MICROMINIATURE SURFACE MOUNT POLARIZED RELAY

FEATURES

- High dielectric and surge voltage: 1.5 kV surge (per FCC Part 68) 750 VRMS open contacts
- Low power consumption: 56 mW set
- Non-latching and latching versions
- Single coil and dual coil versions
- Stable contact resistance for low level signal switching
- Epoxy sealed for automatic wave soldering and cleaning
- UL file E43203, CSA 73363
- All plastics meet UL94 V-0, 30 min. oxygen index



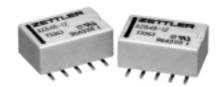
Arrangement	DPDT (2 Form C) Bifurcated crossbar contacts			
Ratings	Non-inductive load: Max. switched power: 60 W or 62.5 VA Max. switched current: 2 A Max. switched voltage: 220 VDC or 250 VAC			
Rated Load UL/CSA	0.5 A at 125 VAC res. 2.0 A at 30 VDC res. 0.3 A at 110 VDC res.			
Material	Silver palladium; gold clad			
Resistance	< 50 milliohms initially at 6 V, 0.1 A			

COIL

Power	AZ848: 79 mW to 169 mW
At Pickup Voltage	AZ848P1: 57 mW to 85 mW
(typical)	AZ848P2: 110 mW to 170 mW
Max. Continuous	826 mW at 20°C (68°F) ambient
Dissipation	652 mW at 40°C (104°F) ambient
Temperature Rise	At nominal coil voltage 18°C (32°F) (3 - 12 VDC coils) 25°C (45°F) (18, 24 VDC coils) 34°C (61°F) (48 VDC coils)
Temperature	Max. 115°C (239°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 ⁸ operations at 3 Hz 2 x 10 ⁵ operations at 0.5 A, 125 VAC, resistive 5 x 10 ⁵ operations at 1.0 A, 30 VDC, resistive		
Operate Time (typical)	2 ms at nominal coil voltage		
Release Time (typical)	1 ms at nominal coil voltage (with no coil suppression)		
Bounce (typical)	1 ms (at nominal coil voltage)		
Capacitance	< 0.5 pF open and adjacent contacts < 1.0 pF contact to coil		
Dielectric Strength (at sea level)	See table		
Insulation Resistance	109 ohms min. at 500 VDC		
Dropout	Greater than 10% of nominal coil voltage		
Ambient Temperature Operating Storage	At nominal coil voltage -40°C (-40°F) to 85°C (185°F) -40°C (-40°F) to 85°C (185°F)		
Vibration	Operational, 3.3 mm DA, 10 - 55 Hz Non-Destructive, 5.5 mm DA, 10 -55 Hz		
Shock	Operational, 50g min., 11 ms Non-Destructive, 100 g min., 6 ms		
Enclosure	LCP		
Terminals	Tinned copper alloy, P.C.		
Max. Solder Temp.	See charts		
Max. Solder Time	See charts		
Max. Solvent Temp.	80°C (176°F)		
Max. Immersion Time	30 seconds		
Weight	1.5 grams		



RELAY ORDERING DATA

SINGLE SIDE STABLE (Standard, Non-Latching)				
COIL SPECIFICATIONS				
Nominal Coil VDC	Max. Continuous VDC	Coil Resistance ± 10%	Must Operate VDC	ORDER NUMBER
1.5	3.7	16.1	1.13	AZ848-1.5
3	7.3	64.3	2.25	AZ848-3
4.5	10.9	145	3.38	AZ848-4.5
5	12.1	178	3.75	AZ848-5
6	14.6	257	4.5	AZ848-6
9	21.9	579	6.75	AZ848-9
12	29.1	1,028	9.0	AZ848-12
18	36.6	1,620	13.5	AZ848-18
24	48.7	2,880	18.0	AZ848-24
48	79.6	7,680	36.0	AZ848-48

RELAY ORDERING DATA

NGLE COIL (Late	hing)			
COIL SPECIFICATIONS				
Nominal Coil VDC	Max. Continuous VDC	Coil Resistance ± 10%	Set (+)/Reset (-) VDC	ORDER NUMBER
1.5	4.3	22.5	1.13	AZ848P1-1.5
3	8.6	90	2.25	AZ848P1-3
4.5	12.9	203	3.38	AZ848P1-4.5
5	14.4	250	3.75	AZ848P1-5
6	17.2	360	4.5	AZ848P1-6
9	25.8	810	6.75	AZ848P1-9
12	34.5	1,440	9.0	AZ848P1-12
18	42.2	2,160	13.5	AZ848P1-18
24	56.3	3,840	18.0	AZ848P1-24

