

AZ934

20 AMP MINIATURE AUTOMOTIVE RELAY, SINGLE OR DUAL

FEATURES

- Up to 20 Amp switching capability in a compact size
- Sealed
- Two separate relays in DPDT (dual) version
- Quiet operation
- Vibration and shock resistant
- ISO/TS 16949, ISO 14000
- Tested in accordance with SAE J2544
- Cost effective
- Designed for power windows, power seats and wiper applications



CONTACTS

Arrangement	DPDT (2 Form C) SPDT (1 Form C)
Ratings	Max. switched power: 280 W Max. switched voltage: 100 VDC Max. switched current (make/break), continuous: 1 Form C: 25A/20A, 20A 2 Form C: 25A/20A, 20A
Material	Silver tin oxide (silver nickel available - contact factory)
Resistance	< 100 milliohms at 1A, 5 VDC

COIL

Power At Pickup Voltage (typical)	203 mW
Max. Continuous Dissipation	2.2 W 20°C (68°F) ambient
Temperature Rise	32°C (58°F) nominal coil VDC
Max. Temperature	155°C (311°F)

NOTES

1. All values at 20°C (68°F).
2. Maximum make current refers to in-rush current of lamp load.
3. Relay may pull in with less than "Must Operate" value.
4. Specifications subject to change without notice.

GENERAL DATA

Life Expectancy Mechanical Electrical	Minimum operations 1 x 10 ⁷ operations 2 x 10 ⁵ operations at 20 A 14 VDC Res.
Operate Time (typical)	3 ms at nominal coil voltage
Release Time (typical)	1.5 ms at nominal coil voltage (with no coil suppression)
Dielectric Strength (at sea level for 1 min.)	500 Vrms coil to contact 500 Vrms between open contacts
Insulation Resistance	100 megohms min. at 20°C, 500 VDC, 50% RH
Dropout	> 8.3% of nominal coil voltage
Ambient Temperature Operating Storage	At nominal coil voltage -40°C (-40°F) to 100°C (212°F) -40°C (-40°F) to 155°C (311°F)
Vibration	0.062" DA at 10–55Hz, 10 g at 55-200 Hz
Shock	30 g, 11 ms, functional
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	10 grams



AMERICAN ZETTLER, INC.

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RELAY ORDERING DATA

COIL SPECIFICATIONS - DC Coil				ORDER NUMBER	
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance $\pm 10\%$	1 Form C (SPDT)	2 Form C (DPDT)
12	7.2	24.0	255	AZ934-1C-12DET	AZ934-2C-12DET

MECHANICAL DATA

SPDT (1 Form C) Top View: .699 Max [17.8], .53 Max [13.5], .138 [3.5], .020 [0.5], .376 Max [9.6] Bottom View: 3x.016 [0.4], 2x$\varnothing$.02 [0.5], 3x.035 [0.9]		DPDT (2 Form C) Top View: .699 Max [17.8], .53 Max [13.5], .138 [3.5], .020 [0.5], .671 Max [17.1] Bottom View: 6x.016 [0.4], 6x.035 [0.9], 4x$\varnothing$.02 [0.5]	
PC BOARD LAYOUT Dimensions: .541 [13.75], .087 [2.2], .110 [2.8], .148 [3.75], .246 [6.25], .098 [2.5], 3x$\varnothing$.051 [0.13], 2x$\varnothing$.035 [0.9] Viewed toward terminals	WIRING DIAGRAM Viewed toward terminals	PC BOARD LAYOUT Dimensions: .541 [13.75], .087 [2.2], .110 [2.8], .148 [3.75], .246 [6.25], .098 [2.5], 6x$\varnothing$.051 [0.13], 4x$\varnothing$.035 [0.9] Viewed toward terminals	WIRING DIAGRAM Viewed toward terminals

Dimensions in inches with metric equivalents in parentheses. Tolerance: ± 0.010 "



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