

AZ954

SUBMINIATURE POWER RELAY

FEATURES

- Subminiature size for high density packaging
- Coil sensitivity to 114mW
- Extremely low cost
- Coils to 24VDC
- Epoxy sealed versions available
- 2 Amp contacts
- Class B insulation standard
- Life expectancy to 10 million operations
- UL, CUR file E43203

CONTACTS

| | |
|--------------------|---|
| Arrangement | SPDT (1 Form C) |
| Ratings | Resistive load: Max. switched power: 30W or 240VA Max. switched current: 2A Max. switched voltage: 150VDC* or 300VAC UL Rating: 2A at 125VAC General Use 1A at 240VAC General Use 1A at 30VDC Resistive |
| Material | Silver nickel, gold plated |
| Resistance | < 100 milliohms initially |

COIL

| | |
|------------------------------------|---|
| Power | |
| At Pickup Voltage (typical) | 0.45W coil: 253mW 0.36W coil: 203mW 0.20W coil: 114mW |
| Max Continuous Dissipation | 1.0W at 20°C (68°F) ambient |
| Temperature Rise | At nominal coil voltage: 0.45W: 54°C (97°F) 0.36W: 44°C (79°F) 0.2W: 30°C (54°F) |
| Max. Temperature | 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. Other coil resistances and sensitivities available upon request.
4. Specifications subject to change without notice.



GENERAL DATA

| | |
|--|--|
| Life Expectancy | Minimum operations |
| Mechanical | 1×10^7 |
| Electrical | 1×10^5 at 2A 120VAC Res. |
| Operate Time (typical) | 5ms at nominal coil voltage |
| Release Time (typical) | 1ms at nominal coil voltage (with no coil suppressions) |
| Dielectric Strength (at sea level for 1 min.) | 1250Vrms coil to contact 750Vrms between open contacts |
| Insulation Resistance | 100 megohms min. at 20°C, 500 VDC |
| Dropout | Greater than 10% of nominal coil voltage |
| Ambient Temperature Operating | At nominal coil voltage 0.45W: -25°C (-13°F) to 70°C (158°F) 0.36W: -25°C (-13°F) to 85°C (185°F) 0.2W: -25°C (-13°F) to 95°C (203°F) |
| Storage | -25°C (-13°F) to 130°C (266°F) |
| Vibration | 0.062" DA at 10–55Hz |
| Shock | 10 g |
| Enclosure | P.B.T. polyester |
| Terminals | Tinned copper alloy |
| 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 | 5 grams |

