

RK Series

Microminiature SMT Top Actuated Tactile Switch



Description

RK series is low profile micro miniature SMT top actuated tactile switch with different choices of actuation force and long life cycle. The switch is ideal for applications that need a high density of components in limited PCB space, such as automotive key fob, navigation and health & medical devices. The compact top-actuated RK series comes in various product sizes (RKA2: 4.5 x 4.5 x 0.55 mm, RKB2: 4.2 x 3.2 x 2.5 mm, RKC: 3.5 x 2.6 x 1.4 mm). The RK series is available in 6 actuation forces, allowing customers easily integrate into different designs.

Features & Benefits

- Low profile & microminiature package
- SMT termination
- Hard actuator
- Different actuation forces
- Life cycles up to 1 Mio

Applications

- Keyfob
- Navigation
- Health & medical devices

Specifications

Function	Momentary action
Contact Arrangement	1 make contact = SPST N.O.
Terminals	SMT termination
Travel	RKA2: 0.20 ± 0.1 mm RKB2: 0.20 ± 0.1 mm RKC: 0.15 ± 0.1 mm

Electrical Characteristics

Dielectric Strength	250 VA C (1 minute)
Bounce Time	≤ 10 ms

Type	Max. Voltage	Max. Current	Contact Resistance	Insulation Resistance
RKA2	DC 15 V	20 mA max.	500mΩ max.	50MΩ min.
RKB2	DC 12V	50 mA max.	200mΩ max.	100MΩ min.
RKC	DC 12V	50 mA max.	2Ω max.	100MΩ min.

Environmental Characteristics

Operating Temperature	RKA2: -40°C to 85°C RKB2: -40°C to 90°C RKC: -40°C to 85°C
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Process

Soldering	This component is suited to the following methods: Infrared Reflow Soldering in accordance with IEC61760-1
Packaging	RKA2: 5,000 pieces per reel RKB2: 3,000 pieces per reel RKC: 9,500 pieces per reel

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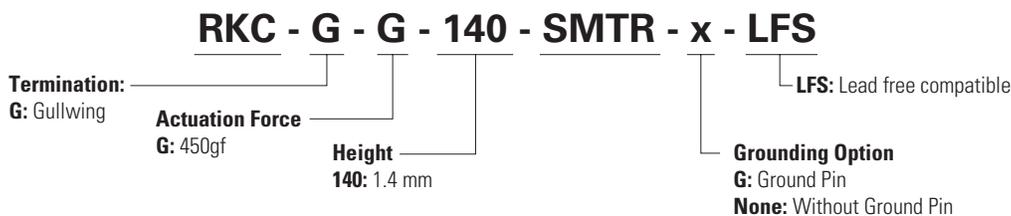
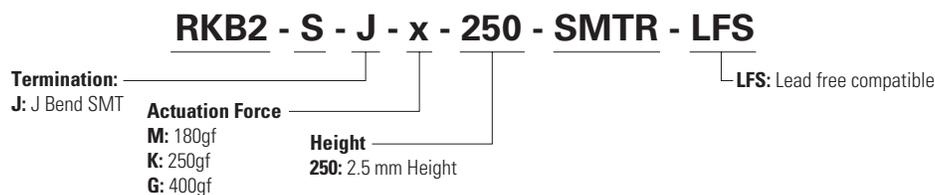
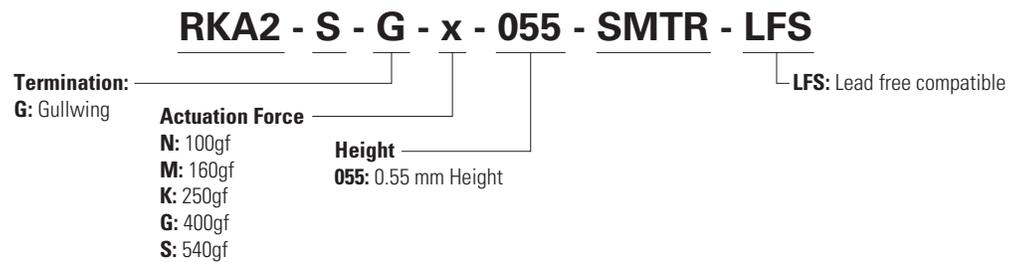


