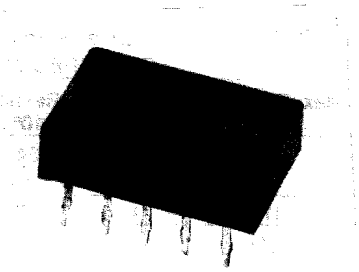
AZ 847 MICRO MINIATURE POLARIZED RELAY

Features

- Micro Miniature Size - Height: 0.217 in (5.5 mm) Length: 0.551 in (14 mm), Width: 0.354 in (9 mm)
- High Sensitivity - 79mW Pickup
- Monostable and Bistable (Latching) Two Coil Versions Available
- Meets FCC Part 68.302 1,500V Lightning Surge
- DIP Terminal Layout - Fits 10-pin IC Socket
- UL File E43203
- CSA LR 73363
- Epoxy Sealed for Automatic Wave Soldering and Cleaning



Specifications

Contacts

Arrangement	DPDT (2 Form C) Bifurcated crossbar contacts
Rating	Noninductive load Max switched power: 30W or 62.5VA Max switched current: 1 Amps Max switched voltage: 110VDC or 125VAC
UL, CSA Rating	1A @ 30VDC 0.5A @ 125VAC
Material	Silver Palladium, Gold Clad
Resistance	50 milliohms initially

Coil

Power	
at pickup voltage (typical)	Single-side stable: 70-150 mW Bistable (latching) two coil: 100-150mW
Max Continuous Dissipation	700mW @ 20C (68F) ambient 530mW @ 40C (104F) ambient
Temperature Rise	18C (64F) at nominal coil voltage
Temperature	Maximum 105C (221F)

General Data

Life Expectancy	Minimum operations
Mechanical	100,000,000
Electrical	500,000 @ 1A, 30VDC 200,000 @ 0.5A, 125VAC
Operate Time (typical)	2 ms at nominal coil voltage
Release Time (typical)	1ms at nominal coil voltage with no coil suppression
Set Time (bistable)	2 ms at nominal coil voltage (typical)
Reset Time (bistable)	2 ms at nominal coil voltage (typical)
Drop Out	> 5% of nominal coil voltage
Capacitance	0.5pF - contact to contact 1.5pF - contact set to contact set 1.0pF - contact to coil
Dielectric Strength (at sea level)	1,000Vrms contact to coil 1,000Vrms between contact sets 1,000Vrms across contacts Meets FCC Part 68.302 1,500V Lightning Surge
Insulation Resistance	1,000 megohms min @ 25C (77F), 500VDC, 50% RH
Ambient Temp	At nominal coil voltage
(operating)	-40C (-40F) to 85C (185F)
(storage)	-40C (-40F) to 85C (185F)
Vibration	0.130" DA @ 10-55 Hz
Shock	50g
Enclosure	LCP
Terminals	Tinned copper alloy, P.C.
Max Solder Temp	250C (482F)
Max Solder Time	5 seconds
Max Solvent Time	80C (176F)
Immersion Time	30 seconds maximum
Weight	1.2 grams

Notes

1. All values at 20C (68F) unless otherwise indicated
2. Relay has fixed coil polarity
3. Relay may pull in with less 'Must Operate' value
4. Relay adjustment may be affected if undue pressure is exerted
5. For complete isolation between the relay's magnetic fields, it is recommended that a 5mm space be provided between relays
6. Relay adjustment may be affected if undue pressure is exerted

Relay Ordering Data

Single Side Stable

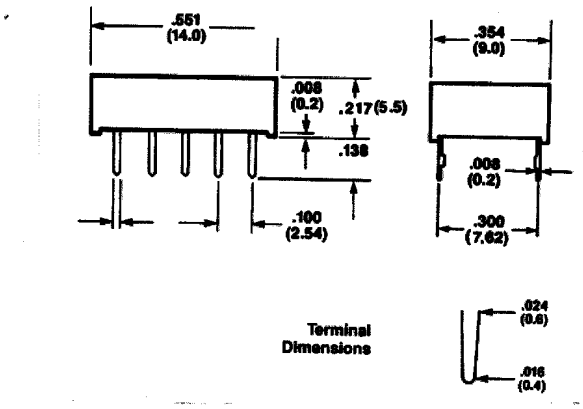
Coil Specifications				ORDER NUMBER
Coil VDC nominal	Max VDC continuous	Coil Resistance	Must Operate VDC	
3	5.7	64.3	2.1	AZ 847-3
5	11.2	178	3.5	AZ 847-5
6	13.4	257	4.2	AZ 847-6
9	20.1	579	6.3	AZ 847-9
12	26.8	1,028	8.4	AZ 847-12
24	44.9	2,880	16.8	AZ 847-24

Bistable (Latching) Two Coil

Coil Specifications				ORDER NUMBER
Coil VDC nominal	Max VDC continuous	Coil Resistance*	Must Operate VDC	
3	5.60	45	2.1	AZ 847P2-3
5	9.40	125	3.5	AZ 847P2-5
6	11.20	180	4.2	AZ 847P2-6
9	15.80	405	6.3	AZ 847P2-9
12	22.40	720	8.4	AZ 847P2-12
24	36.70	1,920	16.8	AZ 847P2-24

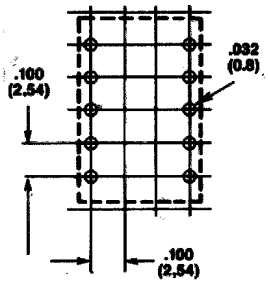
*for both SET and RESET

Mechanical Dimensions



Terminal Dimensions

PC BOARD LAYOUT



Viewed towards terminals

Dimensions in inches with metric equivalents in parentheses. Tolerance is 0.010"