

AZ6991

SENSITIVE SUBMINIATURE RELAY

FEATURES

- Extremely small footprint utilizing only 0.22 square inch of PCB area
- Thin vertical profile only 0.196" wide, horizontal version available
- 8 Amp switching capability
- High sensitivity, 95 mW pickup
- Dielectric strength 4000 Vrms contact to coil
- Coils to 60 VDC
- Epoxy sealed version for wave soldering and cleaning available
- Isolation spacing greater than 8 mm
- UL, CUR file E43203,
- VDE file 40020561

CONTACTS

| | |
|----------------------|---|
| Arrangement | SPST (1 Form A) SPDT (1 Form C) |
| Ratings | Resistive load: Max. switched power: 180 W or 1662 VA Max. switched current: 6 A 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 | 8A at 277 VAC resistive (Form A and C N.O.) 6A at 277 VAC resistive (Form C N.C.) 6A at 30 VDC resistive R300, B300 Pilot Duty |
| VDE | 6A at 250 VAC resistive 6A at 30 VDC resistive |
| Material | Silver nickel, Silver Tin Optional gold plating |
| Resistance | < 50 milliohms initially (24 V voltage drop method) |

COIL

| | |
|---|-------------------------------------|
| Power At Pickup Voltage (typical) | 95 mW |
| Max. Continuous Dissipation | 1.0 W at 20°C (68°F) ambient |
| Temperature Rise | 20°C (36°F) at nominal coil voltage |
| Temperature | Max. 105°C (221°F) |



GENERAL DATA

| | |
|--|---|
| Life Expectancy Mechanical Electrical | Minimum operations 10 million operations 3 X 10 ⁴ at 6 A, 30 VDC or 250 VAC Res. |
| Operate Time (typical) | 8 ms at nominal coil voltage |
| Release Time (typical) | 4 ms at nominal coil voltage (with no coil suppression) |
| Dielectric Strength (at sea level for 1 min.) | 1000 Vrms between open contacts 4000 Vrms contact to coil |
| Insulation Resistance | 100 megohms min. at 20°C, 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 (158°F) -40°C (-40°F) to 105°C (221°F) |
| Vibration | 0.062" DA 10–55 Hz |
| Shock | 10 g |
| Enclosure | P.B.T. polyester 94V-0 |
| Terminals | Tinned copper alloy, P.C. |
| Max. Solder Temp. | 260°C (500°F) |
| Max. Solder Time | 5 seconds |
| Max. Solvent Temp. | 80°C (176°F) |
| Max. Immersion Time | 30 seconds |
| Weight | 5.4 grams |

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.



AMERICAN ZETTLER, INC.

