

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)
- ISO/TS 16949, ISO 14001

CONTACTS

Arrangement	SPST (1 Form A) SPST NODM (1 Form U) SPDT (1 Form C)
Ratings	Resistive load: Max. switched power: 280 W, 1250 VA Max. switched voltage: 50 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 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 g

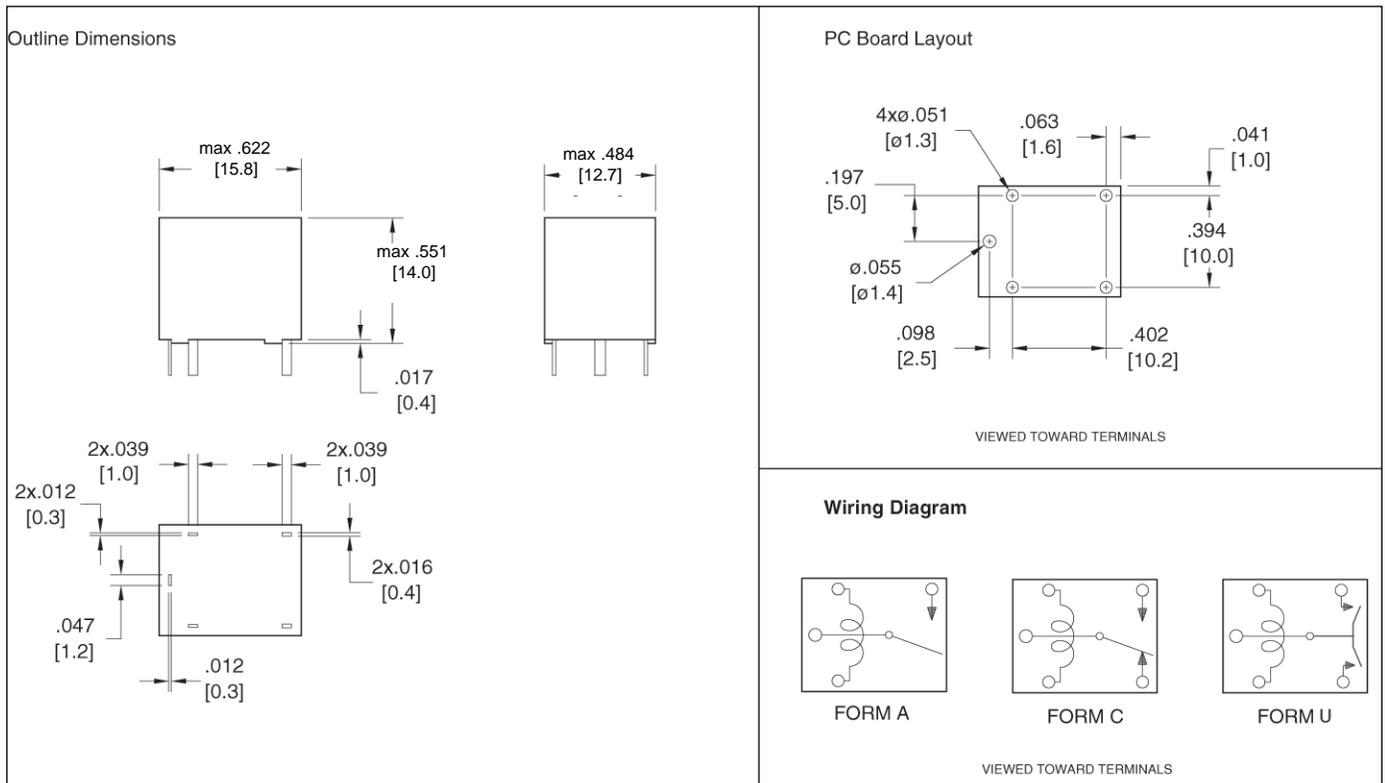
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RELAY ORDERING DATA

COIL SPECIFICATIONS				ORDER NUMBER*	
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance Ohm $\pm 10\%$	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

* For 1U version, replace 1A or 1C with 1U. Add suffix "E" for epoxy sealed version.

MECHANICAL DATA



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

AMERICAN ZETTLER, INC.

4/12/13

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This specification provides an overview of the most significant part features. Any individual applications and operating conditions are not taken into consideration. It is recommended to test the product under application conditions. Responsibility for the application remains with the customer. Proper operation and service life cannot be guaranteed if the part is operated outside the specified limits.