

# KSC Series

## Sealed Tact Switch for SMT

### Features/Benefits

- Positive tactile feel
- Range of 6 actuation forces
- J or G terminations
- Tape & reel
- IP 67

### Typical Applications

- Automotive
- Cellular phones
- Industrial electronics
- Computer & network industry



### Specification

FUNCTION: momentary action  
CONTACT ARRANGEMENT: 1 make contact = SPST, N.O.  
TERMINALS: J bend & Gullwing type for SMT

### Mechanical

| Type     | Operating force FA <sup>1)</sup><br>Newtons (grams) | Operating life<br>(operations) | Travel          |
|----------|-----------------------------------------------------|--------------------------------|-----------------|
| KSC121J  | 1.6 (160)                                           | 200,000                        | 0,25+0,40/-0,0  |
| KSC141J  | 3.0 (300)                                           | 200,000                        | 0,30+0,40/-0,0  |
| KSC151J  | 5.5 (550)                                           | 100,000                        | 0,30+0,40/-0,0  |
| KSC221J  | 2.0 (200)                                           | 500,000                        | 0,35+0,30/-0,10 |
| KSC241J  | 3.5 (350)                                           | 300,000                        | 0,40+0,40/-0,10 |
| KSC321J  | 1.6 (160)                                           | 500,000                        | 0,20+0,30/-0,0  |
| KSC341J  | 3.0 (300)                                           | 300,000                        | 0,20+0,30/-0,0  |
| KSC351J  | 5.5 (550)                                           | 100,000                        | 0,25+0,30/-0,0  |
| KSC401J* | 1.1 (110)                                           | 5,000,000                      | 0,50+0,25/-0,25 |
| KSC411J* | 1.4 (140)                                           | 1,000,000                      | 0,35+0,2/-0,2   |
| KSC421J* | 1.7 (170)                                           | 1,000,000                      | 0,50+0,25/-0,25 |
| KSC441J* | 3.2 (320)                                           | 300,000                        | 0,75+0,25/-0,25 |
| KSC621J  | 1.6 (160)                                           | 500,000                        | 0,20+0,35       |
| KSC641J  | 3.0 (300)                                           | 300,000                        | 0,20+0,30       |
| KSC421V  | 1.7 (170)                                           | 1,000,000                      | 0,50+0,25/-0,25 |

<sup>1)</sup> Tolerances of operating force FA is  $\pm 25\%$ .

\* NOTE: KSC4 standard silicone material is 70 shore,  
the only exception is KSC401J which is 50 shore.

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

### Electrical

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

DIELECTRIC STRENGTH (50 Hz, 1 min.): 250 V  
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: Depending on the application, this component is suited to the following methods:

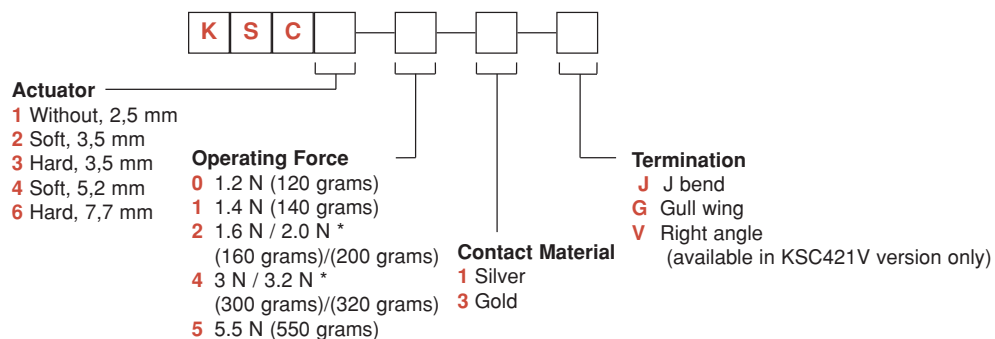
- Terminals being Tin/Lead plated over a nickel barrier, the use of slightly activated flux is suitable.
- Soldering on double wave machine. The bath temperature is generally 225°C $\pm$ 5°C and soldering time < 5 sec.
- Cleaning according to typical washing processes.
- Infrared Reflow Soldering in accordance with CECC00802

### Packaging

KSC1, KSC2 and KSC3 are delivered on continuous tape and reels of 2,000 pieces, KSC4 in reels of 1,000 pieces. KSC 6 in reels of 750 pieces. Dimensions of reels according to EIA RS481 or IEC 2863. External diameter 330 mm  $\pm$  2 mm.

