

# AZ6963

## 10 AMP SUBMINIATURE POWER RELAY

### FEATURES

- High sensitivity, 120 mW pickup
- Dielectric strength 5000 Vrms
- Isolation spacing greater than 10 mm
- Proof tracking index (PTI/CTI) 250
- 10 Amp switching capability
- Epoxy sealed version available
- Reinforced insulation, EN 60730-1 (VDE 0631, part 1)  
EN 60335-1 (VDE 0700, part 1)
- UL, CUR file E43203
- VDE file 40021878



### CONTACTS

<b>Arrangement</b>	SPDT (1 Form C), DPDT (2 Form C) SPST (1 Form A)
<b>Ratings</b>	Resistive load: Max. switched power: 240 W or 2500 VA (2 Form C: 150 W or 1250 VA) Max. switched current: 10 A (2 Form C: 5 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.
<b>Rated Load UL, CUR</b>	10 A at 250 VAC resistive 10 A at 30 VDC resistive 2 Form C: 5 A at 250 VAC resistive
<b>VDE</b>	8 A at 250 VAC resistive (1 Form C) 10 A at 250 VAC resistive (1 Form A)
<b>Material</b>	Silver tin oxide or silver nickel, gold plating available.
<b>Resistance</b>	< 100 milliohms initially

### COIL

<b>Power</b>	
<b>At Pickup Voltage (typical)</b>	120 mW (up to 24 VDC coil) 140 mW (48 VDC and 60 VDC coil)
<b>Max. Continuous Dissipation</b>	1.2 W at 20°C (68°F) ambient
<b>Temperature Rise</b>	20°C (36°F) at nominal coil voltage
<b>Temperature</b>	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

<b>Life Expectancy</b> <b>Mechanical</b> <b>Electrical</b>	Minimum operations 1 x 10 <sup>7</sup> 1 x 10 <sup>5</sup> at 8 A 250 VAC res.
<b>Operate Time (typical)</b>	7 ms at nominal coil voltage
<b>Release Time (typical)</b>	3 ms at nominal coil voltage (with no coil suppression)
<b>Dielectric Strength (at sea level for 1 min.)</b>	5000 Vrms coil to contact 2500 Vrms between contact sets 1000 Vrms between open contacts
<b>Insulation Resistance</b>	1000 megohms min. at 20°C, 500 VDC, 50% RH
<b>Insulation (according to DIN VDE 0110, IEC 60664-1)</b>	C250 Overvoltage category: III Pollution degree: 3 Nominal voltage: 250 VAC
<b>Dropout</b>	Greater than 10% of nominal coil voltage
<b>Ambient Temperature Operating Storage</b>	At nominal coil voltage -40°C (-40°F) to 85°C (185°F) -40°C (-40°F) to 105°C (221°F)
<b>Vibration</b>	Break Contact: 5 g at 10 ...500 Hz Make Contact: 20 g at 10...500 Hz
<b>Shock</b>	10 g
<b>Enclosure</b>	P.B.T. polyester, UL94 V-O
<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>	8 grams
<b>Packing unit in pcs</b>	20 per plastic tube / 1000 per carton box

