

# AZ696

## 10 AMP SUBMINIATURE POWER RELAY

### FEATURES

- Miniature size: Form A version: 0.63" (16mm) height, 1.10" (30mm) length, 0.39" (10mm) width
- High sensitivity, 100mW pickup
- Dielectric strength 4000Vrms
- Isolation spacing greater than 8mm
- Approvals/Standards include: UL, VDE, IEC
- 10 Amp switching capability
- Epoxy sealed for automatic wave soldering and cleaning
- UL, CUR file E43203
- VDE file 40012571



### CONTACTS

<b>Arrangement</b>	SPDT (1 Form C) SPST (1 Form A), SPST (1 Form B)
<b>Ratings</b>	Resistive load: Max. switched power: 300W or 2500VA Max. switched current: 10A Max. switched voltage: 240VDC* or 440VAC *Note: If switching voltage is greater than 30VDC, special precautions must be taken. Please contact the factory.
<b>Rated Load</b>	10A at 30VDC Resistive 10A at 250VAC General use 1/4 HP at 120VAC 1/2 HP at 250VAC B300 Pilot duty
<b>UL</b>	
<b>VDE</b>	1 Form A / 1 Form B (unsealed) 10 A at 250VAC, resistive, 85°C, 50k cycles 1 Form C (unsealed) 10 A at 250VAC, resistive, 85°C, 50k cycles 1 Form A / 1 Form B / 1 Form C (sealed) 10 A at 250VAC, resistive, 85°C, 10k cycles
<b>Material</b>	Silver tin oxide
<b>Resistance</b>	< 30 milliohms initially (at 6V, 1A voltage drop method)

### COIL

<b>Power</b>	
<b>At Pickup Voltage (typical)</b>	110mW
<b>Max. Continuous Dissipation</b>	1.5W at 20°C (68°F) ambient 1.2W at 40°C (104°F) ambient
<b>Temperature Rise</b>	20°C (36°F) at nominal coil voltage
<b>Temperature</b>	Max. 110°C (230°F)

### GENERAL DATA

<b>Life Expectancy</b>	Minimum operations 10 million
<b>Mechanical</b>	1 X 10 <sup>5</sup> at 8A, 250VAC Res.
<b>Electrical</b>	
<b>Operate Time (typical)</b>	10ms at nominal coil voltage
<b>Release Time (typical)</b>	5ms at nominal coil voltage (with no coil suppression)
<b>Dielectric Strength (at sea level for 1 min.)</b>	4000Vrms coil to contact 1000Vrms between open contacts
<b>Insulation Resistance</b>	1000 megohms min. at 20°C, 500VDC, 50% RH
<b>Dropout</b>	Greater than 10% of nominal coil voltage
<b>Ambient Temperature</b>	At nominal coil voltage
<b>Operating Storage</b>	-40°C (-40°F) to 85°C (185°F) -40°C (-40°F) to 110°C (230°F)
<b>Vibration</b>	0.062" (1.5mm) DA at 10–55Hz
<b>Shock</b>	20g
<b>Enclosure</b>	P.B.T. polyester
<b>Terminals</b>	Tinned copper alloy, P.C.
<b>Max. Solder Temp.</b>	270°C (518°F)
<b>Max. Solder Time</b>	5 seconds
<b>Max. Solvent Temp.</b>	80°C (176°F)
<b>Max. Immersion Time</b>	30 seconds
<b>Weight</b>	11 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.
4. It's recommended to remove vent nipple on sealed versions to expand life expectancy when switching higher loads.