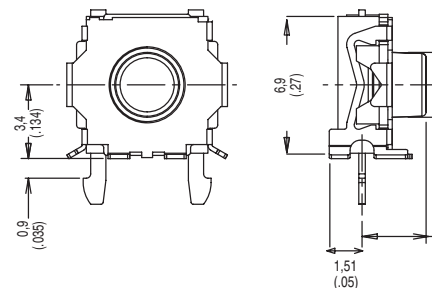
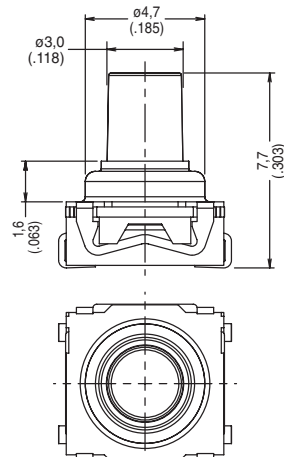
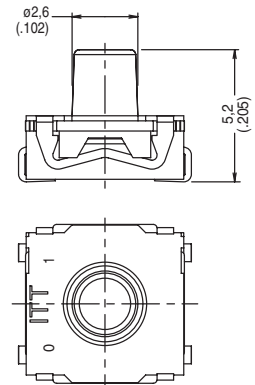
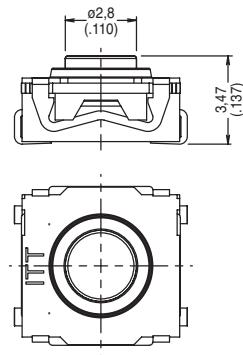
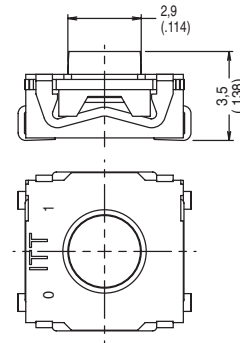
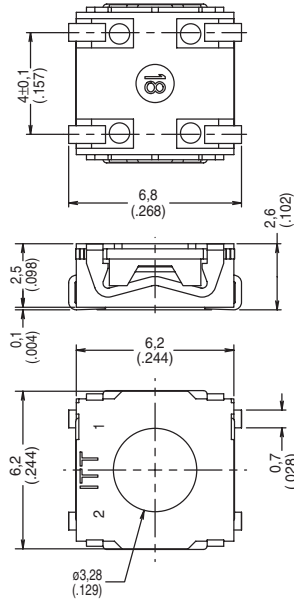
### How To Order

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.



\* See Mechanical chart above to confirm specifications

**ACTUATOR** 



## Tactile Switches



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

# KSC Series Sealed Tact Switch for SMT

## OPERATING FORCE

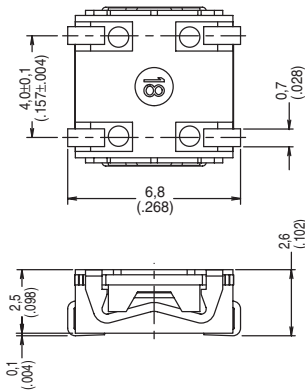
| OPTION CODE | OPERATING FORCE               |
|-------------|-------------------------------|
| 0           | 1.2 N (120 grams)             |
| 1           | 1.4 N (140 grams)             |
| 2           | 1.6 N / 2.0 N (160/200 grams) |
| 4           | 3 N / 3.2 N (300/320 grams)   |
| 5           | 5.5 N (550 grams)             |

## CONTACT MATERIAL

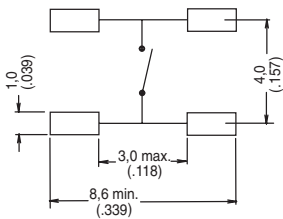
| OPTION CODE | MATERIAL |
|-------------|----------|
| 1           | SILVER   |
| 3           | GOLD     |

