

AZ770

SPDT SUBMINIATURE POWER RELAY

FEATURES

- Small footprint
- 5 kV dielectric strength, 10 kV surge
- Class B insulation standard
- 8 mm creepage and clearance
- Epoxy sealed version available
- 5 Amp switching
- High temperature 105 C and high current 10A version available (UL Pending)
- UL, CUR file E44211, VDE 40006815



CONTACTS

Arrangement	SPST (1 Form A) SPDT (1 Form C)
Ratings	Resistive load: Max. switched power: 150 W (SPST-NO) standard 1250 VA (SPST-NO) standard 90 W (SPDT) 750 VA (SPDT) Max. switched current: 5 A AC SPST-NO standard 5 A DC SPST-NO standard 3 A AC/DC SPST-NO sensitive 3 A AC/DC SPDT Max. switched voltage: 150* VDC or 380 VAC <small>*Note: If switching voltage is greater than 30VDC, special precautions must be taken. Please contact the factory.</small>
Rated Load UL, CUR	Form A (N.O.) 5 A at 250 VAC, Res., 100k cycles 5 A at 30 VDC, Res., 100k cycles 1/8 HP, 125 / 250 VAC, 100k cycles 3 A at 250 VAC, 0.4 PF., 100k cycles C300 Pilot Duty, 125 / 250 VAC, 100k cycles TV-2, 120 VAC Form C 3 A at 250 VAC, Res. 100k cycles 3 A at 30 VDC, Res. 100k cycles
VDE	Form A and Form C 5 A at 250 VAC, 100k cycles
Material	Silver nickel, gold plating available Silver tin oxide (VDE 'T' version only)
Resistance	<100 milliohms initially (24 V, 1 A voltage drop method)

COIL

Power At Pickup Voltage (typical)	253 mW standard 113 mW sensitive
Max. Continuous Dissipation	1.25 W at 20°C (68°F) ambient
Temperature Rise	41°C (74°F) at nominal coil voltage, standard 22°C (40°F) at nominal coil voltage, sensitive
Temperature	Max. 130°C (266°F)

GENERAL DATA

Life Expectancy Mechanical Electrical	Minimum operations 1 x 10 ⁶ 1 x 10 ⁵ at 5 A 240 VAC Res.
Operate Time (typical)	8 ms at nominal coil voltage
Release Time (typical)	4 ms at nominal coil voltage (with no coil suppression)
Dielectric Strength (at sea level for 1 min.)	5000 Vrms coil to contact 1000 Vrms between open contacts
Surge Voltage Coil to contact	10,000V (at 1.2x50 μs)
Insulation Resistance	1000 megohms min. at 20°C 500 VDC 50% RH
Dropout	Greater than 5% of nominal coil voltage
Ambient Temperature Operating Storage	At nominal coil voltage -40°C (-40°F) to 90°C (194°F), standard -40°C (-40°F) to 105°C (221°F), sensitive -40°C (-40°F) to 130°C (266°F)
Vibration	0.062" DA at 10–55 Hz
Shock	10 g operating, 100 g damage
Enclosure	P.B.T. polyester
Terminals	Tinned copper alloy, P.C.
Max. Solder Temp.	270°C (518°F)
Max. Solder Time	5 seconds
Max. Solvent Temp.	80°C (176°F)
Max. Immersion Time	30 seconds
Weight	4.6 grams

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.



AMERICAN ZETTLER, INC.

