

## 20 AMP MINIATURE DUAL AUTOMOTIVE RELAY – QUIET

### FEATURES

- Extremely silent operation
- Up to 20 Amp switching capability in a compact size
- Sealed
- Two separate relays in one package
- 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

<b>Arrangement</b>	DPDT (2x1-Form C)
<b>Ratings</b>  continuous:	Max. switched power: 280 W Max. switched voltage: 100 VDC Max. switched current (make/break),  2 Form C: 25A/20A, 20A
<b>Material</b>	Silver tin oxide (silver nickel available - contact factory)
<b>Resistance</b>	< 100 milliohms at 1A, 5 VDC

### COIL

<b>Power</b>  <b>At Pickup Voltage (typical)</b>  <b>Max. Continuous Dissipation</b>  <b>Temperature Rise</b>	203 mW   1.9 W 20°C (68°F) ambient 32°C (58°F) nominal coil VDC
<b>Max. Temperature</b>	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

<b>Life Expectancy</b> <b>Mechanical</b> <b>Electrical</b>	Minimum operations 1 x 10 <sup>7</sup> operations 2 x 10 <sup>5</sup> operations at 20 A 14 VDC Res.
<b>Operate Time (typical)</b>	3 ms at nominal coil voltage
<b>Release Time (typical)</b>	1.5 ms at nominal coil voltage (with no coil suppression)
<b>Dielectric Strength</b> (at sea level for 1 min.)	500 Vrms coil to contact 500 Vrms between open contacts
<b>Insulation Resistance</b>	100 megohms min. at 20°C, 500 VDC, 50% RH
<b>Dropout</b>	> 8.3% of nominal coil voltage
<b>Ambient Temperature</b> <b>Operating</b> <b>Storage</b>	At nominal coil voltage -40°C (-40°F) to 85°C (185°F) -40°C (-40°F) to 155°C (311°F)
<b>Vibration</b>	0.062" DA at 10–55Hz, 10 g at 55-200 Hz
<b>Shock</b>	30 g, 11 ms, functional
<b>Terminals</b>	Tinned copper alloy, P.C.
<b>Max. Solder Temp.</b>	270°C (518°F)
<b>Max. Solder Time</b>	5 seconds
<b>Max. Solvent Temp.</b>	80°C (176°F)
<b>Max. Immersion Time</b>	30 seconds
<b>Weight</b>	10 grams



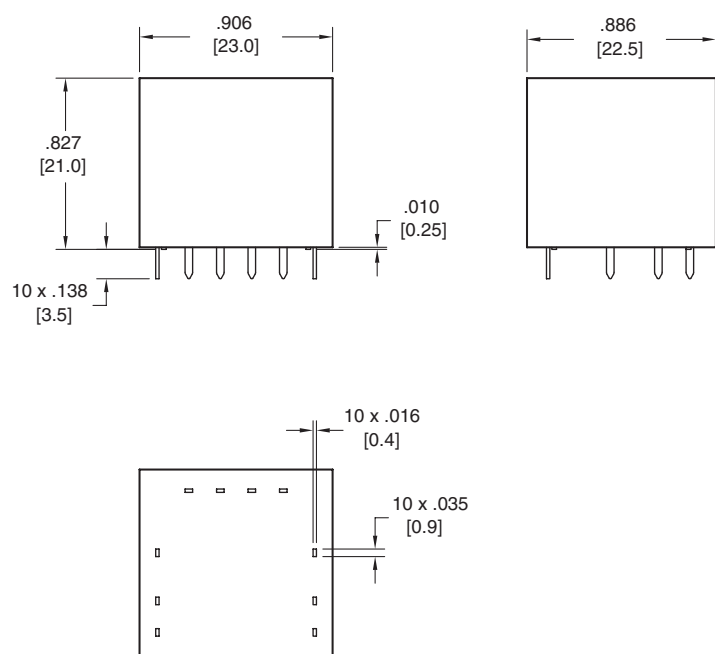
# AZ935

## RELAY ORDERING DATA

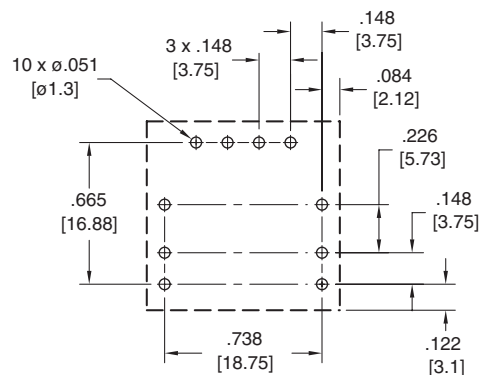
COIL SPECIFICATIONS - DC Coil				ORDER NUMBER
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance $\pm 10\%$	2 Form C (SPDT)
12	7.2	22.0	255	AZ935-2C-12DET

## MECHANICAL DATA

### Outline Dimensions

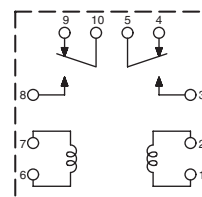


### PC Board Layout



Viewed toward terminals

### Wiring Diagram



Viewed toward terminals

Dimensions in inches with metric equivalents in parentheses. Tolerance:  $\pm 0.010$ "



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