MICROMINIATURE POLARIZED RELAY

FEATURES

- Microminiature size: up to 50% less board area than previous generation telecom relays
- High dielectric and surge voltage:
 2.5 KV surge (per Bellcore TA-NWT-001089)
 1.5 KV surge (per FCC Part 68)
 1,000 Vrms, open contacts
- Low power consumption: 79 mW pickup
- Stable contact resistance for low level signal switching
- Epoxy sealed for automatic wave soldering and cleaning
- UL and CSA approval pending
- All plastics meet UL94 V-O, 30 min. oxygen index



Arrangement	DPDT (2 Form C) Bifurcated crossbar contacts		
Ratings	Resistive load: Max. switched power: 60 W or 62.5 VA Max. switched current: 2.0 A Max. switched voltage: 220 VDC or 250 VAC		
Rated Load UL/CSA (Pending)	0.5 A at 125 VAC 2.0 A at 30 VDC 0.3 A at 110 VDC		
Material	Silver nickel gold plated Silver palladium available upon request		

COIL (Polarized)

Power At Pickup Voltage (typical)	79 mW			
Max. Continuous Dissipation	1.0 W at 20°C (68°F) 0.78 W at 40°C (104°F)			
Temperature Rise	At nominal coil voltage 18°C (32°F)			
Temperature	Max. 110°C (230°F)			

NOTES

- 1. All values at 20°C (68°F).
- 2. Relay may pull in with less than "Must Operate" value.
- 3. Relay has fixed coil polarity.
- 4. Specifications subject to change without notice.



GENERAL DATA

Life Evnesteney	Minimum operations			
Life Expectancy Mechanical	Minimum operations 1 x 108			
Electrical	1 x 10 ⁵ 1 x 10 ⁵ at 0.5 A, 125 VAC, resistive			
	2 x 10 ⁵ at 1.0 A, 30 VDC, resistive			
Operate Time	3 ms at nominal coil voltage			
(typical)	3 ms at nominal con voltage			
Release Time (typical)	2 ms at nominal coil voltage			
	(with no coil suppression)			
Bounce (typical)	At 10 mA contact current			
	1 ms at operate or release			
Dielectric Strength	See table			
(at sea level)				
Dropout	Greater than 10% of nominal coil voltage			
Insulation Resistance	109 ohms min. at 25°C, 500 VDC,			
	50% RH			
Ambient Temperature	At nominal coil voltage			
Operating	-40°C (-40°F) to 85°C (185°F)			
Storage	-40°C (-40°F) to 110°C (230°F)			
Vibration	Operational, 35 g, 10-1000 Hz			
Shock	Operational, 50 g min., 11 ms			
	Non-destructive, 150 g min., 11 ms			
Max. Solder Temp.	See soldering profile			
Temp./Time				
Max. Solvent Temp.	80°C (176°F)			
Max. Immersion Time	30 seconds			
Weight	2.3 grams			
Enclosure	P.B.T. polyester			
Terminals	Tinned copper alloy, P.C.			

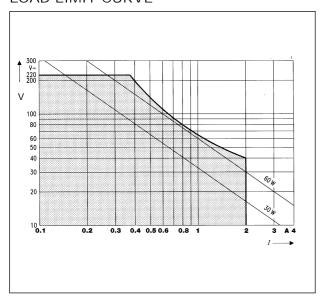
RELAY ORDERING DATA

STANDARD RELAYS				Order Number		
Nominal Coil VDC	Max. Continuous VDC	Coil Resistance ± 10%	Must Operate VDC	THT Through Hole	SMT Long	SMT Short
3	6.5	64.3	2.25	AZ833-3DE	AZ833S1-3DE	AZ833S2-3DE
4.5	9.8	145	3.38	AZ833-4.5DE	AZ833S1-4.5DE	AZ833S2-4.5DE
5	10.9	178	3.75	AZ833-5DE	AZ833S1-5DE	AZ833S2-5DE
6	13.0	257	4.50	AZ833-6DE	AZ833S1-6DE	AZ833S2-6DE
9	19.6	578	6.75	AZ833-9DE	AZ833S1-9DE	AZ833S2-9DE
12	26.2	1,029	9.00	AZ833-12DE	AZ833S1-12DE	AZ833S2-12DE
24	52.3	4114	18.00	AZ833-24DE	AZ833S1-24DE	AZ833S2-24DE

