# Automotive Relay SRZ

- 30A switching capability
- Ambient temperature -40°C to 125°C
- SPNO and SPCO contacts
- Sealed and Dust cover options
- Optional parallel diode or transient suppression resistor
- Contact gap ≥ 0.6mm

## Options and ordering codes

<table>
<thead>
<tr>
<th>SRZ</th>
<th>P</th>
<th>H</th>
<th>N</th>
<th>1A</th>
<th>T</th>
<th>D</th>
<th>L</th>
<th>R</th>
<th>12VDC</th>
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<tbody>
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<tr>
<td>Sensitivity</td>
<td>Standard</td>
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<td>NIL</td>
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<tr>
<td>Capacity</td>
<td>12/24VDC Standard</td>
<td>24VDC High Power (Contact gap &gt; 0.6mm)</td>
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<td>Contact Form</td>
<td>SPNO</td>
<td>1A</td>
<td></td>
<td>N</td>
<td>AgNi</td>
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<tr>
<td></td>
<td>SPCO</td>
<td>1C</td>
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<td>T</td>
<td>AgSnO2</td>
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</table>

## Contact Data

- **Contact Arrangement**: 1C, 1A
- **Load Version**: 1C, 1A
- **Res. Load**
  - **Motor**: on 20A, off 10A, 30A
  - **Lamp**: 120A, 40A, 20A
- **High Power 24V**
  - **Motor**: on 20A, off 10A, 20A
  - **Lamp**: 70A, 7A
- **Contact Material**: AgNi, AgSnO2
- **Max. switching current**: 30A
- **Max. switching voltage**: 27VDC
- **Max. switching power**: 540W
- **Initial contact resistance**: 50mΩ (at 1A/24VDC)
- **Contact voltage drop**: Max 250mV
- **Initial Insulation Resistance**: 100MΩ @ 500VDC
- **Dielectric Strength**: 500VAC 1min.
- **Operate time**: Max. 10ms
- **Release time**: Max. 10ms
- **Vibration resistance**: 10-500Hz 50g
- **Shock resistance**: 500VAC 1min.
- **Ambient temperature**: -40°C to +125°C
- **Storage temperature**: -40°C to +155°C
- **Termination**: QC & PCB
- **Weight**: 22g
- **Construction**: Dust cover, Sealed IP67

## Characteristics

- **Cover retention**: (push:pull) 200N
- **Terminal retention**: (push:pull) 100N
- **Terminal resistance to binding**: (front:side) 10N

## Mechanical Data

- **Cover retention**: (push:pull) 200N
- **Terminal retention**: (push:pull) 100N
- **Terminal resistance to binding**: (front:side) 10N

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Automotive Relay SRZ continued...

**Coil Data**

<table>
<thead>
<tr>
<th></th>
<th>Nominal Voltage VDC</th>
<th>Pick-up Voltage VDC</th>
<th>Drop-out Voltage VDC</th>
<th>Coil Resistance Ω ± 10%</th>
<th>Parallel Resistance Ω ± 5%</th>
<th>Equivalent Resistance Ω ± 10%</th>
<th>Power Consumption W</th>
<th>Max. allowable overdrive voltage VDC</th>
<th>20°C</th>
<th>85°C</th>
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<tbody>
<tr>
<td><strong>Standard</strong></td>
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</table>

(1) The power consumption of parallel resistance is 0.5W
(2) Max. allowable overdrive voltage is stated with no load applied and minimum coil resistance

**Outline dimensions (mm)**

Wiring diagram and PC Board layout
Automotive Relay SRZ

Characteristic Curve

Ambient Temperature Characteristics

Applied Voltage to the Coil

Operating temperature (°C)

-40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 125

Temperature (°C)

Operating temperature (°C)

Coil Temperature Rise

Switching Current (A)

Load Limit Curve

Switching Voltage (VDC)

100W
50W
20W
10W
250W

Ambient Temperature (°C)

COIL OPERATING VOLTAGE RANGE

Percentage of nominal coil voltage

U_{\text{pick-up}} (\text{after pre-energisation under } U_{\text{nom}})

U_{\text{pick-up}} (\text{initial})

Upick-up (after pre-energisation under Unom.)

Upick-up (initial)

Temperature Curve (One Cycle)

Temperature (°C)

humidity

Time (h)