

# 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



Tactile Switches

## 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> Newtons (grams)	Operating life (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 ± 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

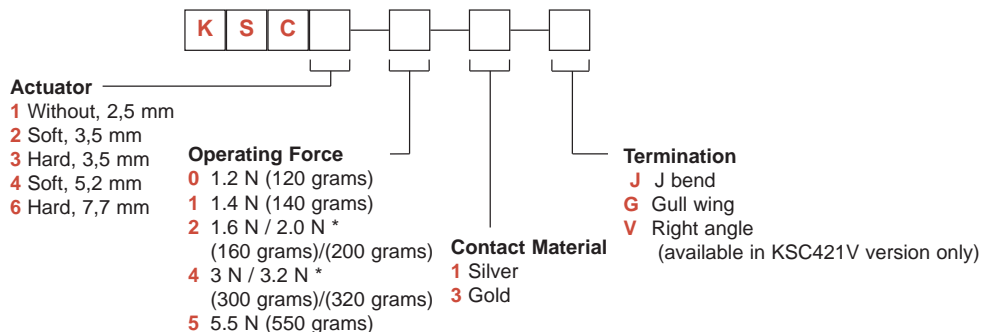
- SOLDERING: Depending on the application, this component is suited to the following methods:
- Terminals being Tin/Lead plated over a nickel barrier, the use of slightly activated flux is suitable.
  - Soldering on double wave machine. The bath temperature is generally 225°C±5°C and soldering time < 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. KSCV in boxes of 500 pieces. Dimensions of reels according to EIA RS481 or IEC 2863. External diameter 330 mm ± 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.

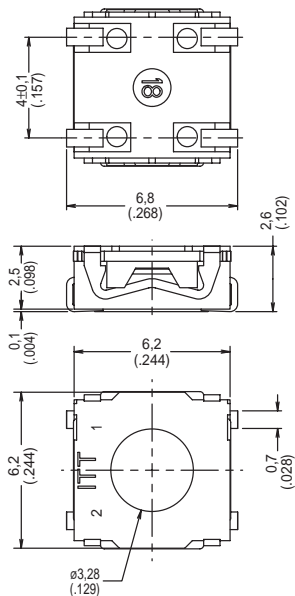


\* See Mechanical chart above to confirm specifications

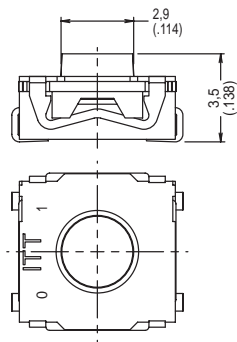
# KSC Series Sealed Tact Switch for SMT

## ACTUATOR

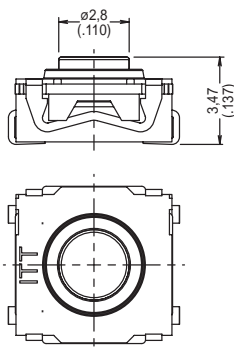
**KSC1** WITHOUT, 2.5 mm high



**KSC2** SOFT, 3.5 mm high

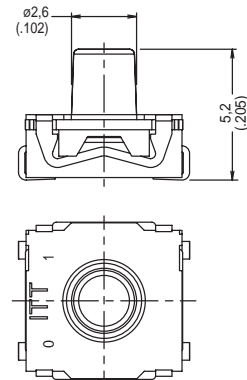


**KSC3** HARD, 3.5 mm high

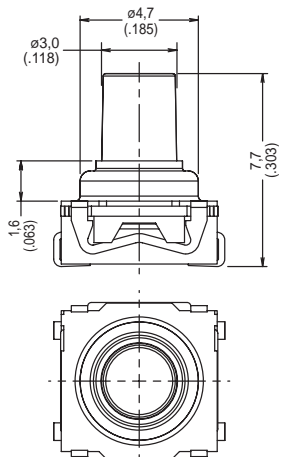


**KSC4** SOFT, 5.2 mm high

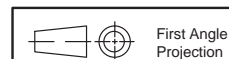
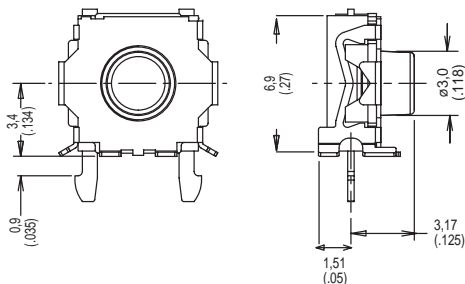
NOTE: KSC4 standard silicone material is 70 shore, the only exception is KSC401J which is 50 shore.



