

RB Series

Rolling Ball Sensor Switch



Description

It is critical for household goods, electronic toys, consumer electronics and security controls to be built with long lasting, high quality parts that can be counted on to work every time. The RB series rolling ball sensor switches feature an ultraminiature design and are available with several different angle options to trigger, helping ensure they fit any product.

Features & Benefits

- Different angle options to trigger
- Ultra miniature design
- Patent awarded

Applications

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

Ordering Number

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

Part Number (Part Description)	Product Details
RB-231X2	Rolling Ball Sensor Switch
RB-220-07A R	Rolling Ball Sensor Switch

RB-231X2 Information

Specifications

Contact Arrangement	SPST
Sensor Angle	0° to -10° scope inside, terminal to disconnection electric current

Electrical Characteristics

Maximum Voltage	5 VDC 1mA (resistive load)
Minimum Voltage	1 VDC 10mA (resistive load)
Operating Life	100,000 cycles
Insulation Resistance	1,000 M Ω min. @ 100 VDC
Dielectric Strength	500 V AC (50-60 Hz)
Operating Temperature	-20°C to 70°C

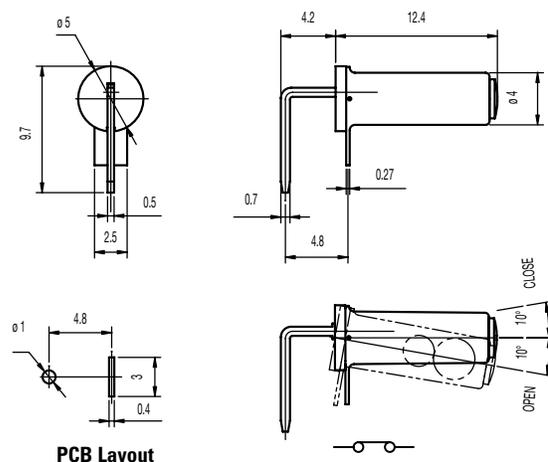
Packaging

Part Number	Packaging
RB-231X2	1,000 pieces

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 inches (mm)



PCB Layout

RB Series

Rolling Ball Sensor Switch



RB-220-07A Information

Specifications

Contact Arrangement	SPST
Sensor Angle	In the range of 15° to 90°, current appears between terminals

Electrical Characteristics

Maximum Voltage	5 VDC 1mA (resistive load)
Minimum Voltage	1 VDC 10µA (resistive load)
Operating Life	100,000 cycles
Insulation Resistance	10 M Ω min. @ 100 VDC
Dielectric Strength	100 V AC (50-60 Hz)
Operating Temperature	-10°C to 50°C

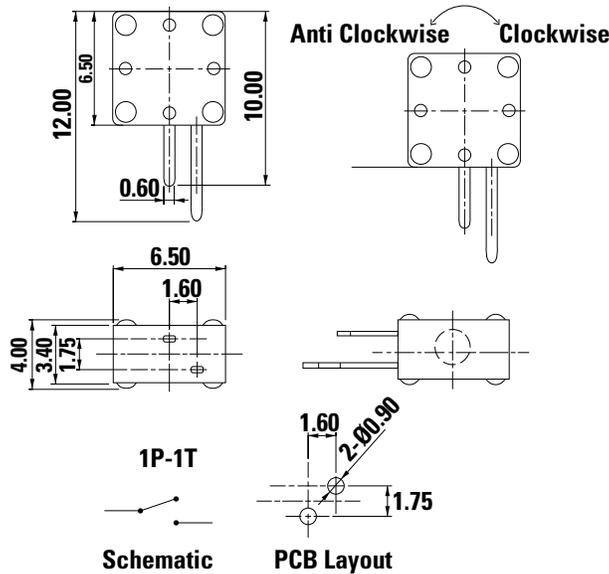
Materials

Cover	PA
Housing	
Silicon Sheet	Silica
Terminals	Copper alloy, gold plated
Brass Ball	Brass, gold plated

Packaging

Part Number	Packaging
RB-220-07A R	500 pieces

Dimensions inches (mm)



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