

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), SPST-NO DM (1 Form U)

CONTACTS

Arrangement	SPST (1 Form A), SPST-NO DM (1 Form U) SPDT (1 Form C)
Ratings	Resistive load: Max. switched power: 280 W, 1250 VA Max. switched voltage: 42 VDC* or 250 VAC * Note: If switching voltage is greater than 30 VDC, special precautions must be taken. Please contact the factory. 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)

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.

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	At nominal coil voltage -40°C (-40°F) to 85°C (185°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

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This product specification to be used only together with the application notes which can be downloaded from <http://www.ZETTLERelectronics.com/pdfs/relais/ApplicationNotes.pdf>

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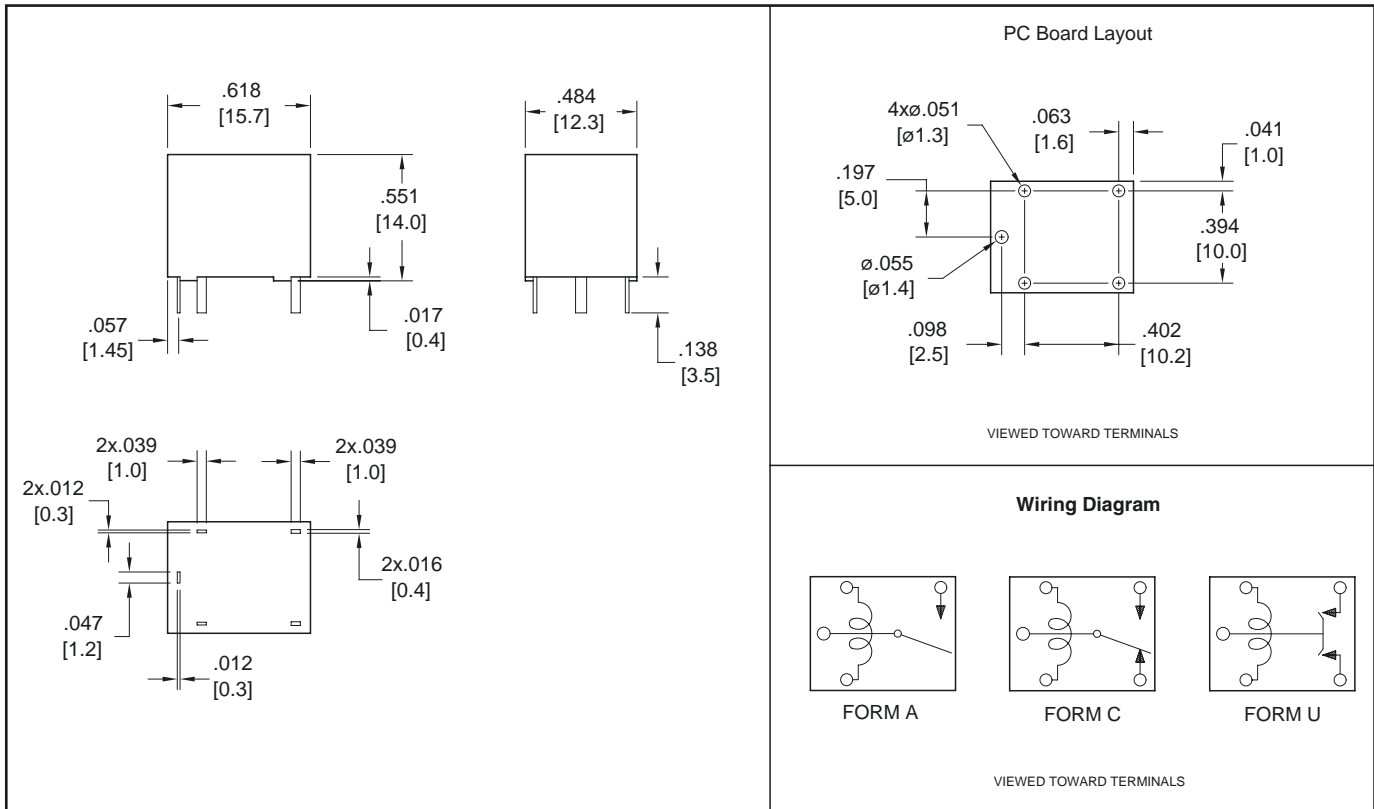
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RELAY ORDERING DATA

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

* "1A" or "1C" denote silver tin oxide contacts.
 Substitute "1U" in place of "1A" or "1C" for 1 Form U version.
 Add suffix "E" at the end of order number for epoxy sealed version.

MECHANICAL DATA



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

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