Mechanical Characteristics

Type	Operating Force	Life (cycles)
RKB2SJM250SMTR LFS	180 gf	100,000
RKB2SJK250SMTR LFS	250 gf	100,000
RKB2SJG250SMTR LFS	400 gf	100,000
RKA2SGN055SMTR LFS	100 gf	1,000,000
RKA2SGM055SMTR LFS	160 gf	1,000,000
RKA2SGK055SMTR LFS	250 gf	200,000
RKA2SGG055SMTR LFS	400 gf	200,000
RKA2SGS055SMTR LFS	540 gf	150,000
RKC GG140 SMTR LFS	450 gf	200,000
RKC GG140 G SMTR LFS	450 gf	200,000

Ordering Numbers

Our easy build-a-switch concept allows you to mix and match options to create the switch you need. To order, select desired option from each category and place it in the appropriate box. For any part number different from those listed above, please consult your local representative.

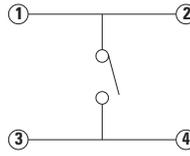
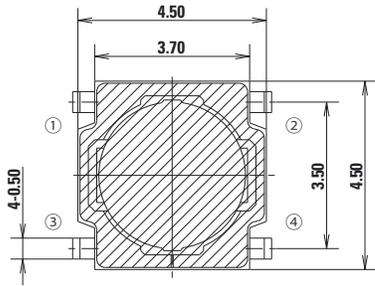


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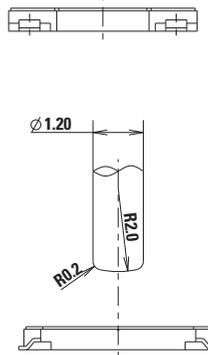
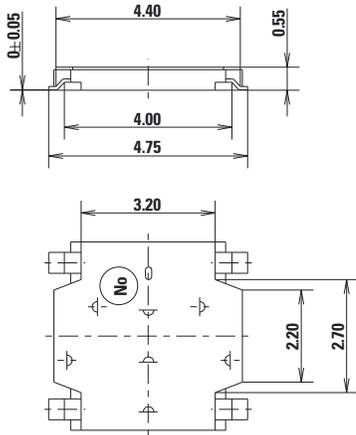
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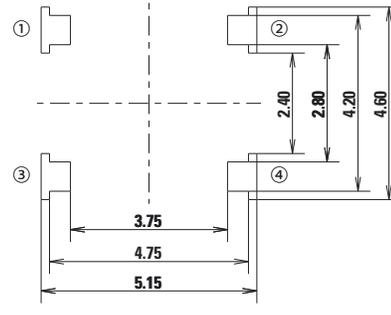
RKA2 4.5 x 4.5 x 0.55 (mm)



