

AZ947

20 AMP SUBMINIATURE PCB POWER RELAY FOR AUTOMOTIVE USE



FEATURES

- Low cost
- 20 Amp contact rating
- Low profile, small footprint
- High operating temperature (85°C)
- SPST (1 Form A), SPDT (1 Form C)

CONTACTS

| | |
|--------------------|---|
| Arrangement | SPST (1 Form A) SPDT (1 Form C) |
| Ratings | Resistive load: Max. switched power: 280 W, 1250 VA Max. switched voltage: 50 VDC, 125 VAC 20 A at 14 VDC Res. (make) 15 A at 14 VDC Res. (break) . |
| Material | Silver tin oxide |
| Resistance | < 50 milliohms initially (6 V, 1 A voltage drop method) |

GENERAL DATA

| | |
|---|--|
| Life Expectancy Mechanical Electrical | Minimum operations 1 x 10 ⁷ 1 x 10 ⁵ at 20 A 14 VDC Res. |
| Operate Time (max.) | 10 ms max. at nominal coil voltage |
| Release Time (max.) | 5 ms max. at nominal coil voltage (with no coil suppression) |
| Dielectric Strength (at sea level for 1 min.) | 500 VAC coil to contact 500 VAC between open contacts |
| Insulation Resistance | 100 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 -40°C (-40°F) to 85°C (185°F) -40°C (-40°F) to 105°C (221°F) |
| Vibration | 0.062" (1.5 mm) DA at 10-55 Hz |
| Shock | 10 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 | 6 grams |

COIL

| | |
|--|-------------------------------------|
| Power | |
| At Pickup Voltage (typical) | 222 mW |
| Max. Continuous Dissipation | 1.09 W at 20°C (68°F) ambient |
| Temperature Rise | 44°C (79°F) at nominal coil voltage |
| 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. Specifications subject to change without notice.

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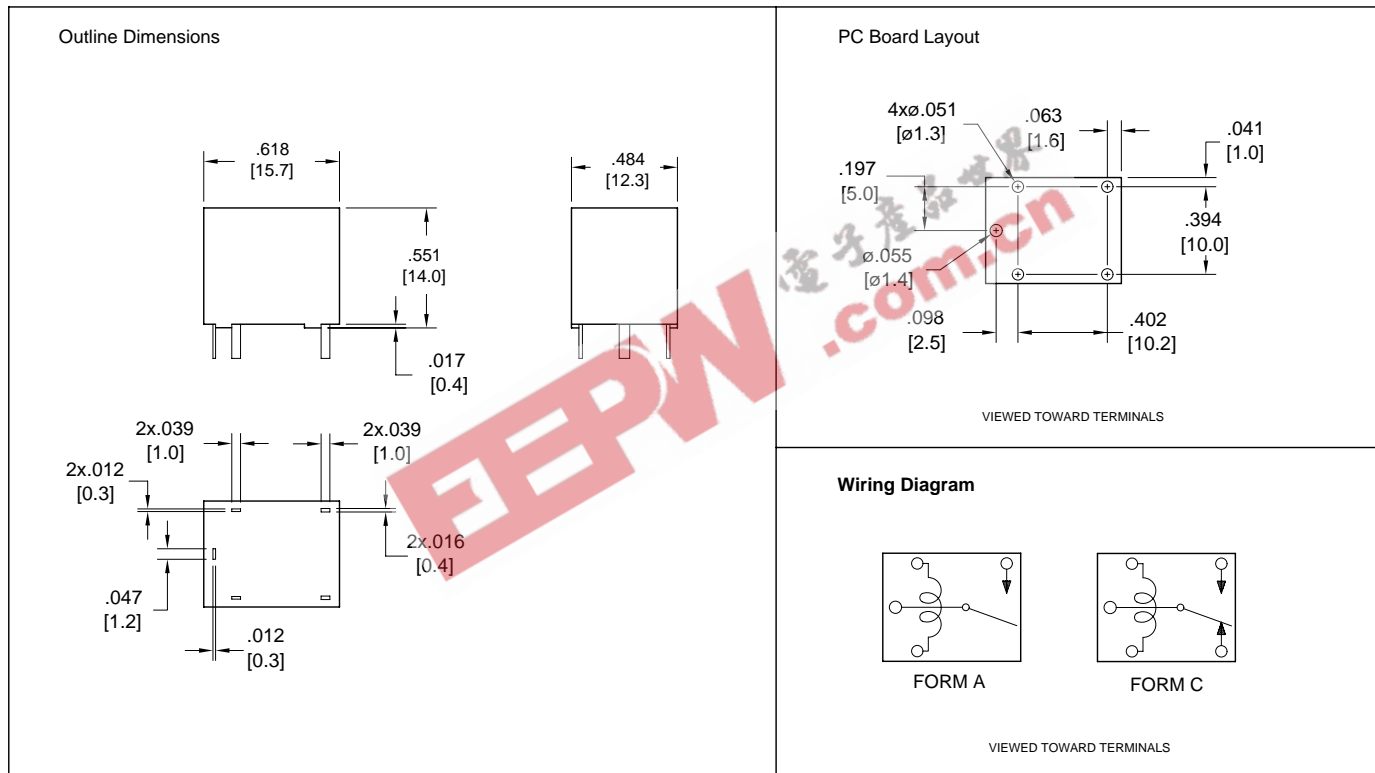
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RELAY ORDERING DATA

| COIL SPECIFICATIONS | | | | ORDER NUMBER* | |
|---------------------|------------------|---------------------|----------------------------|---------------|--------------|
| Nominal Coil VDC | Must Operate VDC | Max. Continuous VDC | Coil Resistance $\pm 10\%$ | SPST | SPDT |
| 6 | 3.6 | 8.1 | 60 | AZ947-1A-6D | AZ947-1C-6D |
| 9 | 5.4 | 12.2 | 135 | AZ947-1A-9D | AZ947-1C-9D |
| 12 | 7.3 | 16.2 | 240 | AZ947-1A-12D | AZ947-1C-12D |
| 24 | 14.4 | 32.5 | 960 | AZ947-1A-24D | AZ947-1C-24D |

* Add suffix "E" for epoxy sealed version.

MECHANICAL DATA



Dimensions in inches with metric equivalents in parentheses. Tolerance: $\pm .010$ "

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