

AZ954

SUBMINIATURE POWER RELAY

FEATURES

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



CONTACTS

| | |
|--------------------|---|
| Arrangement | SPDT (1 Form C) |
| Ratings | Resistive load: |
| Light Duty | Max. switched power: 30 W or 125 VA Max. switched current: 1 A Max. switched voltage: 150 VDC* or 300 VAC UL Rating: 1 A at 125VAC General Use 1 A at 30 VDC Resistive |
| Medium Duty | Max. switched power: 30 W or 250 VA Max. switched current: 2 A Max. switched voltage: 150 VDC* or 300 VAC UL Rating: 2 A at 125VAC General Use 1 A at 30 VDC Resistive. |
| Material | Silver alloy |
| Resistance | < 100 milliohms initially |

COIL

| | |
|------------------------------------|---|
| Power | |
| At Pickup Voltage (typical) | 0.45W coil: 253 mW 0.36W coil: 203 mW 0.2W coil: 114 mw |
| Max Continuous Dissipation | 0.8 W at 20°C (68°F) ambient 0.6 W at 40°C (104°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 | 105°C (221°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 x 10 ⁷ |
| Electrical | 1 x 10 ⁵ at rated load |
| Operate Time (typical) | 5 ms at nominal coil voltage |
| Release Time (typical) | 1 ms at nominal coil voltage (with no coil suppressions) |
| Dielectric Strength (at sea level for 1 min.) | 1250 Vrms coil to contact 750 Vrms 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 55°C (131°F) 0.36W: -25°C (-13°F) to 65°C (167°F) 0.2W: -25°C (-13°F) to 75°C (167°F) |
| Storage | -25°C (-13°F) to 105°C (221°F) |
| Vibration | 0.062" DA at 10–55Hz |
| Shock | 15 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 | 3.5 grams |

ZETTLER electronics

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AZ954

RELAY ORDERING DATA

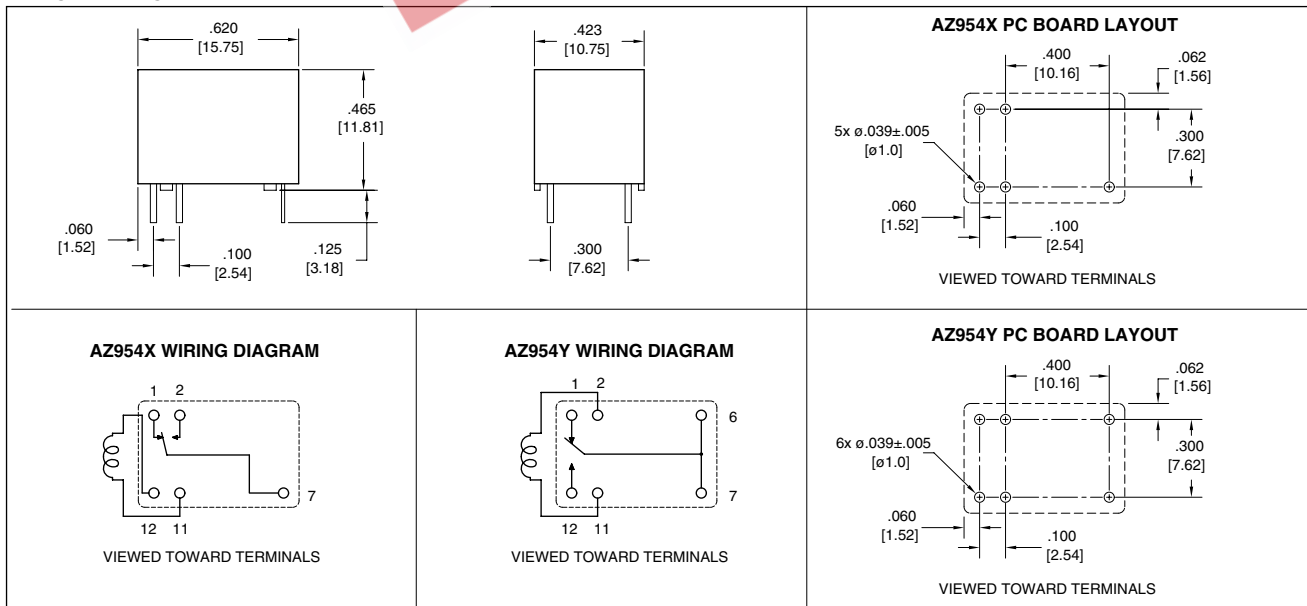
| MEDIUM DUTY RELAYS – 0.45 W COIL | | | | | |
|----------------------------------|---------------------|----------------------------|------------------|---------------|---------------|
| COIL SPECIFICATIONS | | | | ORDER NUMBER* | |
| Nominal Coil VDC | Max. Continuous VDC | Coil Resistance $\pm 10\%$ | Must Operate VDC | | |
| 3 | 4.0 | 20 | 2.25 | AZ954X-1C-3D | AZ954Y-1C-3D |
| 5 | 6.7 | 56 | 3.75 | AZ954X-1C-5D | AZ954Y-1C-5D |
| 6 | 8.0 | 80 | 4.50 | AZ954X-1C-6D | AZ954Y-1C-6D |
| 9 | 12.0 | 180 | 6.75 | AZ954X-1C-9D | AZ954Y-1C-9D |
| 12 | 16.0 | 320 | 9.0 | AZ954X-1C-12D | AZ954Y-1C-12D |
| 24 | 32.0 | 1280 | 18.0 | AZ954X-1C-24D | AZ954Y-1C-24D |