## TERMINATION

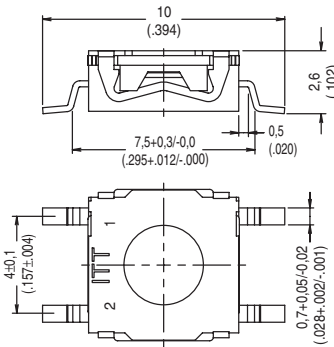
### J BEND



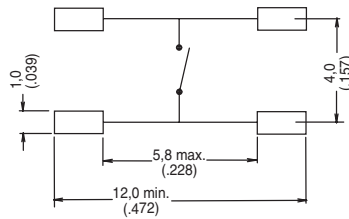
PAD LAYOUT



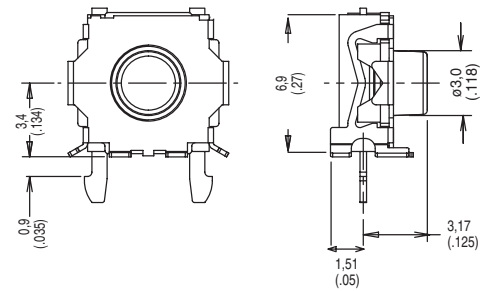
### G GULLWING



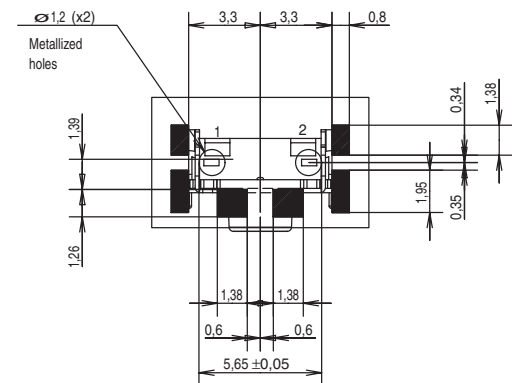
PAD LAYOUT



### V RIGHT ANGLE - KSC421V only



PAD LAYOUT



First Angle  
Projection