**AMERICAN ZETTLER, INC.**

1/16/18

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## RELAY ORDERING DATA

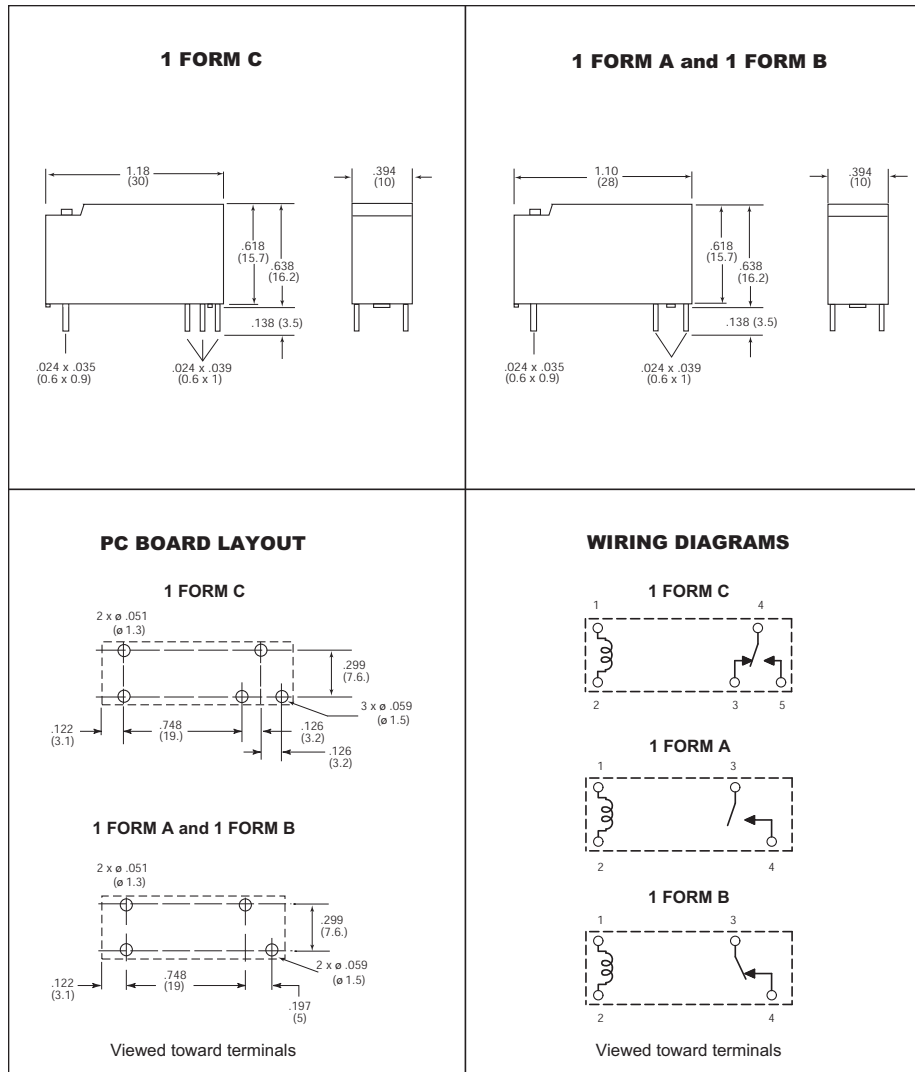
COIL SPECIFICATIONS				ORDER NUMBER	
Nominal Coil VDC	Must Operate VDC	Max Continuous VDC	Coil Resistance Ohms $\pm 10\%$	1 Form A (SPST-NO)	1 Form C (SPDT)
5	3.5	12.0	110	AZ696-1AE-5D	AZ696-1CE-5D
6	4.2	14.5	160	AZ696-1AE-6D	AZ696-1CE-6D
9	6.3	22.0	360	AZ696-1AE-9D	AZ696-1CE-9D
12	8.4	29.5	660	AZ696-1AE-12D	AZ696-1CE-12D
18	12.6	44.0	1,500	AZ696-1AE-18D	AZ696-1CE-18D
24	16.8	54.0	2,200	AZ696-1AE-24D	AZ696-1CE-24D
48	33.6	102.0	8,000	AZ696-1AE-48D	AZ696-1CE-48D

\* Substitute "1BE" in place of "1AE" for 1 Form B contact. Add Suffix "E" at the end of order number for sealed version. 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.

## INTERNATIONAL APPROVALS

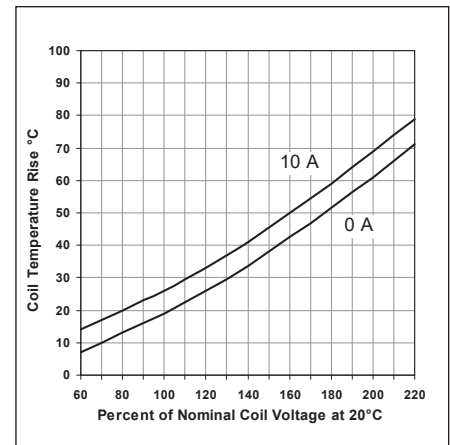
Germany	VDE 0435/09.72 at 8 Amps VDE 0631/12.83 at 8 Amps VDE 0700/1/2.81 at 8 Amps
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## MECHANICAL DATA

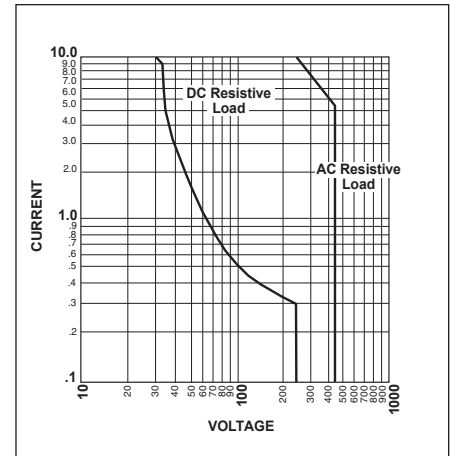


Dimensions in inches with metric equivalents in parentheses. Tolerance:  $\pm .010$ "

## Coil Temperature Rise



## Maximum Switching Capacity



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