# **AZ770** <sub>-</sub>

# **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 avilable (UL Pending)
- UL, CUR file E44211, VDE 40006815



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 *Note: If switching voltage is greater than 30 VDC, special precautions must be taken. Please contact the factory.			
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			
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 <sup>6</sup> 1 x 10 <sup>5</sup> 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 μ s)			
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.



# **RELAY ORDERING DATA**

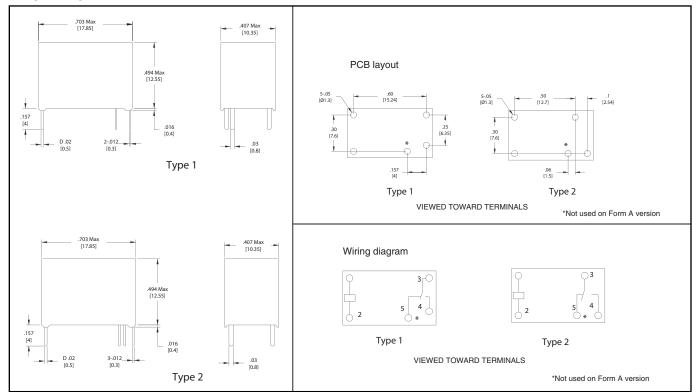
COIL SPECIFICATIONS				ORDER NUMBER*	
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance	Form A (SPST)	Form C (SPDT)
3	2.25	3.9	20 ± 10%	AZ770-1A-3D	AZ770-1C-3D
5	3.75	6.5	55 ± 10%	AZ770-1A-5D	AZ770-1C-5D
6	4.5	7.8	80 ± 10%	AZ770-1A-6D	AZ770-1C-6D
9	6.75	11.7	180 ± 10%	AZ770-1A-9D	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

<sup>\*</sup>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 (sensitive only).

## **MECHANICAL DATA**



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