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



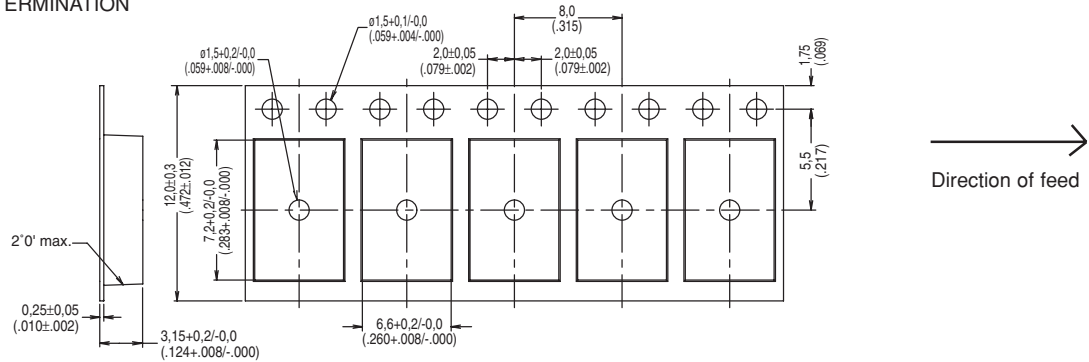
B

Tactile Switches

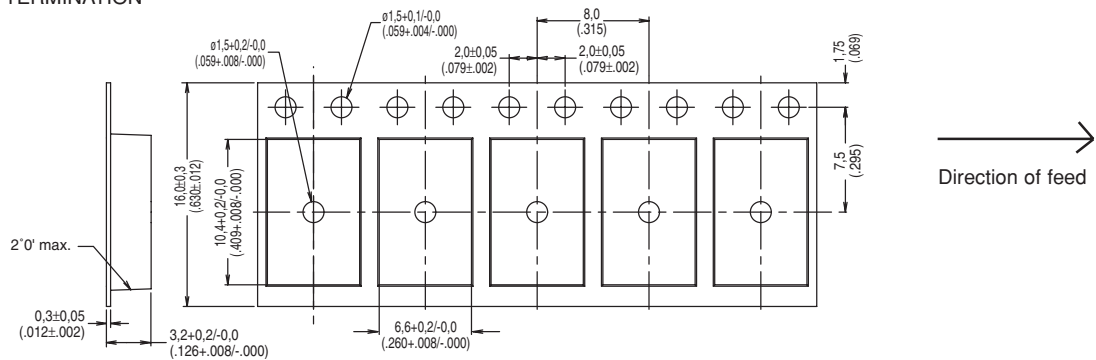
# KSC Series Sealed Tact Switch for SMT

## TAPE & REEL

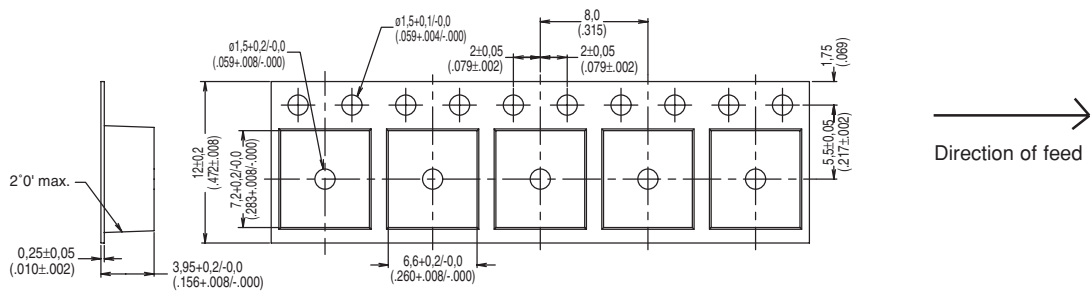
### FOR KSC1 J TERMINATION



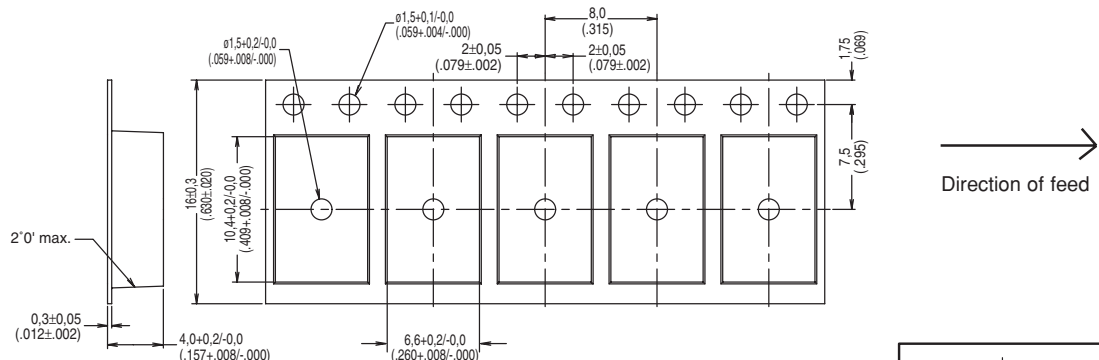
