

AZ943T

20 AMP SUBMINIATURE PC BOARD RELAY

FEATURES

- 20A switching capability
- Flux tight and sealed versions available
- Double and single pin terminal available
- Class B insulation (130°C) standard
- Class F insulation (155°C) available
- UL, CUR E44211



CONTACTS

| | |
|--------------------|--|
| Arrangement | SPST (1 Form A) SPDT (1 Form C) |
| Ratings | Form A and C Max. switched power: 4700VA Max. switched current: 20A (Form A), 17A (Form C) Max. switched voltage: 400VAC |
| UL/CUR | Normally Open 20 A at 125 VAC, Resistive, 50k cycles at 40°C 10 A at 277 VAC, Resistive, 200k cycles at 105°C TV-8 125 VAC, Tungsten, 25k cycles at 40°C(AgSnO ₂) 1HP at 250 VAC (AgSnO ₂) 1/2 HP at 125 VAC (AgSnO ₂) Long Endurance Type 17A at 277 VAC, Res, 100k cycles at 105°C (AgNi) Normally Closed 20 A at 125 VAC, Resistive, 6k cycles at 40°C (N.C.) 10 A at 277 VAC, Resistive, 50k cycles at 85°C (N.C.) |
| Material | Silver tin oxide; Silver Nickel;gold plating available |
| Resistance | < 100 milliohms initially (24 V, 1 A method) |

GENERAL DATA

| | |
|--|--|
| Life Expectancy Mechanical Electrical | 1 x 10 ⁷ 1 x 10 ⁵ Form A, 5 x 10 ⁴ Form C |
| Operate Time | 10 ms max. |
| Release Time | 5 ms max. (with no coil suppression) |
| Dielectric Strength (at sea level for 1 min.) | 2500 VAC contact to coil 1000 VAC across contacts |
| Insulation Resistance | 1000 megohms min. at 500 VDC, 50% RH |
| Dropout | Greater than 10% of nominal coil voltage |
| Ambient Temperature Operating Storage | At nominal coil voltage -40°C(-40°F) to 85°C(185°F) Class B -40°C(-40°F) to 105°C(221°F) Class F -40°C(-40°F) to 155°C(311°F) |
| Vibration | 0.059" DA at 10–55 Hz |
| Shock(Func./Dest.) | 10 g / 100 g |
| 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 | Approx.14 g |

COIL

| | |
|---|--|
| Power At Pickup Voltage Max Continuous Dissipation | 203 mW 1.8 W at 20°C (68°F) Class B 2.4 W at 20°C (68°F) Class F |
| Temperature Rise | 32°C (58°F) at nominal coil voltage |
| 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. Unsealed relays should not be dip cleaned.
4. Specifications subject to change without notice.

AMERICAN ZETTLER, INC. www.azettler.com

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RELAY ORDERING DATA

| STANDARD RELAYS | | | | ORDER NUMBER* |
|---------------------|------------------|--------------------|----------------------------|---------------|
| COIL SPECIFICATIONS | | | | |
| Nominal Coil VDC | Must Operate VDC | Max Continuous VDC | Coil Resistance $\pm 10\%$ | |
| 3 | 2.25 | 3.9 | 25 | AZ943T-1C-3D |
| 5 | 3.75 | 6.5 | 70 | AZ943T-1C-5D |
| 6 | 4.50 | 7.8 | 100 | AZ943T-1C-6D |
| 9 | 6.75 | 11.7 | 225 | AZ943T-1C-9D |
| 12 | 9.00 | 15.6 | 400 | AZ943T-1C-12D |
| 18 | 13.5 | 23.4 | 900 | AZ943T-1C-18D |
| 24 | 18.0 | 31.2 | 1,600 | AZ943T-1C-24D |
| 48 | 36.0 | 62.4 | 6,400 | AZ943T-1C-48D |

*Substitute "1C" for "1A" for Form A contacts. Add suffix "E" after "1C" for silver tin oxide contacts. Add suffix "P" for double pin version. Add suffix "Q" for Long Endurance Type(AgNi Only). Add suffix "E" for epoxy sealed version. Add suffix "F" for Class F insulation system. Add suffix "G" for gold plated contacts.

