AZ8A

MINIATURE PC BOARD RELAY

FEATURES

- Subminiature size
- High sensitivity, 110 mW pickup
- Coils to 48 VDC
- · Epoxy sealed for automatic wave soldering
- Contacts rated at 6 Amps
- · Life expectancy to 20 million operations
- Extremely low cost
- Class B insulation (130°C) standard
- Class F insulation (155°C) version available
- UL, CUR file E44211

CONTACTS

| Arrangement | SPDT (1 Form C) | | | | |
|-------------|--|--|--|--|--|
| Ratings | Resistive load: | | | | |
| UL Rating | Max. switched power: 300 W or 2400 VA Max. switched current: 10 A Max. switched voltage: 150* VDC or 300 VAC 10 A at 240 VAC General Use 6 A at 30 VDC Resistive 6 A at 300 VAC Resistive | | | | |
| | Note: If switching voltage is greater than 30 VDC, special precautions must be taken. Please contact the factory. | | | | |
| Material | Silver alloy | | | | |
| Resistance | < 100 milliohms initially | | | | |

COIL

| Power At Pickup Voltage (typical) | Standard coil: 210 mW Sensitive coil: 140 mW | | |
|---|--|--|--|
| Max. Continuous Dissipation | Class B: 2.0 W 20°C (68°F) ambient 1.6 W 40°C (104°F) ambient Class F: 2.5 W 20°C (68°F) ambient 2.1 W 40°C (104°F) ambient | | |
| Temperature Rise | At nominal coil voltage Standard coil: 38°C (68°F) Sensitive coil: 28°C (50°F) | | |
| Temperature | Max. 130°C (266°F) Class B Max. 155°C (311°F) Class F | | |

NOTES

- 1. All values at 20°C (68°F).
- 2. Relay may pull in with less than "Must Operate" value.
- 3. Other coil resistances and sensitivities available upon request.
- 4. Unsealed relays should not be dip cleaned.
- 5. Specifications subject to change without notice.



GENERAL DATA

| Life Expectancy Mechanical | Minimum operations | | | |
|--|--|--|--|--|
| Electrical | 100 million operations 1 x 10 ⁵ at 6 A, 120 VAC | | | |
| Operate Time (typical) | 5 ms at nominal coil voltage | | | |
| Release Time (typical) | 2 ms at nominal coil voltage (with no coil suppression) | | | |
| Dielectric Strength (at sea level for 1 min.) | 750 Vrms contact to contact 3000 Vrms contact to coil | | | |
| Insulation Resistance | 1000 megohms min. at 20°C, 500 VDC, 50% RH | | | |
| Dropout | Greater than 5% of nominal coil voltage | | | |
| Ambient Temperature Operating Storage | At nominal coil voltage -55°C (-67°F) to 90°C (194°F) Class B -55°C (-67°F) to 115°C (239°F) Class F -55°C (-67°F) to 130°C (266°F) Class B -55°C (-67°F) to 155°C (311°F) Class F | | | |
| Vibration | 0.062" DA at 10–55 Hz, 10 g at 55–110 Hz | | | |
| Shock | 10 g | | | |
| Enclosure | PBT 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 | 8 grams | | | |

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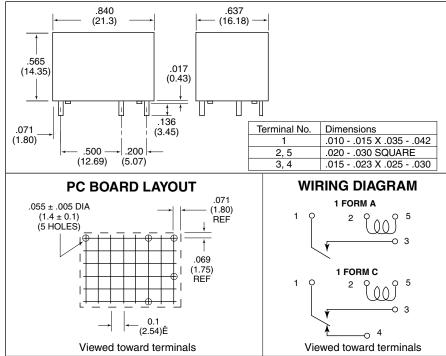


| COIL SPECIFICATIONS | | | | | | | |
|---|------------------------|---------------------|---------------------|---------------|----------------|--|--|
| STANDARD RELAYS: 1 Form C (SPDT) | | | | ORDER NUMBER* | | | |
| Nominal Coil VDC | Max. VDC Continuous | Resistance ± 10% | Must Operate VDC | Unsealed | Epoxy Sealed | | |
| 5 | 10.6 | 56 | 3.25 | AZ8A–1CH–5D | AZ8A-1CH-5DE | | |
| 6 | 12.6 | 80 | 3.90 | AZ8A-1CH-6D | AZ8A-1CH-6DE | | |
| 9 | 19.0 | 180 | 5.85 | AZ8A-1CH-9D | AZ8A-1CH-9DE | | |
| 12 | 25.0 | 320 | 7.80 | AZ8A-1CH-12D | AZ8A-1CH-12DE | | |
| 24 | 50.0 | 1,280 | 15.60 | AZ8A-1CH-24D | AZ8A-1CH-24DE | | |
| 48 | 87.0 | 3,800 | 28.80 | AZ8A-1CH-48D | AZ8A-1CH-48DE | | |
| SENSITIVE RELAYS: 1 Form C (SPDT) ORDER NUMBER* | | | | | | | |
| Nominal Coil VDC | Max. VDC Continuous | Resistance ± 10% | Must Operate VDC | Unsealed | Epoxy Sealed | | |
| 5 | 12.6 | 80 | 3.25 | AZ8A-1CH-5DS | AZ8A-1CH-5DSE | | |
| 6 | 14.8 | 110 | 3.90 | AZ8A-1CH-6DS | AZ8A-1CH-6DSE | | |
| 9 | 22.4 | 250 | 5.85 | AZ8A-1CH-9DS | AZ8A-1CH-9DSE | | |
| 12 | 30.0 | 440 | 7.80 | AZ8A-1CH-12DS | AZ8A-1CH-12DSE | | |
| 24 | 60.0 | 1,780 | 15.60 | AZ8A-1CH-24DS | AZ8A-1CH-24DSE | | |

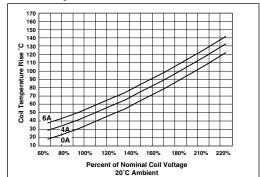
RELAY ORDERING DATA

*To indicate Class F version, add suffix "F". Other coil resistances and sensitivities available. Please contact the factory.

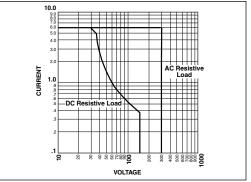
MECHANICAL DATA



Coil Temperature Rise



Maximum Switching Capacity



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

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