RELAY ORDERING DATA

COIL SPECIFICATIONS				
Nominal Coil VDC	Max. Continuous VDC	Coil Resistance (each coil) ± 10%	Set/Reset VDC	ORDER NUMBER
1.5	3.0	11.25	1.13	AZ848P2-1.5
3	6.1	45	2.25	AZ848P2-3
4.5	9.1	101	3.38	AZ848P2-4.5
5	10.2	125	3.75	AZ848P2-5
6	12.2	180	4.5	AZ848P2-6
9	25.8	405	6.75	AZ848P2-9
12	24.4	720	9.0	AZ848P2-12
18	29.9	1,080	13.5	AZ848P2-18
24	39.8	1,920	18.0	AZ848P2-24

INITIAL DIELECTRIC AND SURGE STRENGTH (minimum)

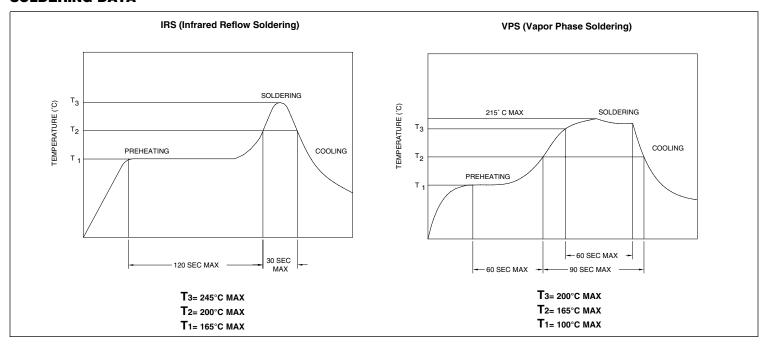
		SURGE		
	VRMS, 1 min.	Peak (V)	Rise Time	Decay Time
Between Open Contacts	750	1500	10 µs	160 µs
Between Contact Sets	750	1500	10 µs	160 µs
Between Coil and Contacts	1000	1500	10 µs	160 µs

Decay time measured from beginning of surge.

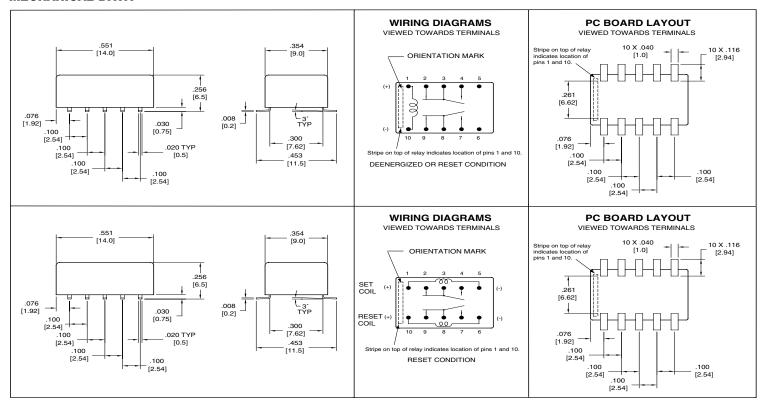


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SOLDERING DATA



MECHANICAL DATA



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



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PACKING

(1) Packing Method (only tape packing is available)

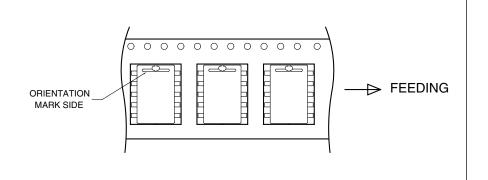
 Taping Standards: JIS C 0806 and RC - 1009B (EIAJ)

• Tape type: TB2416 or TE2416

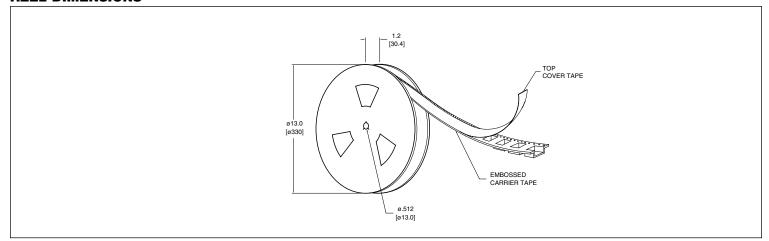
• Reel type: R24D

· Quantity on 1 reel: 500 relays

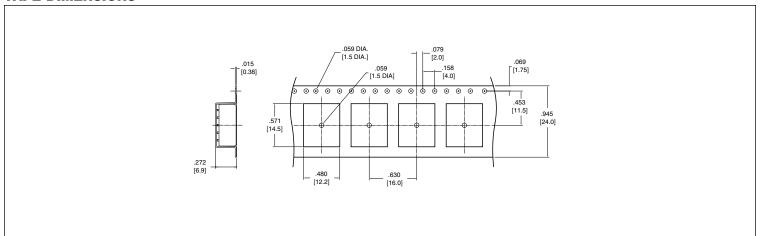
· Packing orientation code: B



REEL DIMENSIONS



TAPE DIMENSIONS





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