**KSC6** HARD, 7.7 mm high



**KSC4** KSC421V only



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

# KSC Series Sealed Tact Switch for SMT

## OPERATING FORCE

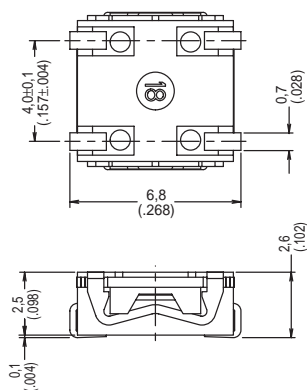
OPTION CODE	OPERATING FORCE
<b>0</b>	1.2 N (120 grams)
<b>1</b>	1.4 N (140 grams)
<b>2</b>	1.6 N / 2.0 N (160/200 grams)
<b>4</b>	3 N / 3.2 N (300/320 grams)
<b>5</b>	5.5 N (550 grams)

## CONTACT MATERIAL

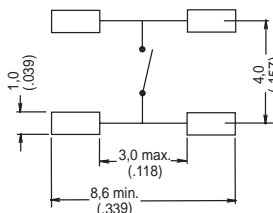
OPTION CODE	MATERIAL
<b>1</b>	SILVER
<b>3</b>	GOLD

## TERMINATION

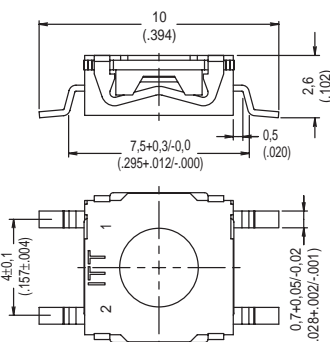
### J J BEND



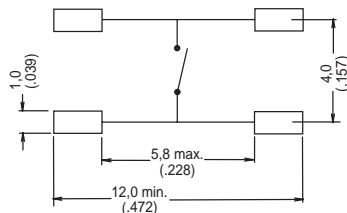