### FOR KSC1 G TERMINATION



### FOR KSC2 & KSC3 J TERMINATION



### FOR KSC2 & KSC3 G TERMINATION

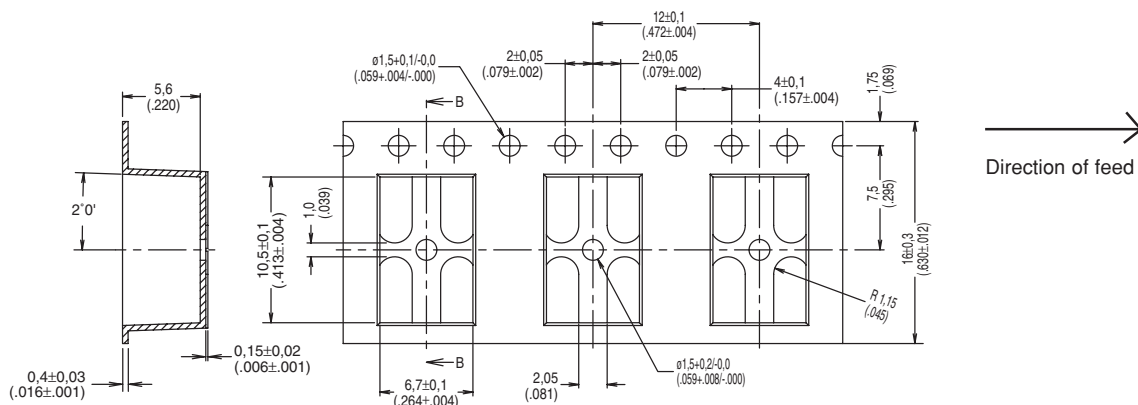


# KSC Series

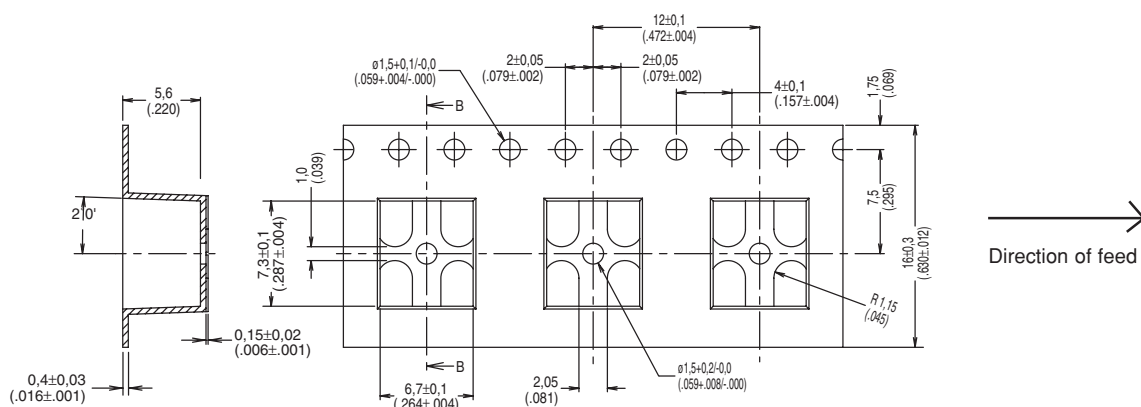
## Sealed Tact Switch for SMT

## TAPE & REEL

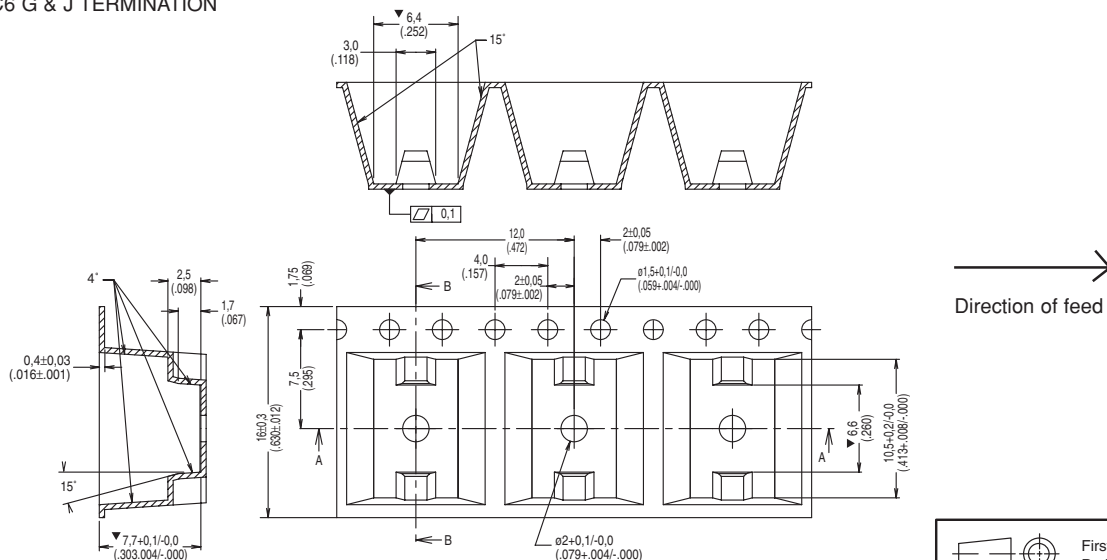
FOR KSC4 FOR G TERMINATION



FOR KSC4 FOR J TERMINATION



FOR KSC6 G & J TERMINATION



Cannon