

AZ7705

SUBMINIATURE POWER RELAY

FEATURES

- Small footprint
- 4kV dielectric strength, 10kV surge
- Epoxy sealed available
- Class F insulation system standard
- 5 Amp switching
- High current 10A version available
- UL, CUR file E44211



CONTACTS

Arrangement	SPST (1 Form A)
Ratings	Resistive load: Max. switched power: 150W (SPST-NO) standard 1250VA (SPST-NO) standard Max. switched current: 5A AC SPST-NO standard 5A DC SPST-NO standard 3A AC/DC SPST-NO sensitive Max. switched voltage: 30* VDC or 277VAC *Note: If switching voltage is greater than 30VDC, special precautions must be taken. Please contact the factory.
Rated Load UL, CUR	Form A 5A at 277VAC, Res., Standard, Ag, 100k cycles, 85°C 5A at 30VDC, Res., Standard, Ag, 100k cycles, 85°C 3A at 250VAC, Res., Sensitive, Ag, 100k cycles, 85°C 3A at 30VDC, Res., Sensitive, Ag, 100k cycles, 85°C 1/6HP at 125 / 250 / 277VAC, Ag, 100k cycles, 85°C 'T' High Current Version: Standard 10A at 250VAC, Res., AgCdO, 100k cycles, 85°C 10A at 30VDC, Res., AgCdO, 100k cycles, 85°C 1/6HP at 125 / 250VAC, AgCdO, 100k cycles, 85°C TV-5 5A, 125VAC, AgCdO 'T' High Current Version: Sensitive 8A at 250VAC, Res., AgCdO, 100k cycles, 85°C 8A at 30VDC, Res., AgCdO, 100k cycles, 85°C
Material	Silver Alloy, Silver Cadmium Oxide
Resistance	<100 milliohms initially (24V, 1A voltage drop method)

COIL

Power At Pickup Voltage (typical)	221mW standard 113mW sensitive
Max. Continuous Dissipation	761mW at 20°C (68°F) ambient
Temperature Rise	41°C (74°F) at nominal coil voltage, standard 30°C (40°F) at nominal coil voltage, sensitive
Temperature	Max. 155°C (311°F)

GENERAL DATA

Life Expectancy Mechanical Electrical	Minimum operations 1 x 10 ⁷ 1 x 10 ⁵ at 5A 240VAC Res.
Operate Time (typical)	15ms at nominal coil voltage
Release Time (typical)	4ms at nominal coil voltage (with no coil suppression)
Dielectric Strength (at sea level for 1 min.)	4000Vrms coil to contact 750Vrms between open contacts
Surge Voltage Coil to contact	10,000V (at 1.2x50 μs)
Insulation Resistance	1000 megohms min. at 20°C 500VDC 50% RH
Dropout	Greater than 10% of nominal coil voltage
Ambient Temperature Operating Storage	At nominal coil voltage -30°C (-22°F) to 85°C (185°F), -30°C (-22°F) to 105°C (221°F),
Vibration	0.062" DA at 10–55 Hz
Shock	10g operating, 100g 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 (approx.)	9 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.

AZ7705

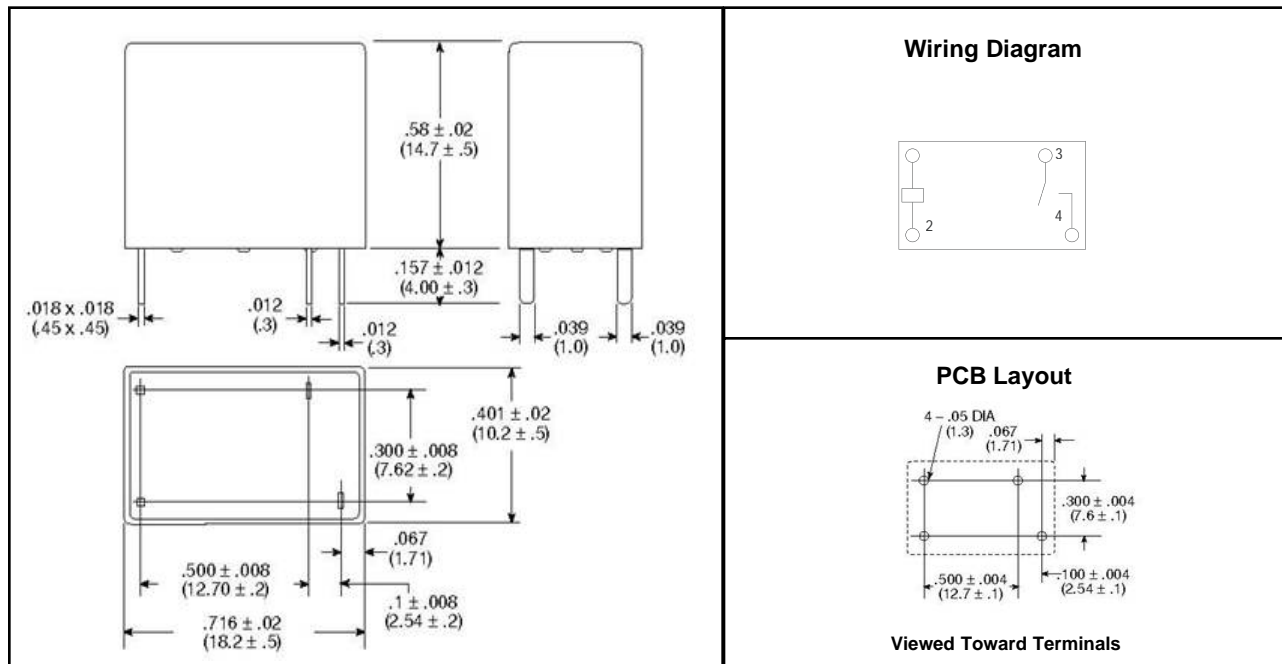
RELAY ORDERING DATA

STANDARD RELAYS				
COIL SPECIFICATIONS				ORDER NUMBER*
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance	Form A (SPST)
3	2.10	3.9	20 ± 10%	AZ7705-1A-3DF
5	3.50	6.5	55 ± 10%	AZ7705-1A-5DF
6	4.20	7.8	80 ± 10%	AZ7705-1A-6DF
9	6.30	11.7	180 ± 10%	AZ7705-1A-9DF
12	8.40	15.6	320 ± 10%	AZ7705-1A-12DF
18	12.60	23.4	720 ± 10%	AZ7705-1A-18DF
24	16.80	31.2	1280 ± 10%	AZ7705-1A-24DF
48	33.60	62.4	5120 ± 15%	AZ7705-1A-48DF

SENSITIVE RELAYS				
COIL SPECIFICATIONS				ORDER NUMBER*
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance	Form A (SPST)
3	2.25	3.9	45 ± 10%	AZ7705-1A-3DSF
5	3.75	6.5	125 ± 10%	AZ7705-1A-5DSF
6	4.5	7.8	180 ± 10%	AZ7705-1A-6DSF
9	6.75	11.7	400 ± 10%	AZ7705-1A-9DSF
12	9.0	15.6	720 ± 10%	AZ7705-1A-12DSF
18	13.5	23.4	1620 ± 10%	AZ7705-1A-18DSF
24	18.0	31.2	2800 ± 10%	AZ7705-1A-24DSF

*Add "T" after AZ7705 for high current version. Add suffix "E" after 'D' or 'DS' for epoxy sealed version.

MECHANICAL DATA



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