PAD LAYOUT



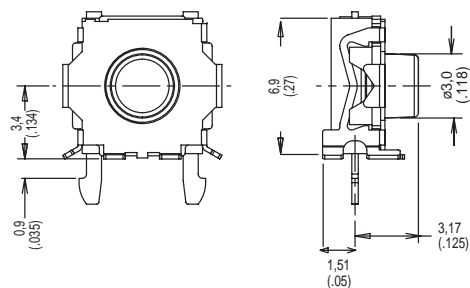
### G GULLWING



PAD LAYOUT



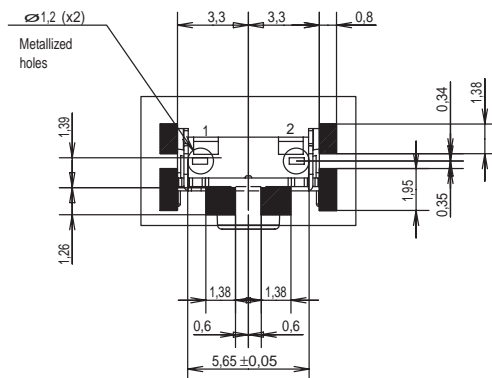
### V RIGHT ANGLE - KSC421V only



PAD LAYOUT



LAYOUT

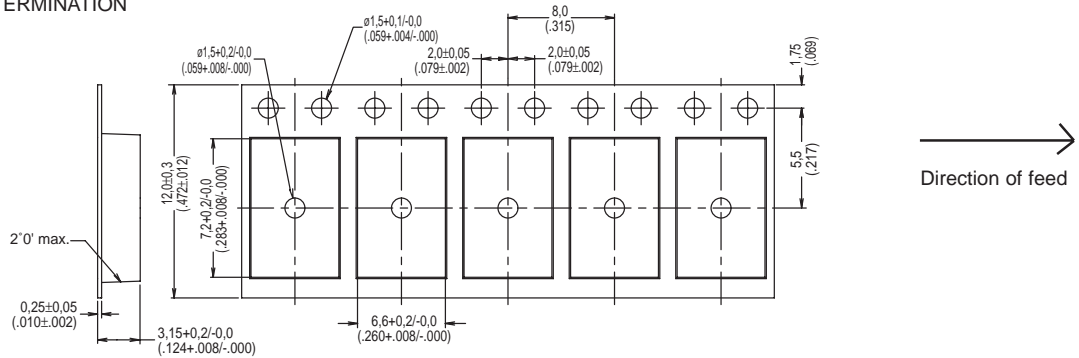


Dimensions are shown: mm (inch)  
Dimensions subject to change

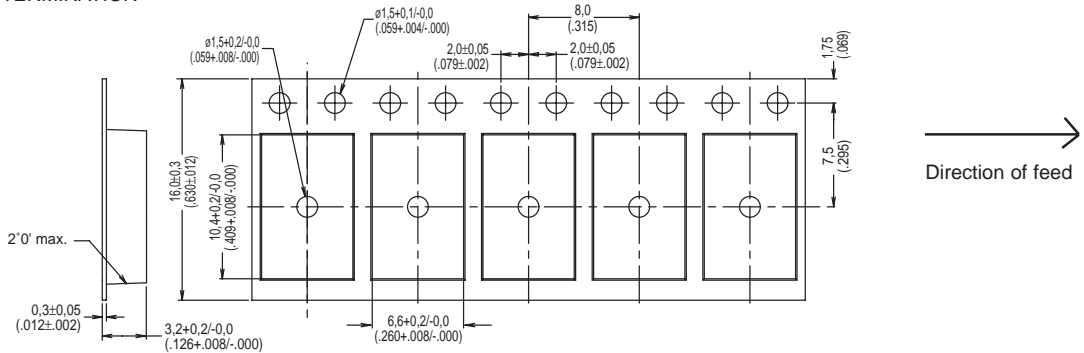
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## TAPE & REEL

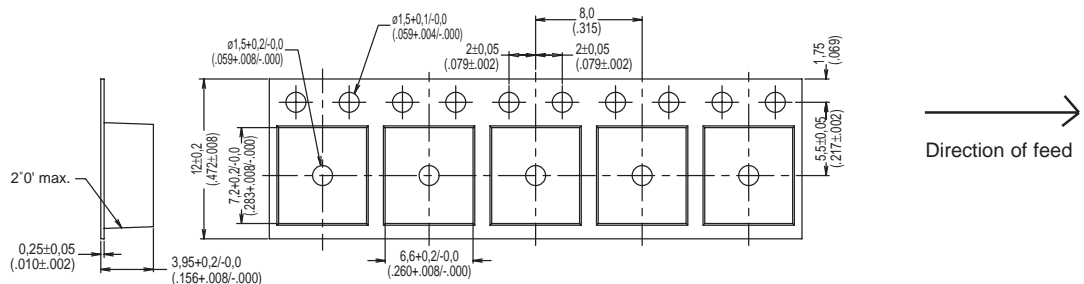
FOR KSC1 J TERMINATION



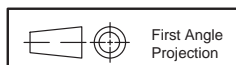
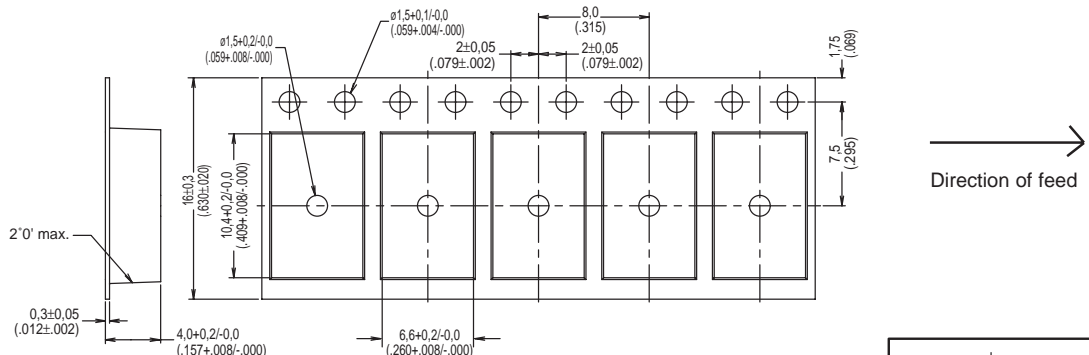
FOR KSC1 G TERMINATION