www.azettler.com

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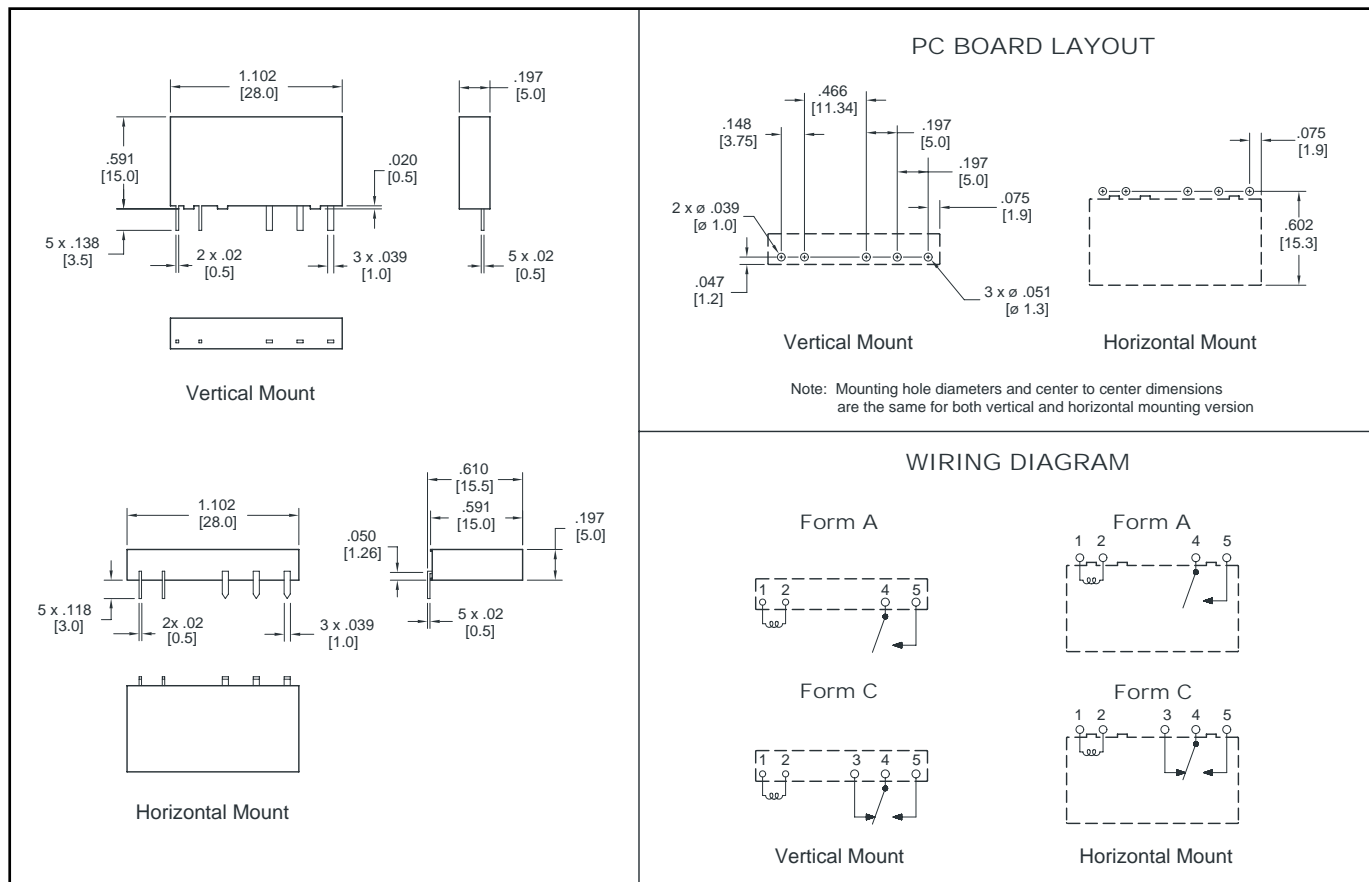
AZ6991

RELAY ORDERING DATA

| COIL SPECIFICATIONS | | | | ORDER NUMBER* | |
|---------------------|------------------|---------------------|-----------------|---------------|----------------|
| Nominal Coil VDC | Must Operate VDC | Max. Continuous VDC | Coil Resistance | Unsealed | Sealed |
| 3 | 2.25 | 6.9 | 53 ± 10% | AZ6991-1A-3D | AZ6991-1A-3DE |
| 5 | 3.75 | 11.5 | 147 ± 10% | AZ6991-1A-5D | AZ6991-1A-5DE |
| 6 | 4.50 | 13.8 | 212 ± 10% | AZ6991-1A-6D | AZ6991-1A-6DE |
| 9 | 6.75 | 20.7 | 476 ± 10% | AZ6991-1A-9D | AZ6991-1A-9DE |
| 12 | 9.00 | 27.6 | 848 ± 10% | AZ6991-1A-12D | AZ6991-1A-12DE |
| 18 | 13.5 | 41.4 | 1906 ± 15% | AZ6991-1A-18D | AZ6991-1A-18DE |
| 24 | 18.0 | 55.2 | 3390 ± 15% | AZ6991-1A-24D | AZ6991-1A-24DE |
| 48 | 36.0 | 97.7 | 10600 ± 15% | AZ6991-1A-48D | AZ6991-1A-48DE |
| 60 | 45.0 | 122.2 | 16600 ± 15% | AZ6991-1A-60D | AZ6991-1A-60DE |

*Substitute "-1C" for "-1A" to indicate 1 Form C contacts. Add "E" after 1A or 1C for Silver Tin contacts. Add suffix "A" for gold plated contacts. Add suffix "H" for horizontal version.

MECHANICAL DATA



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



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