RB Series
Rolling Ball Sensor Switch

Features/Benefits
• Different angle options to trigger
• Ultra miniature design
• Patent awarded

Typical Applications
• Household goods
• Electronic toys
• Consumer electronics including irons, portable heaters, games, toys
• Safety and security controls

How To Order
Part number list is shown below. For individual part details, please refer to the following.

<table>
<thead>
<tr>
<th>Part Number (Part Description)</th>
<th>Product Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>RB-231X2</td>
<td>Rolling Ball Sensor Switch</td>
</tr>
<tr>
<td>RB-220-07A R</td>
<td>Rolling Ball Sensor Switch</td>
</tr>
</tbody>
</table>

Specifications
CONTACT ARRANGEMENT: SPST
SENSOR ANGLE: 0° to -10° scope inside, terminal to disconnection electric current
MINIMUM VOLTAGE: 1 VDC 10mA (resistive load)
MAXIMUM VOLTAGE: 5 VDC 1mA (resistive load)
OPERATING LIFE: 100,000 cycles
INSULATION RESISTANCE: 1000 MΩ min. @ 100 VDC
DIELECTRIC STRENGTH: 500 V AC (50-60 Hz)
OPERATING TEMPERATURE: −20°C to +70°C

Materials
FRAME: Copper alloy, nickel plated
COVER: PA 46 (UL94V-0)
MOVABLE CONTACT: Copper alloy, nickel plated
TERMINALS: Copper alloy, gold plated
BRASS BALL: Brass, gold plated

Dimensions shown: mm
Specifications and dimensions subject to change

www.ckswitches.com
### Specifications

<table>
<thead>
<tr>
<th>CONTACT ARRANGEMENT: SPST</th>
</tr>
</thead>
<tbody>
<tr>
<td>SENSOR ANGLE: In the range of 15° to 90°, current appears between terminals</td>
</tr>
<tr>
<td>MINIMUM VOLTAGE: 1 VDC 10 µA (resistive load)</td>
</tr>
<tr>
<td>MAXIMUM VOLTAGE: 5 VDC 1mA (resistive load)</td>
</tr>
<tr>
<td>OPERATING LIFE WITH LOAD: 100,000 cycles</td>
</tr>
<tr>
<td>INSULATION RESISTANCE: 10 M Ω min. @ 100 VDC</td>
</tr>
<tr>
<td>DIELECTRIC STRENGTH: 100 V AC (50-60 Hz)</td>
</tr>
<tr>
<td>OPERATING TEMPERATURE: –10°C to +50°C</td>
</tr>
</tbody>
</table>

### Materials

- COVER: PA
- HOUSING: PA
- SILICON SHEET: Silica
- TERMINALS: Copper alloy, gold plated
- BRASS BALL: Brass, gold plated

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<th>PART NUMBER</th>
<th>PACKAGING</th>
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<tbody>
<tr>
<td>RB-220-07A R</td>
<td>500 pieces</td>
</tr>
</tbody>
</table>

Dimensions are shown: mm
Specifications and dimensions subject to change

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