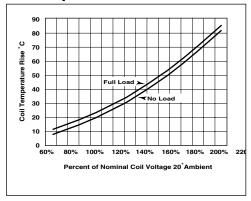
#### **MECHANICAL DATA**



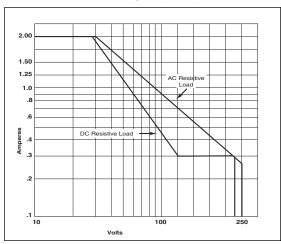


Dimensions in inches with metric equivalents in parentheses. Tolerance: ±0.010"

#### **Coil Temperature Rise**



#### **Maximum Switching Capacity**





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