| MEDIUM DUTY RELAYS – 0.36 W COIL | | | | | |
|----------------------------------|---------------------|----------------------------|------------------|----------------|----------------|
| COIL SPECIFICATIONS | | | | ORDER NUMBER* | |
| Nominal Coil VDC | Max. Continuous VDC | Coil Resistance $\pm 10\%$ | Must Operate VDC | | |
| 3 | 4.5 | 25 | 2.25 | AZ954X-1C-3DM | AZ954Y-1C-3DM |
| 5 | 7.5 | 70 | 3.75 | AZ954X-1C-5DM | AZ954Y-1C-5DM |
| 6 | 8.9 | 100 | 4.50 | AZ954X-1C-6DM | AZ954Y-1C-6DM |
| 9 | 13.4 | 225 | 6.75 | AZ954X-1C-9DM | AZ954Y-1C-9DM |
| 12 | 17.8 | 400 | 9.0 | AZ954X-1C-12DM | AZ954Y-1C-12DM |
| 24 | 35.7 | 1600 | 18.0 | AZ954X-1C-24DM | AZ954Y-1C-24DM |

| LIGHT DUTY RELAYS – 0.2 W COIL | | | | | |
|--------------------------------|---------------------|----------------------------|------------------|----------------|----------------|
| COIL SPECIFICATIONS | | | | ORDER NUMBER* | |
| Nominal Coil VDC | Max. Continuous VDC | Coil Resistance $\pm 10\%$ | Must Operate VDC | | |
| 3 | 6.0 | 45 | 2.25 | AZ954X-1C-3DS | AZ954Y-1C-3DS |
| 5 | 9.8 | 120 | 3.75 | AZ954X-1C-5DS | AZ954Y-1C-5DS |
| 6 | 12.0 | 180 | 4.50 | AZ954X-1C-6DS | AZ954Y-1C-6DS |
| 9 | 17.8 | 400 | 6.75 | AZ954X-1C-9DS | AZ954Y-1C-9DS |
| 12 | 23.6 | 700 | 9.0 | AZ954X-1C-12DS | AZ954Y-1C-12DS |
| 24 | 47.3 | 2800 | 18.0 | AZ954X-1C-24DS | AZ954Y-1C-24DS |

*Add suffix "E" for epoxy sealed version. Add suffix "B" for Class B or "F" for Class F insulation system.

MECHANICAL DATA



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

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