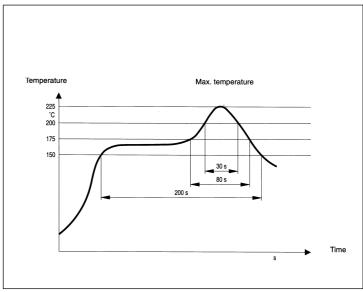
INITIAL DIELECTRIC S	TRENGTH (minir	mum)	SURGE	-
	VRMS, 1 min.	Peak (V)	Rise Time (µS)	Decay Time* (9µS) (1/2 peak)
Between open contacts	1,000	1,500	10	160
Between contact sets	1,000	1,500	2	160
Between coil and contacts	1,800	2,500	2	10

^{*} Decay time measured from beginning of surge.

LOAD LIMIT CURVE

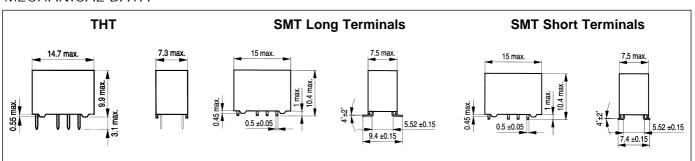


RECOMMENDED SOLDERING PROFILE (Convection Soldering)



AZ833_

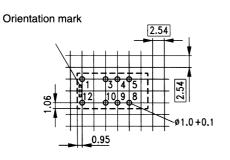
MECHANICAL DATA



PCB Layout

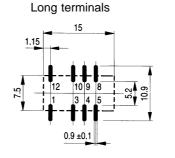
Mounting hole layout

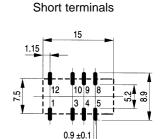
Viewed toward terminals



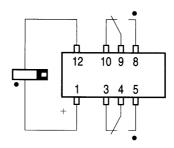
Solder Pad Layout

Viewed toward the component side of the PCB



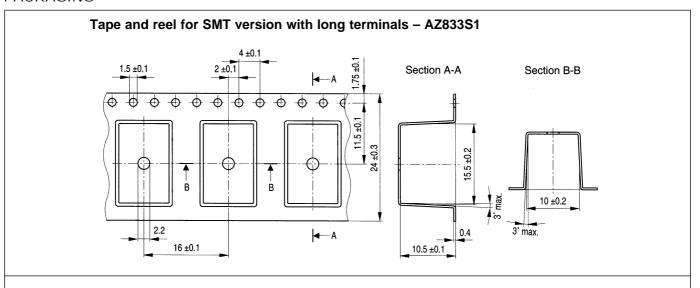


Wiring Diagram

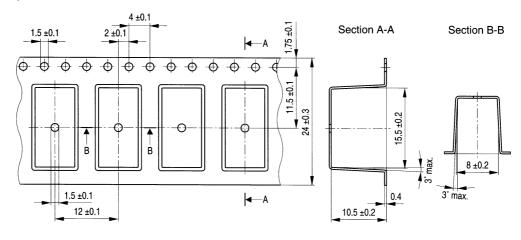


Relay viewed from top

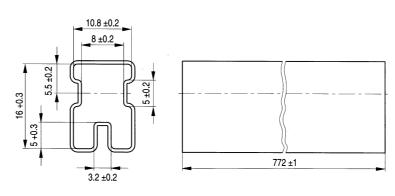
PACKAGING



Tape and reel for SMT version with short terminals - AZ833S2



Tube for THT version - AZ833



50 items / tube