## 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)

#### COIL

Power			
At Pickup Voltage (typical)	222 mW		
Max. Continuous	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)		

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#### GENERAL DATA

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Life Expectancy	Minimum operations		
Mechanical	1 x 10 <sup>7</sup>		
Electrical	1 x 10 <sup>5</sup> 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)		
-0'			
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	At nominal coil voltage		
Operating	-40°C (-40°F) to 85°C (185°F)		
Storage	-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		

#### 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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#### RELAY ORDERING DATA

COIL SPECIFICATIONS				ORDER NUMBER*	
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance ± 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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