CIRCUIT DIAGRAM

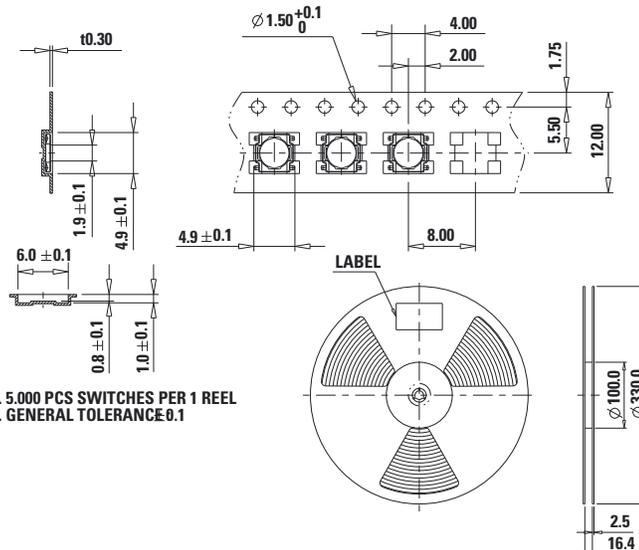


SET MAKER KNOB SIZE



P.C.B MOUNTING SOLDER LAND DIMENSION

Tape & Reel



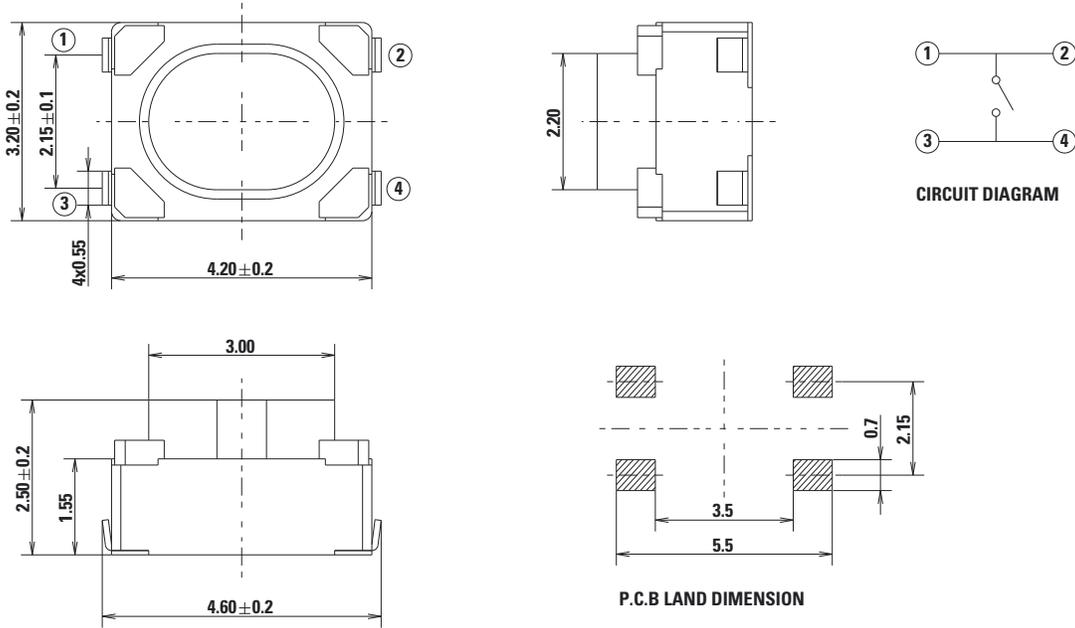
- 1. 5,000 PCS SWITCHES PER 1 REEL
- 2. GENERAL TOLERANCE 0.1

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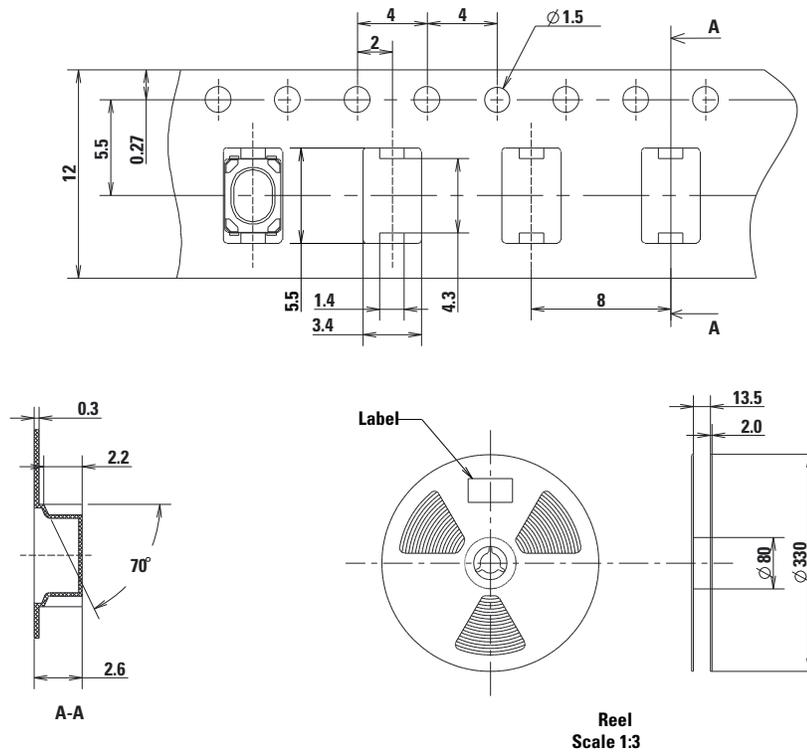
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RKB2 4.2 x 3.2 x 2.5 (mm)