MECHANICAL DATA

Single Pin

Outline Dimensions

Vent-hole cover
(Top view)

1 Form A

1 Form C

Wiring Diagram
(Viewed from Terminals)

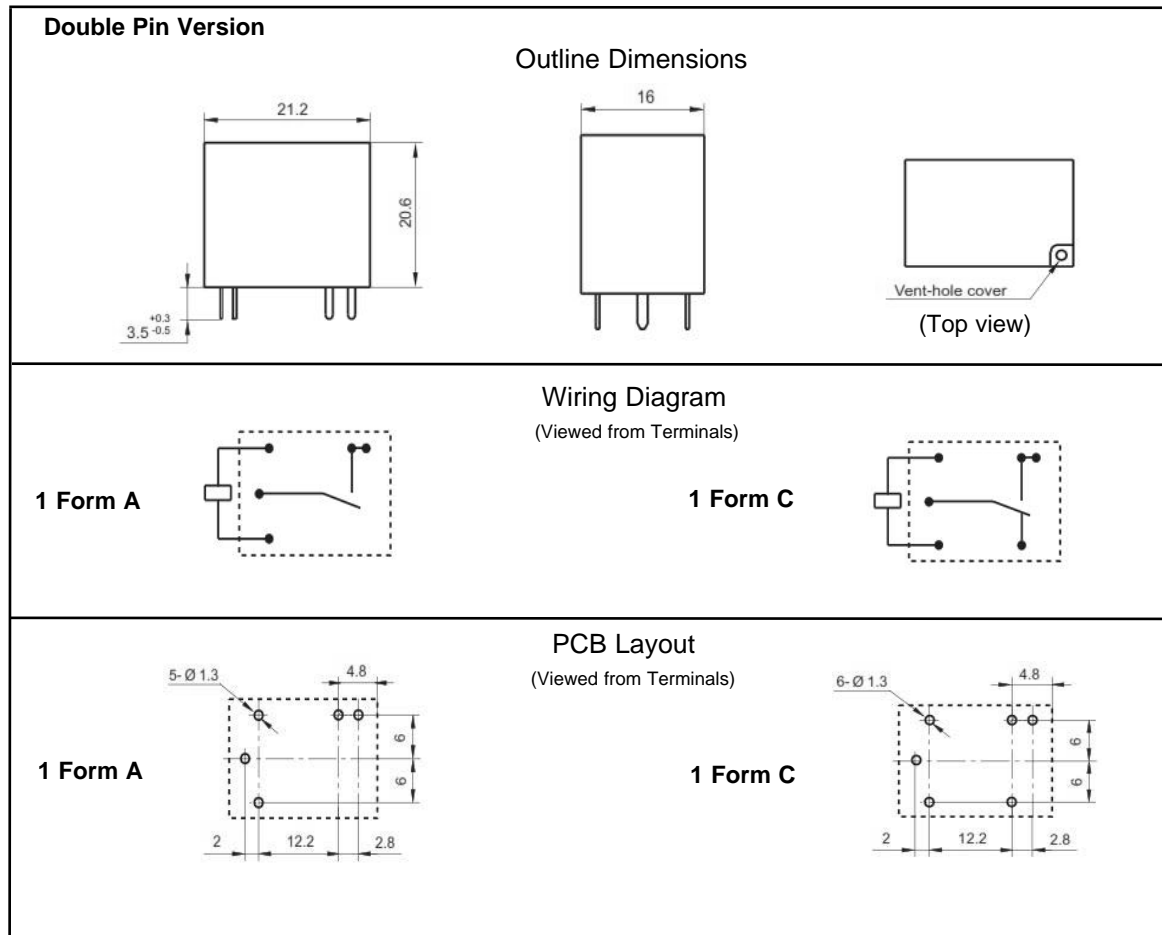
1 Form A

1 Form C

PCB Layout
(Viewed from Terminals)

If no tolerance is shown, dimension $\leq 1\text{mm}$ tolerance is $\pm 0.2\text{mm}$; dimension $> 1\text{mm}$ and $\leq 5\text{mm}$ tolerance is $\pm 0.3\text{mm}$; dimension $> 5\text{mm}$ tolerance is $\pm 0.4\text{mm}$

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If no tolerance is shown, dimension ≤ 1 mm tolerance is ± 0.2 mm; dimension > 1 mm and ≤ 5 mm tolerance is ± 0.3 mm; dimension > 5 mm tolerance is ± 0.4 mm



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