www.azettler.com

75 COLUMBIA • ALISO VIEJO, CA 92656 • PHONE: (949) 831-5000 • FAX: (949) 831-8642 • E-MAIL: SALES@AZETTLER.COM

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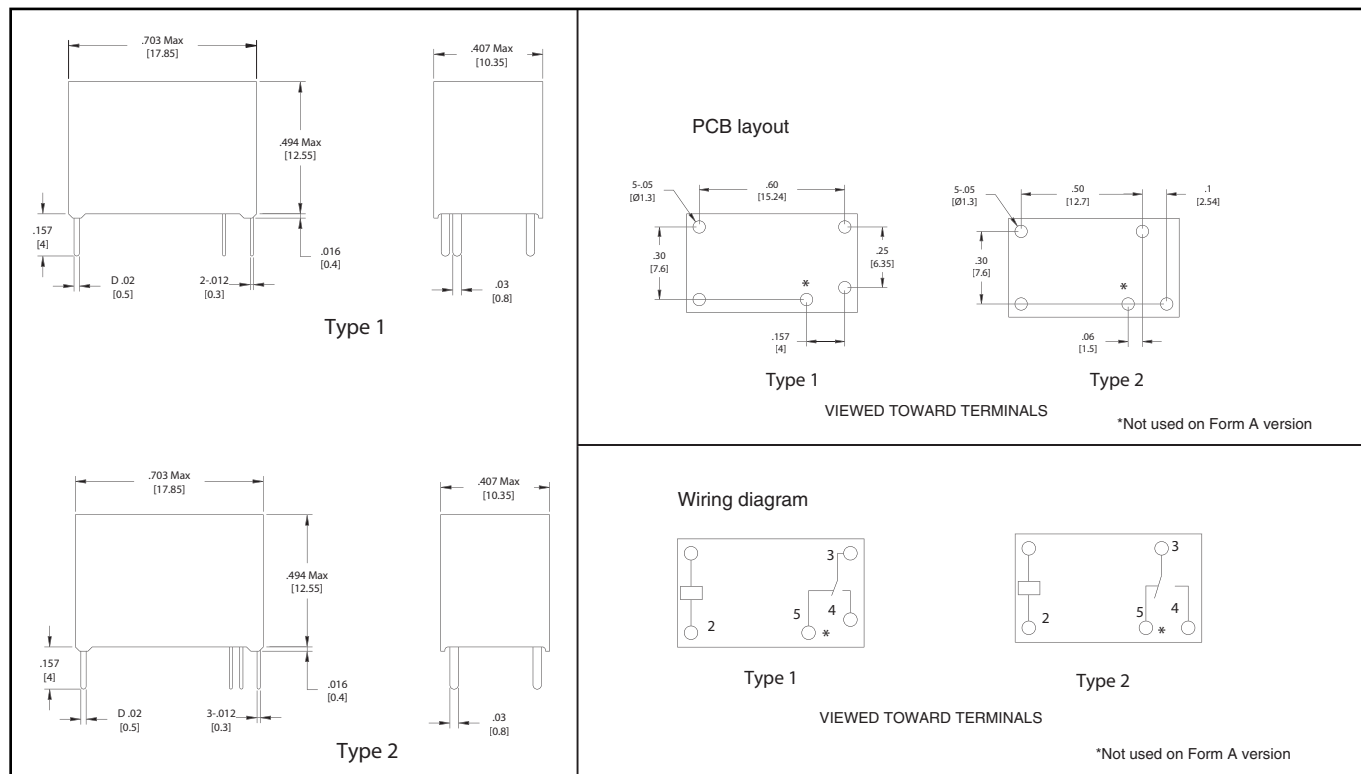
RELAY ORDERING DATA

STANDARD RELAYS – TYPE 1 FOOTPRINT					
COIL SPECIFICATIONS				ORDER NUMBER*	
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance	Form A (SPST)	Form C (SPDT)
3	2.25	3.9	20 ± 10%	AZ770-1A-3D	AZ770-1C-3D
5	3.75	6.5	55 ± 10%	AZ770-1A-5D	AZ770-1C-5D
6	4.5	7.8	80 ± 10%	AZ770-1A-6D	AZ770-1C-6D
9	6.75	11.7	180 ± 10%	AZ770-1A-9D	AZ770-1C-9D
12	9.0	15.6	320 ± 10%	AZ770-1A-12D	AZ770-1C-12D
18	13.5	23.4	720 ± 10%	AZ770-1A-18D	AZ770-1C-18D
24	18.0	31.2	1,280 ± 10%	AZ770-1A-24D	AZ770-1C-24D
48	36.0	62.4	5120 ± 15%	AZ770-1A-48D	AZ770-1C-48D

SENSITIVE RELAYS – TYPE 1 FOOTPRINT					
COIL SPECIFICATIONS				ORDER NUMBER*	
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance	Form A (SPST)	
3	2.25	5.1	45 ± 10%	AZ770-1A-3DS	
5	3.75	8.5	125 ± 10%	AZ770-1A-5DS	
6	4.5	10.2	180 ± 10%	AZ770-1A-6DS	
9	6.75	15.3	400 ± 10%	AZ770-1A-9DS	
12	9.0	20.4	720 ± 10%	AZ770-1A-12DS	
18	13.5	30.6	1600 ± 10%	AZ770-1A-18DS	
24	18.0	40.8	2800 ± 10%	AZ770-1A-24DS	

*Add suffix "E" for epoxy sealed version. Add suffix "K" for Type 2 footprint. Add suffix "G" for gold plated contacts. Add "H" after AZ770 for high temperature version (sensitive only). Add "T" after AZ770 for high current version (SPST sensitive only). If VDE required add "E" after 1A for silver tin oxide contacts

MECHANICAL DATA



Dimensions in inches with metric equivalents in parentheses. Tolerance: ± .010"



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