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RELAY ORDERING DATA

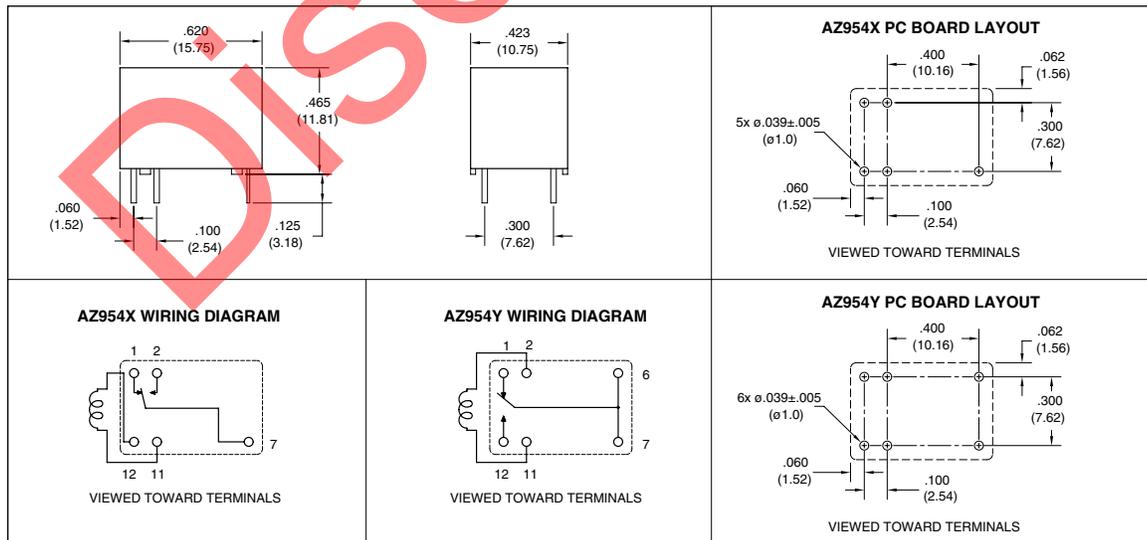
| 0.45 W COIL | | | | | |
|---------------------|---------------------|----------------------------|------------------|---------------|---------------|
| COIL SPECIFICATIONS | | | | ORDER NUMBER* | |
| Nominal Coil VDC | Max. Continuous VDC | Coil Resistance $\pm 10\%$ | Must Operate VDC | | |
| 3 | 3.6 | 20 | 2.25 | AZ954X-1C-3D | AZ954Y-1C-3D |
| 5 | 6.0 | 56 | 3.75 | AZ954X-1C-5D | AZ954Y-1C-5D |
| 6 | 7.2 | 80 | 4.50 | AZ954X-1C-6D | AZ954Y-1C-6D |
| 9 | 10.8 | 180 | 6.75 | AZ954X-1C-9D | AZ954Y-1C-9D |
| 12 | 14.4 | 320 | 9.0 | AZ954X-1C-12D | AZ954Y-1C-12D |
| 24 | 28.8 | 1280 | 18.0 | AZ954X-1C-24D | AZ954Y-1C-24D |

| 0.36 W COIL | | | | | |
|---------------------|---------------------|----------------------------|------------------|----------------|----------------|
| COIL SPECIFICATIONS | | | | ORDER NUMBER* | |
| Nominal Coil VDC | Max. Continuous VDC | Coil Resistance $\pm 10\%$ | Must Operate VDC | | |
| 3 | 5.0 | 25 | 2.25 | AZ954X-1C-3DM | AZ954Y-1C-3DM |
| 5 | 8.4 | 70 | 3.75 | AZ954X-1C-5DM | AZ954Y-1C-5DM |
| 6 | 10 | 100 | 4.50 | AZ954X-1C-6DM | AZ954Y-1C-6DM |
| 9 | 15 | 225 | 6.75 | AZ954X-1C-9DM | AZ954Y-1C-9DM |
| 12 | 20 | 400 | 9.0 | AZ954X-1C-12DM | AZ954Y-1C-12DM |
| 24 | 40 | 1600 | 18.0 | AZ954X-1C-24DM | AZ954Y-1C-24DM |

| 0.2 W COIL | | | | | |
|---------------------|---------------------|----------------------------|------------------|----------------|----------------|
| COIL SPECIFICATIONS | | | | ORDER NUMBER* | |
| Nominal Coil VDC | Max. Continuous VDC | Coil Resistance $\pm 10\%$ | Must Operate VDC | | |
| 3 | 6.7 | 45 | 2.25 | AZ954X-1C-3DS | AZ954Y-1C-3DS |
| 5 | 11 | 120 | 3.75 | AZ954X-1C-5DS | AZ954Y-1C-5DS |
| 6 | 13.4 | 180 | 4.50 | AZ954X-1C-6DS | AZ954Y-1C-6DS |
| 9 | 20 | 400 | 6.75 | AZ954X-1C-9DS | AZ954Y-1C-9DS |
| 12 | 26.5 | 700 | 9.0 | AZ954X-1C-12DS | AZ954Y-1C-12DS |
| 24 | 59.9 | 2800 | 18.0 | AZ954X-1C-24DS | AZ954Y-1C-24DS |

* Add suffix "E" for epoxy sealed version.

MECHANICAL DATA



Dimensions in inches with metric equivalents in parentheses. Tolerance: ± 0.010 "

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This specification provides an overview of the most significant part features. Any individual applications and operating conditions are not taken into consideration. It is recommended to test the product under application conditions. Responsibility for the application remains with the customer. Proper operation and service life cannot be guaranteed if the part is operated outside the specified limits.