# AZ6961

# 10 AMP SUBMINIATURE POWER RELAY

### **FEATURES**

- High sensitivity, 120 mW pickup
- Dielectric strength 5000 Vrms
- Isolation spacing greater than 8 mm
- 10 Amp switching capability
- Epoxy sealed version available
- Reinforced insulation, EN 60730-1 (VDE 0631, part 1)
- UL, CUR file E43203
- VDE file 131637



### CONTACTS

Arrangement	SPDT (1 Form C) SPST (1 Form A)				
Ratings	Resistive load:				
	Max. switched power: 240 W or 2500 VA Max. switched current: 10 A Max. switched voltage: 240* VDC or 440 VAC				
	* Note: If switching voltage is greater than 30 VDC, special precautions must be taken. Please contact the factory.				
Rated Load UL, CUR	10 A at 250 VAC resistive [1] 8 A at 30 VDC / 250 VAC [1] 8 A at 30 VDC / 250 VAC, 100k cycles [2] B300 Pilot Duty [1] R300 Pilot Duty [1]	tching voltage is greater than 30 VDC, al precautions must be taken. See contact the factory.  VAC resistive [1] DC / 250 VAC [1] DC / 250 VAC, 100k cycles [2] Duty [1] Duty [1] VAC resistive, [1], [2] and [3] mium oxide, [2] Silver tin oxide,			
VDE	8 A at 250 VAC resistive, [1], [2] and [3] [1] Silver cadmium oxide, [2] Silver tin oxide, [3] Silver nickel				
Material	Silver cadmium oxide, silver tin oxide or silver nickel, gold plating available				
Resistance	sistance < 100 milliohms initially				

## COIL

Power				
At Pickup Voltage (typical)	120 mW 140 mW (60 VDC coil)			
Max. Continuous Dissipation	1.2 W at 20°C (68°F) ambient			
Temperature Rise	20°C (36°F) at nominal coil voltage			
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.

# **GENERAL DATA**

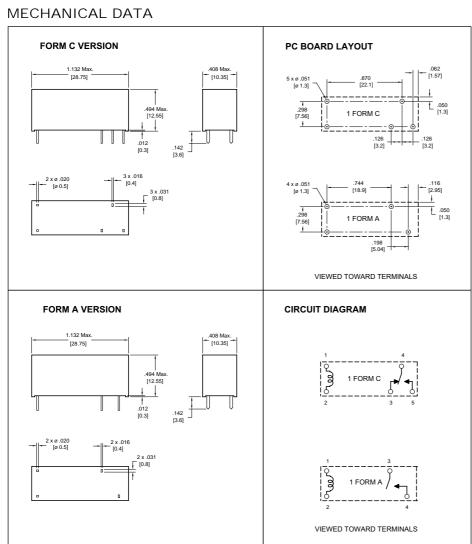
Life Expectancy Mechanical Electrical	Minimum operations 1 x 10 <sup>7</sup> 1 x 10 <sup>5</sup> at 8 A 250 VAC res.			
Operate Time (typical)	7 ms at nominal coil voltage			
Release Time (typical)	3 ms at nominal coil voltage (with no coil suppression)			
Dielectric Strength (at sea level for 1 min.)	5000 Vrms coil to contact 1000 Vrms between open contacts			
Insulation Resistance	1000 megohms min. at 20°C, 500 VDC, 50% RH			
Insulation (according to DIN VDE 0110, IEC 60664-1)	C250 Overvoltage category: III Pollution degree: 3 Nominal voltage: 250 VAC			
Dropout	Greater than 10% of nominal coil voltage			
Ambient Temperature Operating Storage	At nominal coil voltage -40°C (-40°F) to 85°C (185°F) -40°C (-40°F) to 105°C (221°F)			
Vibration	Break Contact: 5 g at 10500 Hz Make Contact: 20 g at 10500 Hz			
Shock	10 g			
Enclosure	P.B.T. polyester, UL94 V-O			
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	8 grams			
Packing unit in pcs	20 per plastic tube / 1000 per carton box			

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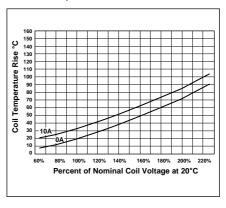
#### **RELAY ORDERING DATA**

COIL SPECIFICATIONS				ORDER NUMBER*	
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance Ohm	1 Form A (SPST-NO)	1 Form C (SPDT)
5	3.5	11.6	113 ± 10%	AZ6961-1A-5D	AZ6961-1C-5D
6	4.2	14.0	164 ± 10%	AZ6961-1A-6D	AZ6961-1C-6D
9	6.3	21.1	360 ± 10%	AZ6961-1A-9D	AZ6961-1C-9D
12	8.4	27.2	617 ± 10%	AZ6961-1A-12D	AZ6961-1C-12D
15	10.5	38.0	800 ± 10%	AZ6961-1A-15D	AZ6961-1C-15D
24	16.8	53.1	2,350 ± 10%	AZ6961-1A-24D	AZ6961-1C-24D
48	33.6	107.3	9,600 ± 15%	AZ6961-1A-48D	AZ6961-1C-48D
60	42.0	122.4	12,500 ± 15%	AZ6961-1A-60D	AZ6961-1C-60D

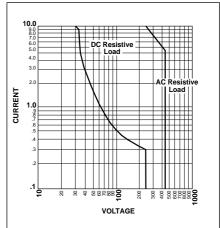
<sup>\*</sup> Add suffix "E" to "1A" or "1C" for silver tin oxide contacts. Add suffix "B" to "1A" or "1C" for silver nickel contacts. Add suffix "E" at the end of order number for sealed version. Add suffix "A" for gold plated contacts.



## Coil Temperature Rise



### Maximum Switching Capacity



Dimensions in inches with metric equivalents in parentheses. Tolerance:  $\pm$  .010"