

AZ673

MINIATURE POWER RELAY

FEATURES

- Compact size for dense PCB layouts
- High power contacts (10A) for use in consumer appliances, HVAC, TV
- Withstands surges of up to 10,000 volts
- Epoxy sealed version available
- Insulation Class B standard
- UL/CUR file E44211
- TÜV file R50454512



CONTACTS

Arrangement	1 Form A (SPST), 1 Form C (SPDT)
Ratings	Max. switched power: 300W or 2500VA Max. switched current: 10A Max. switched voltage: 150VDC* or 250 VAC *Note: If switching voltage is greater than 30 VDC, special precautions must be taken. Please contact the factory.
Rated Load UL, CUR,	10A at 250VAC, general use, 100k 10A at 30VDC resistive, 100K 1/8HP at 125VAC (1 Form C only) 1/4HP at 250VAC (1 Form C only) TV-5 at 125VAC (1 Form A only)
TÜV	10A at 250VAC resistive, 100k 10A at 30VDC resistive, 100k
Material	Silver cadmium oxide or silver tin oxide
Resistance	< 100 milliohms initially (6V, 1A voltage drop method)

COIL

Power At Pickup Voltage (typical)	300mW standard coil 140mW sensitive coil
Max. Continuous Dissipation	1.2W at 20°C (68°F) ambient
Temperature Rise	48°C (86°F) at nominal coil voltage, std. coil 22°C (40°F) at nominal coil voltage, sens. coil
Temperature	Max. 130°C (266°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.
4. Specifications subject to change without notice.

GENERAL DATA

Life Expectancy Mechanical Electrical	1 x 10 ⁷ 1 x 10 ⁵ at 10A 240VAC Res.
Operate Time (typical)	15ms at nominal coil voltage
Release Time (typical)	5ms at nominal coil voltage (with no coil suppression)
Dielectric Strength (at sea level for 1 min.)	1000Vrms contact to contact 4000Vrms N.O. contact to coil 3000Vrms N.C. contact to coil 10,000V surge contact to coil
Insulation Resistance	1000 megohms min. at 20°C, 500VDC, 50% RH
Dropout	5% of nominal coil voltage
Ambient Temperature Operating	-40°C (-40°F) to 70°C (158°F)
Storage	-40°C (-40°F) to 105°C (221°F) sensitive coil -40°C (-40°F) to 130°C (266°F)
Vibration	1.5mm DA at 10–55 Hz
Shock	10 g
Enclosure	Plastic
Terminals	PC, tinned
Max. Solder Temp.	250°C (482°F)
Max. Solder Time	5 seconds
Max. Solvent Temp.	80°C
Max. Immersion Time	30 seconds
Weight	Approx. 12 grams

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RELAY ORDERING DATA

COIL SPECIFICATIONS — STANDARD COIL				ORDER NUMBER*	
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance $\pm 10\%$	1 Form A	1 Form C
5	3.75	6.5	47	AZ673-1A-5D	AZ673-1C-5D
6	4.50	7.8	68	AZ673-1A-6D	AZ673-1C-6D
9	6.75	11.7	155	AZ673-1A-9D	AZ673-1C-9D
12	9.00	15.6	270	AZ673-1A-12D	AZ673-1C-12D
18	13.5	23.4	620	AZ673-1A-18D	AZ673-1C-18D
24	18.0	31.2	1080	AZ673-1A-24D	AZ673-1C-24D
48	36.0	62.4	4400	AZ673-1A-48D	AZ673-1C-48D

COIL SPECIFICATIONS — SENSITIVE COIL				ORDER NUMBER*
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance $\pm 10\%$	1 Form A
5	3.75	6.5	100	AZ673-1A-5DS
6	4.50	7.8	145	AZ673-1A-6DS
9	6.75	11.7	325	AZ673-1A-9DS
12	9.00	15.6	575	AZ673-1A-12DS
18	13.5	23.4	1300	AZ673-1A-18DS
24	18.0	31.2	2310	AZ673-1A-24DS

*For epoxy sealed version add suffix "E". For silver tin oxide contacts add suffix "A". When suffix "E" is specified for Epoxy Seal, refer to AZ "Relay Technical Notes" on AZ website - Product Resources. Consult factory for other PCB process conditions that may apply.

MECHANICAL DATA

FORM C VERSION SHOWN	TABLE I	PC BOARD LAYOUT		CIRCUIT DIAGRAM																								
		5 x .051 (1.3)	.650 (16.5)																									
	<table border="1"> <thead> <tr> <th>DIM. LETTER</th> <th>DIM. SEALED INCHES</th> <th>DIM. SEALED MM</th> <th>DIM. UNSEALED INCHES</th> <th>DIM. UNSEALED MM</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>.965</td> <td>24.5</td> <td>.937</td> <td>23.8</td> </tr> <tr> <td>B</td> <td>.413</td> <td>10.5</td> <td>.374</td> <td>9.5</td> </tr> <tr> <td>C</td> <td>.093</td> <td>2.4</td> <td>.079</td> <td>2.0</td> </tr> <tr> <td>D</td> <td>.059</td> <td>1.5</td> <td>.039</td> <td>1.0</td> </tr> </tbody> </table>	DIM. LETTER	DIM. SEALED INCHES	DIM. SEALED MM	DIM. UNSEALED INCHES	DIM. UNSEALED MM	A	.965	24.5	.937	23.8	B	.413	10.5	.374	9.5	C	.093	2.4	.079	2.0	D	.059	1.5	.039	1.0		
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Dimensions in inches with metric equivalents in parentheses. Tolerance: $\pm .010"$

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12/12/19

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This specification provides an overview of the most significant part features. Any individual applications and operating conditions are not taken into consideration. It is recommended to test the product under application conditions. Responsibility for the application remains with the customer. Proper operation and service life cannot be guaranteed if the part is operated outside the specified limits.