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# AZ6963

## RELAY ORDERING DATA

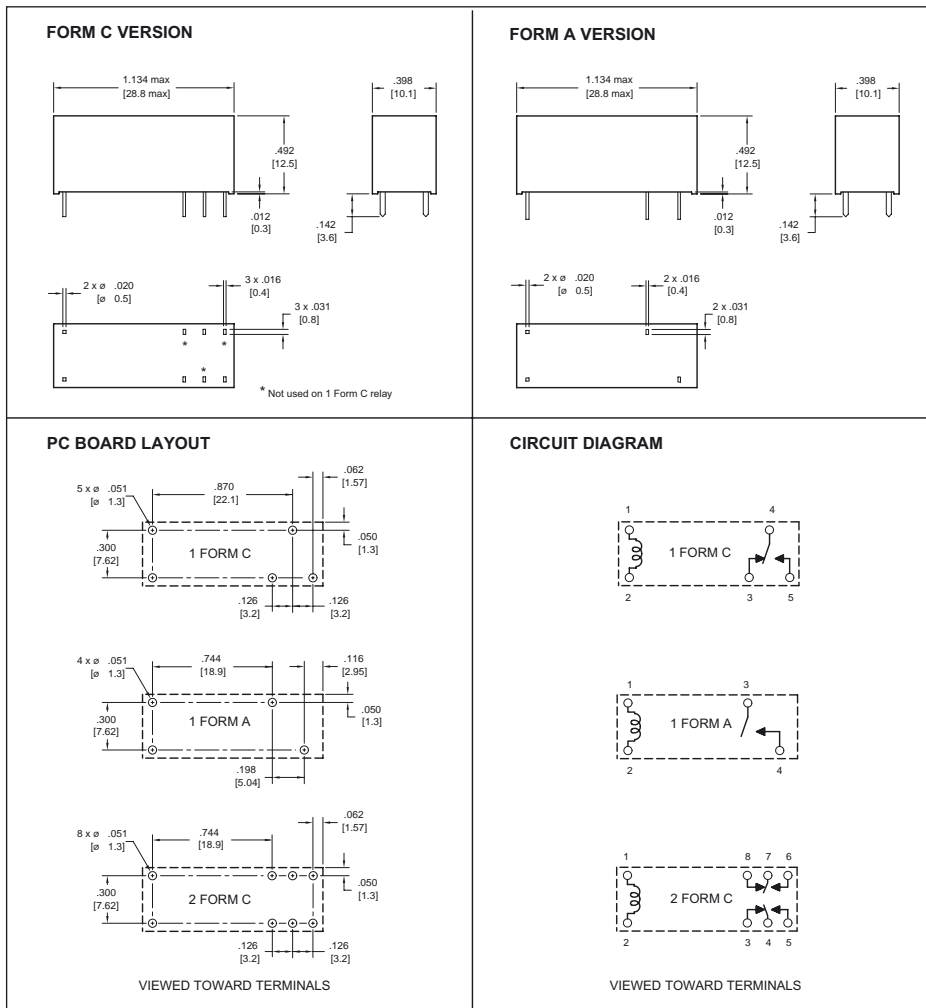
COIL SPECIFICATIONS				ORDER NUMBER*	
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance Ohm	1 Form A (SPST-NO)	1 Form C (SPDT)
5	3.5	11.6	113 ± 10%	AZ6963-1AE-5D	AZ6963-1CE-5D
6	4.2	14.0	164 ± 10%	AZ6963-1AE-6D	AZ6963-1CE-6D
9	6.3	20.8	360 ± 10%	AZ6963-1AE-9D	AZ6963-1CE-9D
12	8.4	27.2	620 ± 10%	AZ6963-1AE-12D	AZ6963-1CE-12D
18	12.6	39.4	1,295 ± 10%	AZ6963-1AE-18D	AZ6963-1CE-18D
24	16.8	53.1	2,350 ± 10%	AZ6963-1AE-24D	AZ6963-1CE-24D
48	33.6	98.0	8,000 ± 15%	AZ6963-1AE-48D	AZ6963-1CE-48D

\*Suffix "E" at "1AE" or "1CE" indicates silver tin oxide contacts. Substitute suffix "B" in place of "E" at "1AE" or "1CE" for silver nickel contacts.

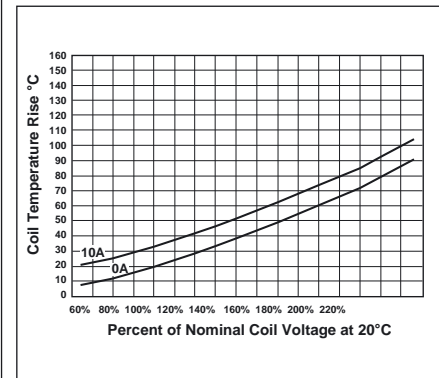
Substitute "2C" in place of "1C" for 2 Form C relay.

Add suffix "E" at the end of order number for sealed version. Add suffix "A" at the end of order number for gold plated contacts.

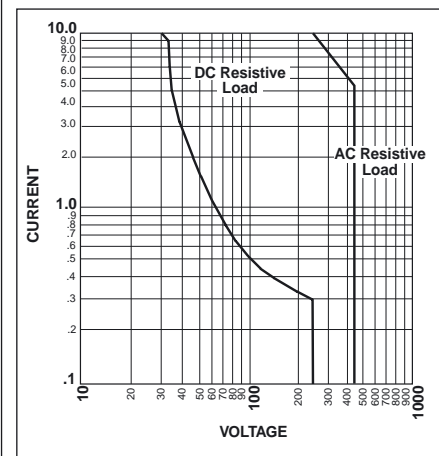
## MECHANICAL DATA



## Coil Temperature Rise



## Maximum Switching Capacity (1 Form A and 1 Form C)



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

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