

## Excellent Integrated System Limited

Stocking Distributor

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[C&K Components](#)

[KSR221J](#)

For any questions, you can email us directly:

[sales@integrated-circuit.com](mailto:sales@integrated-circuit.com)

# KSR Series Subminiature Tact Switch for SMT

### Features/Benefits

- Saves PCB space
- Range of 4 actuation forces
- J or G terminations
- N.O. or N.C. contacts
- Detect type available
- Soft actuator

### Typical Applications

- Automotive
- Cellular phones & accessories
- Industrial electronics
- Computers & network equipment



B

Tactile Switches

### Specification

FUNCTION: momentary action

CONTACT ARRANGEMENT: N.O.

TERMINALS: J bend & Gullwing type for SMT

### Mechanical

Type	Operating force Newtons (grams)	Operating life (operations)	Travel
KSR211/213	1.8 (180) ± 20%	100,000	0,25 ± 0,15
KSR221/223	2.0 (200) ± 25%	200,000	0,3 ± 0,15
KSR231/233	3.0 (300) ± 25%	200,000	0,5 ± 0,15
KSR251/253	4.5 (450) ± 25%	100,000	0,5 ± 0,15
KSR2D3J	1.5 (150) ± 25%	100,000	0,3 ± 0,15
KSR223GNC	2 (200) ± 25%	100,000	0,3 ± 0,15

### Packaging

Switches are delivered on continuous tape, in reels of 2,500 pieces.

### Electrical

	Silver	Gold
MAXIMUM POWER:	1 VA	0.2 VA
MAXIMUM VOLTAGE:	32 VDC	32 VDC
MINIMUM VOLTAGE:	20 mV	20 mV
MAXIMUM CURRENT DC:	50 mA	10 mA
MINIMUM CURRENT DC:	1 mA	1 mA

CONTACT RESISTANCE: ≤ 100 mΩ

INSULATION RESISTANCE (100 V): 10<sup>9</sup> Ω

BOUNCE TIME: 1 ms

### Environmental

	Silver	Gold
OPERATING TEMPERATURE:	-40°C to 85°C	-40°C to 125°C
STORAGE TEMPERATURE:	-55°C to 85°C	-55°C to 125°C

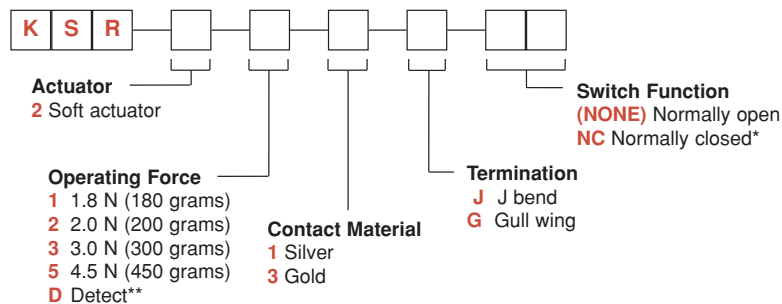
### Process

SOLDERING: Infrared reflow in accordance with CECC00802

**NOTE:** Part numbers listed above do not represent all possible configurations. For information on specific and custom switches, consult Customer Service Center.

### How To Order

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.



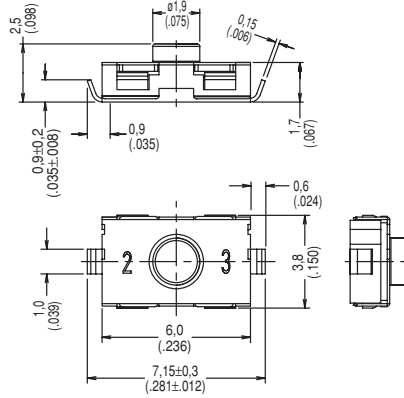
\*Available on KSR223GNC only.

\*\*D contact is recommended for long period of closing. No tactile feel. KSR2D3J only.

## KSR Series Subminiature Tact Switch for SMT

SERIES

**KSR**

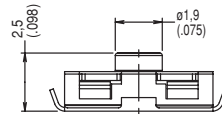


**B**

Tactile Switches

ACTUATOR

**2** Soft Actuator



OPERATING FORCE

OPTION CODE	OPERATING FORCE
<b>1</b>	1.8 N (180 grams)
<b>2</b>	2.0 N (200 grams)
<b>3</b>	3.0 N (300 grams)
<b>5</b>	4.0 N (400 grams)
<b>D*</b>	DETECT

\*D contact is recommended for long period of closing.  
No tactile feel. KSR2D3J only.

CONTACT MATERIAL

OPTION CODE	MATERIAL
<b>1</b>	SILVER
<b>3</b>	GOLD



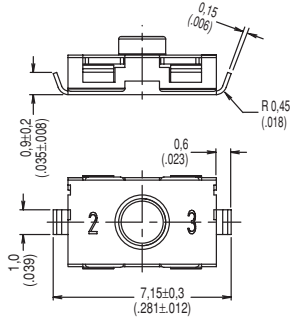
First Angle  
Projection

Dimensions are shown: mm (inch)  
Dimensions subject to change

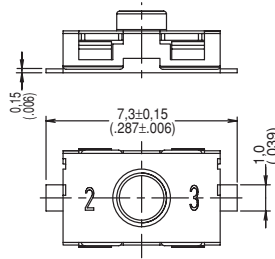
# KSR Series Subminiature Tact Switch for SMT

## TERMINATION

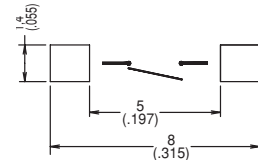
**J** J BEND



**G** GULLWING



**PAD LAYOUT**

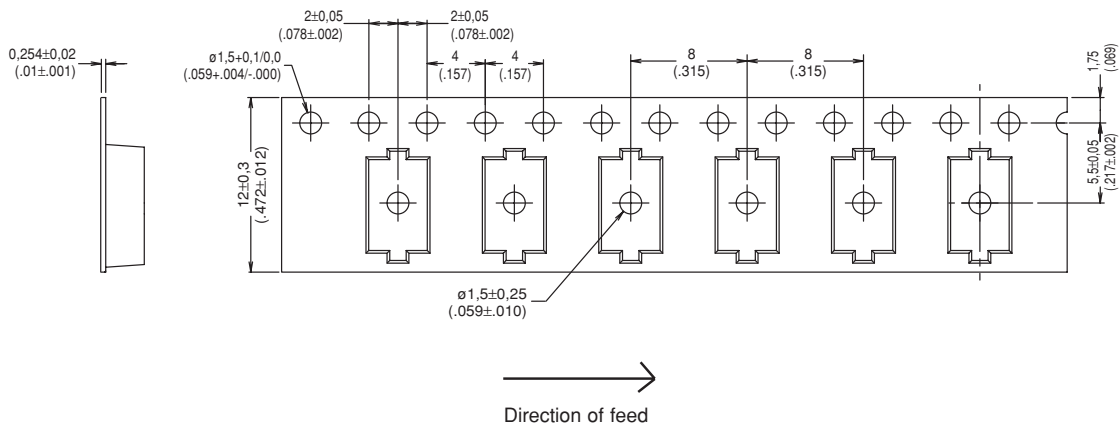


## SWITCH FUNCTION

OPTION CODE	FUNCTION
<b>NONE</b>	NORMALLY OPEN
<b>NC*</b>	NORMALLY CLOSED

\*Available on KSR223GNC only.

## TAPE & REEL



First Angle  
Projection

Dimensions are shown: mm (inch)  
Dimensions subject to change