

20 AMP MINIATURE PCB POWER RELAY FOR AUTOMOTIVE USE

FEATURES

- Up to 20 Amp switching capability in a compact size
- Coils to 24 VDC
- Small footprint
- 1 Form A and C contacts available
- Vibration and shock resistant
- QS9000, ISO9001, ISO14000
- Cost effective
- Designed for high in-rush applications



CONTACTS

Arrangement	SPST (1 Form A) SPDT (1 Form C)
Ratings	Resistive load: Max. switched power: 280 W Max. switched voltage: 20 A Max. switched voltage: 150 VDC* Rate load: 20 A at 14 VDC 1 Form A: 20 A at 12 VDC 1 Form C: 20 A (N.O.)/10 A (N.C.) at 12 VDC * If switching voltage is greater than 30 VDC, special precautions must be taken. Please contact the factory.
Material	Silver tin oxide
Resistance	< 50 milliohms initially (6V, 1 A voltage drop method)

COIL

Power	
At Pickup Voltage (typical)	534 mW (Standard)
Max. Continuous Dissipation	2.6 W at 20°C (68°F) ambient
Temperature Rise	60°C (108°F) at nominal coil voltage
Max Temperature	160°C (320°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 ⁶ 1 x 10 ⁵ at 20 A 14 VDC Res.
Operate Time (max.)	10 ms max. at nominal coil voltage
Release Time (max.)	7 ms max. at nominal coil voltage (with no coil suppression)
Dielectric Strength (at sea level for 1 min.)	1000 VDC coil to contact 500 VDC between open contacts
Insulation Resistance	100 megohm min. at 20°C, 500 VDC 50% RH
Dropout	Greater than 8.3% of nominal coil voltage
Ambient Temperature Operating Storage	At nominal coil voltage -40°C (-40°F) to 115°C (239°F) -40°C (-40°F) to 155°C (311°F)
Vibration	0.062" 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	16 grams

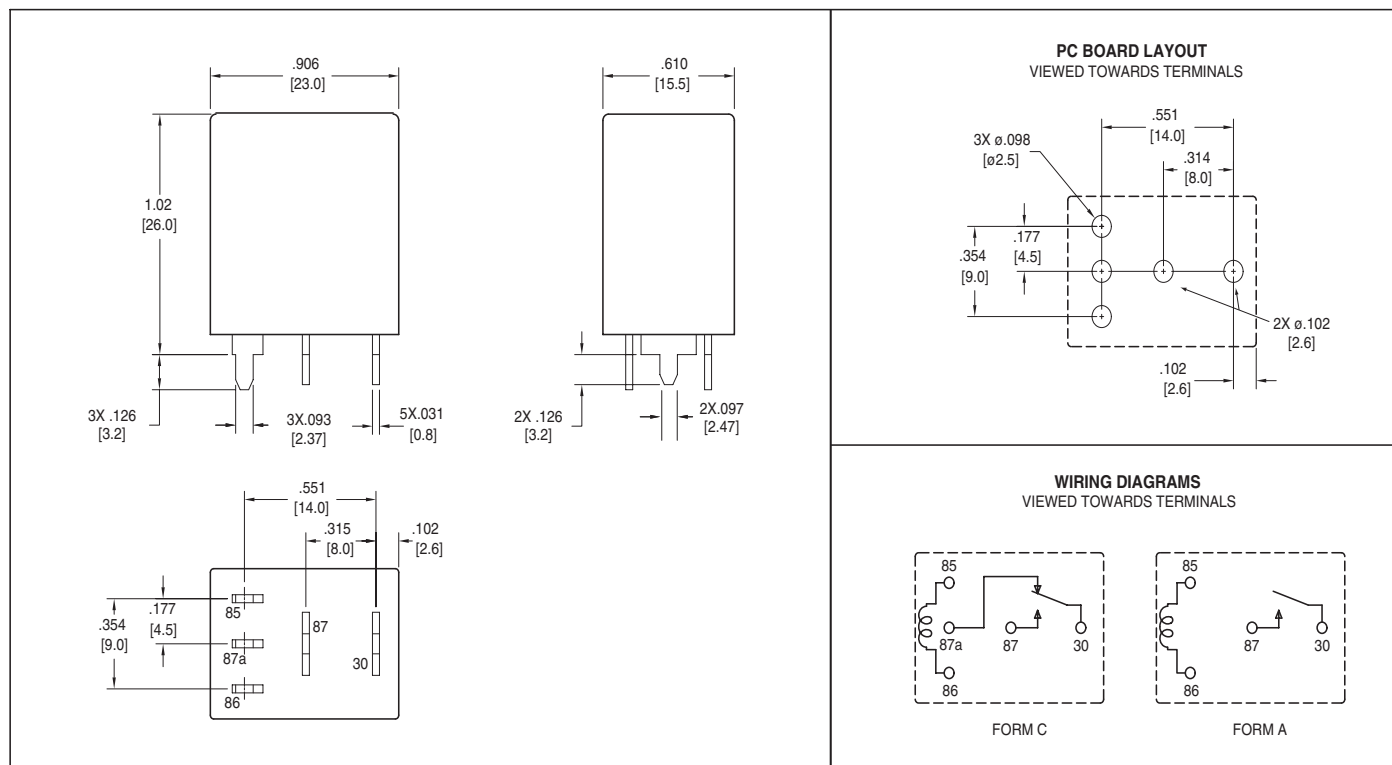
RELAY ORDERING DATA

STANDARD RELAYS				ORDER NUMBER*	
COIL SPECIFICATIONS					
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance $\pm 10\%$	Form A (SPST)	Form C (SPDT)
6	3.6	7.8	25	AZ978-1A-6D	AZ978-1C-6D
12	7.2	15.6	97	AZ978-1A-12D	AZ978-1C-12D
24	14.4	31.2	384	AZ978-1A-24D	AZ978-1C-24D

SENSITIVE RELAYS					
COIL SPECIFICATIONS				ORDER NUMBER*	
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance $\pm 10\%$	Form A (SPST)	Form C (SPDT)
6	3.6	7.8	32	AZ978-1A-6DS	AZ978-1C-6DS
12	7.2	15.6	123	AZ978-1A-12DS	AZ978-1C-12DS
24	14.4	31.2	483	AZ978-1A-24DS	AZ978-1C-24DS

*Add suffix "R" for resistor in parallel with coil. Resistor values: 6V: 180 ohms, 12V: 680 ohms, 24V: 2700 ohms.

MECHANICAL DATA



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

AMERICAN ZETTLER, INC. www.azettler.com

75 COLUMBIA • ALISO VIEJO, CA 92656 • PHONE: (949) 831-5000 • FAX: (949) 831-8642 • E-MAIL: SALES@AZETTLER.COM