AZ940

10 AMP MINIATURE POWER RELAY

FEATURES

- 10 Amp switching capability
- 4 kV dielectric strength
- Epoxy sealed version available
- UL, CUR file E44211
- VDE file 134326

CONTACTS

Arrangement	SPST (1 Form A) SPDT (1 Form C)
Ratings	Resistive load: Max. switched power: 150 W or 1250 VA (N.O.) 90 W or 750 VA (N.C.) Max. switched current: 10 A (N.O.), 3 A (N.C.) Max. switched voltage: 150 VDC* or 400 VAC * Note: If switching voltage is greater than 30 VDC, special precautions must be taken. Please contact the factory.
Rated Load **UL, CUR (N.O.)**	10 A at 125 VAC general use, 100K cycles [1] [2] 10 A at 277 VAC cos phi 0.4, 10K cycles [1] [2] 5 A at 250 VAC general use, 100K cycles [1] [2] 5 A at 30 VDC [1] [2] $^1/_{10}$ HP at 125 VAC, 100K cycles [1] [2] $^1/_6$ HP at 250 VAC, 100K cycles [1] [2]
UL, CUR (N.C.)	3 A at 250 VAC general use, 100 K cycles [1] [2] 3 A at 30 VDC resistive, 100K cycles [1] [2]
VDE	Form A N.O.: 5 A 250 VAC [1] [2] Form C N.O.: 5 A 250 VAC [1] [2] Form C N.C.: 3 A 250 VAC [1] [2]
Material	Silver cadmium oxide [1] or silver nickel [2]. Gold plating available.
Resistance	<100 milliohms initially

COIL

Power	
At Pickup Voltage (typical)	253 mW (Standard Coil) 113 mW (Sensitive Coil)
Max. Continuous Dissipation	1.1 W at 20°C (68°F)
Temperature Rise	40°C (72°F) standard coil 20°C (36°F) sensitive coil
Temperature	Max. 105°C (221°F)

GENERAL DATA

Life Expectancy **Mechanical** **Electrical**	Minimum operations 1 x 10^7 1 x 10^5 at 10 A 250 VAC Res.
Operate Time (max.)	8 ms at nominal coil voltage
Release Time (max.)	5 ms at nominal coil voltage (with no coil suppression)
Dielectric Strength (at sea level for 1 min.)	1000 Vrms contact to contact 4000 Vrms contact to coil
Insulation Resistance	1 x 10^9 ohms minimum at 500 VDC
Dropout	Greater than 5% of nominal coil voltage
Ambient Temperature **Operating** **Storage**	At nominal coil voltage -40°C (-40°F) to 70°C (158°F) standard -40°C (-40°F) to 85°C (185°F) sensitive -40°C (-40°F) to 105°C (221°F)
Vibration	0.062" (1.5 mm) DA at 10–55 Hz
Shock **Operating** **Mechanical**	 10 g for 11 ms 1/2 sine pulse (no contact opening >100 usec) 100 g for 11 ms 1/2 sine pulse
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	7 grams
Packing unit in pcs	100 per styropor tray / 1000 per carton box

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.

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RELAY ORDERING DATA

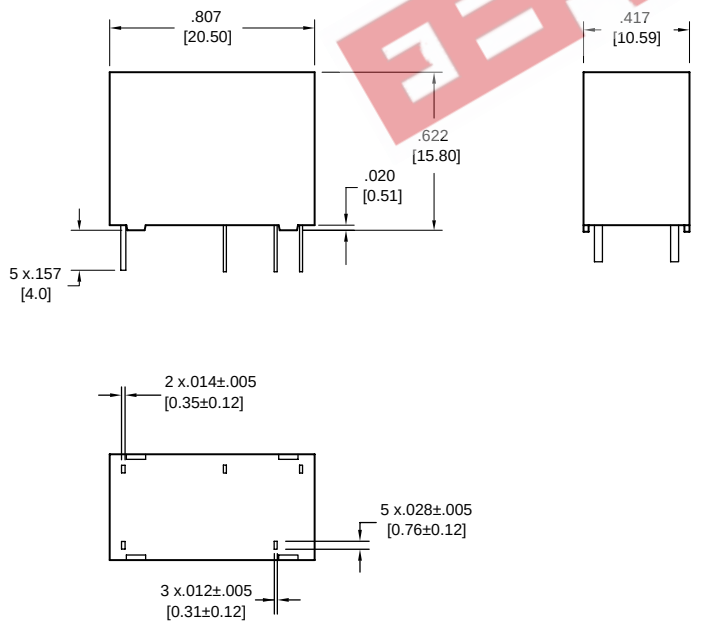
COIL SPECIFICATIONS – Standard Coil (SPDT and SPST)				ORDER NUMBER*
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance Ohm ± 10%	
3	2.3	4.7	20	AZ940–1C–3D
5	3.8	7.7	55	AZ940–1C–5D
6	4.5	9.4	80	AZ940–1C–6D
9	6.8	14.0	180	AZ940–1C–9D
12	9.0	18.7	320	AZ940–1C–12D
18	13.5	28.1	720	AZ940–1C–18D
24	18.0	37.5	1,280	AZ940–1C–24D

* Substitute “1A” for “1C” to indicate 1 Form A 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 “G” for gold plated contacts.

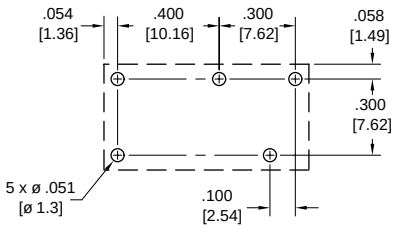
COIL SPECIFICATIONS – Sensitive Coil (SPST)				ORDER NUMBER**
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance Ohm ± 10%	
3	2.3	7.0	45	AZ940–1A–3DS
5	3.8	11.7	125	AZ940–1A–5DS
6	4.5	14.0	180	AZ940–1A–6DS
9	6.8	20.9	400	AZ940–1A–9DS
12	9.0	28.1	720	AZ940–1A–12DS
18	13.5	41.9	1,600	AZ940–1A–18DS
24	18.0	55.5	2,800	AZ940–1A–24DS

** Add suffix “B” to “1A” for silver nickel contacts.
Add suffix “E” at the end of order number for sealed version. Add suffix “G” for gold plated contacts.

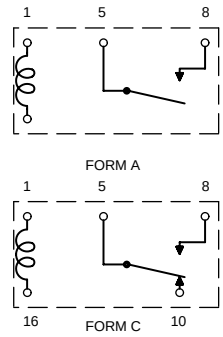
MECHANICAL DATA



PC BOARD LAYOUT



WIRING DIAGRAM



VIEWED TOWARD TERMINALS

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

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