

20 AMP SUB-MINIATURE POWER RELAY FOR AUTOMOTIVE USE

FEATURES

- Up to 20 Amp switching capability in a compact size
- Sealed
- Two separate relays in DPDT version
- Quiet operation
- Vibration and shock resistant
- Designed for power windows, power seats and wiper applications
- QS-9000 Factory



CONTACTS

Arrangement	DPDT (2 Form C) SPDT (1 Form C)
Ratings	Max. switched power: 280 W Max. switched voltage: 28 VDC Max. switched current (make/break), continuous: 1 Form C: 25A/20A, 20A 2 Form C: 25A/20A, 20A
Material	Silver tin oxide
Resistance	< 100 milliohms at 1A, 5 VDC

COIL

Power	
At Pickup Voltage (typical)	203 mW
Max. Continuous Dissipation	1.0 W 20°C (68°F) ambient
Temperature Rise	42°C (76°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	At nominal coil voltage -40°C (-40°F) to 85°C (185°F)
Vibration	0.062" (1.5 mm) 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

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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>

2014-09-26

AZ934

RELAY ORDERING DATA

COIL SPECIFICATIONS - DC Coil				ORDER NUMBER*	
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance Ohm $\pm 10\%$	1 Form C (SPST)	2 Form C (SPDT)
6	3.6	7.5	64	AZ934-1C-6DET	AZ934-2C-6DET
12	7.2	15.0	255	AZ934-1C-12DET	AZ934-2C-12DET

MECHANICAL DATA

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

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

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