Tape & Reel



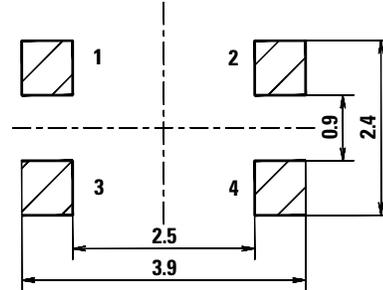
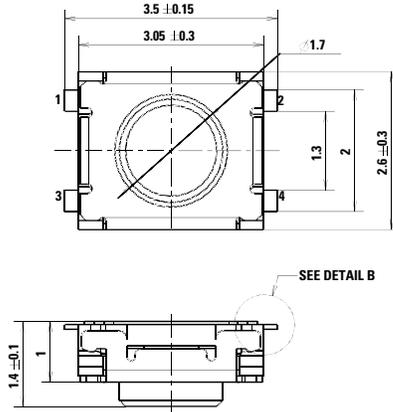
Notes:
 1. 3K pcs Switches per reel.
 2. General tolerance: 0.3mm

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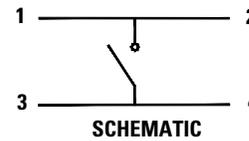
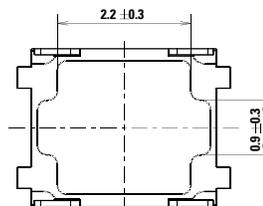
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RKC 3.5 x 2.6 x 1.4 mm

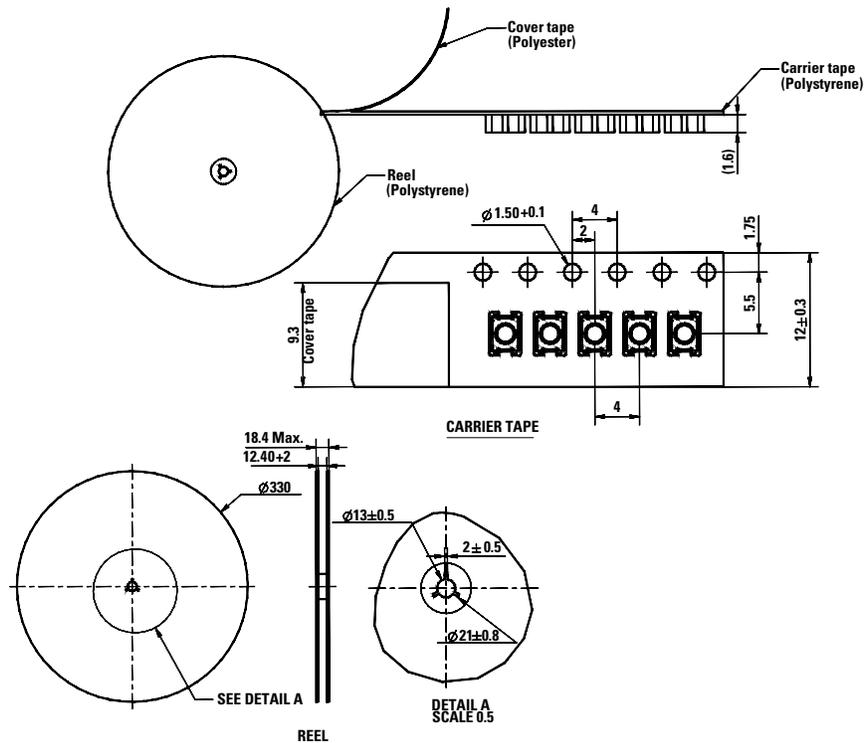


RECOMMENDED PCB LAYOUT



SCHEMATIC

Tape & Reel



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