FOR KSC2 & KSC3 J TERMINATION



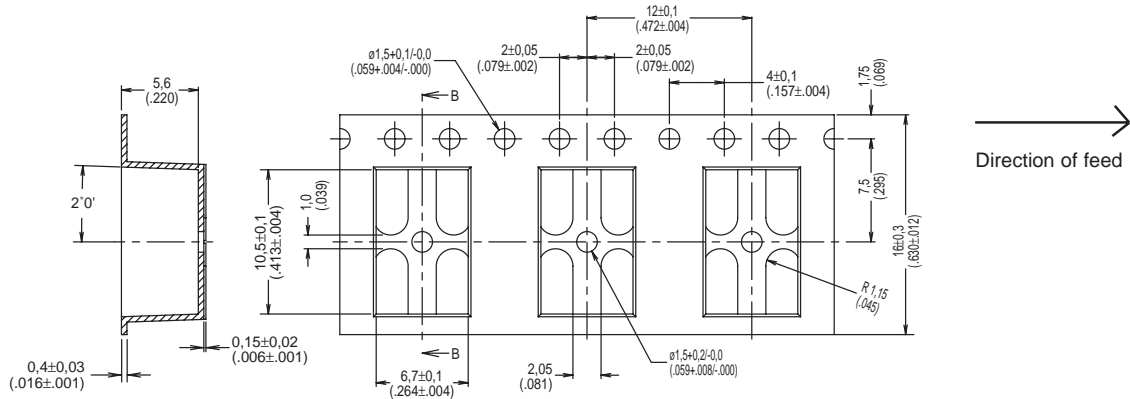
FOR KSC2 & KSC3 G TERMINATION



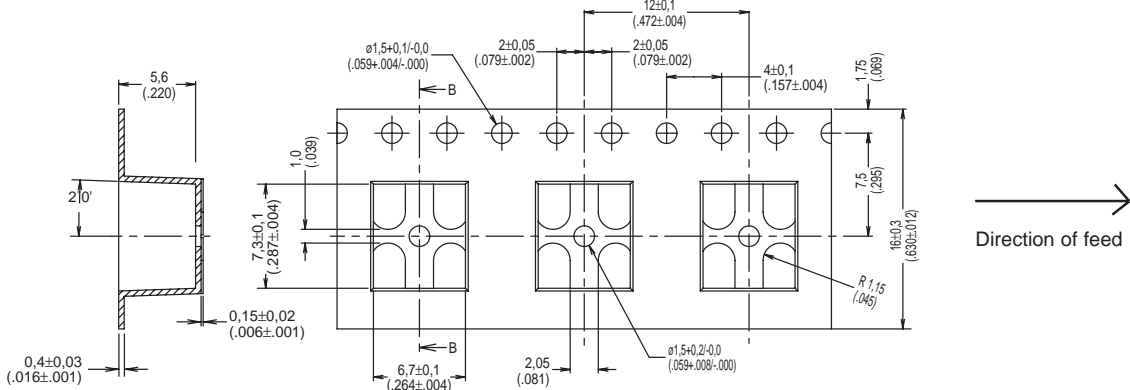
# KSC Series Sealed Tact Switch for SMT

## TAPE & REEL

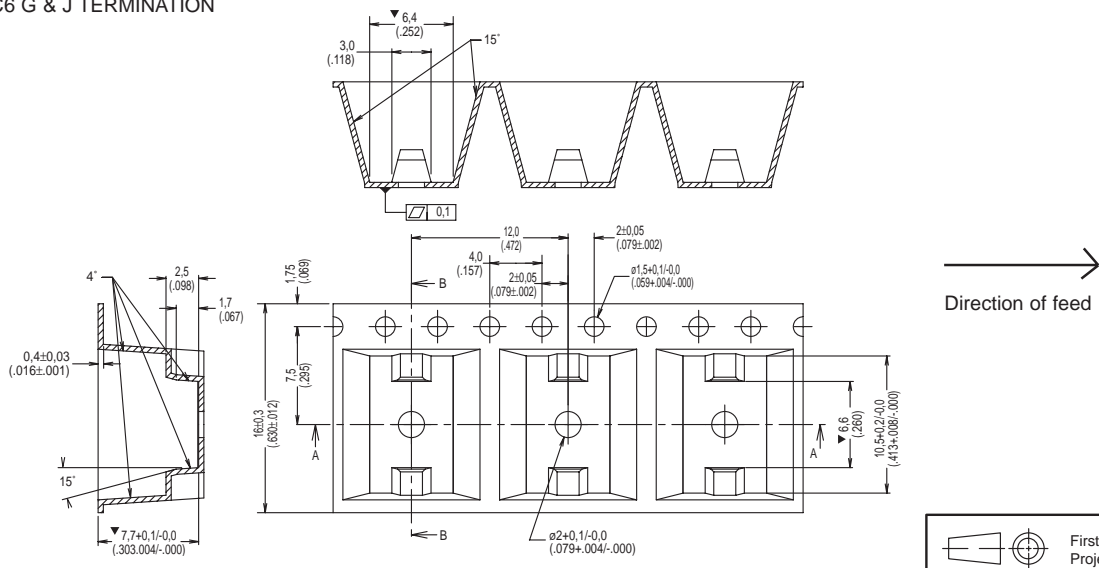
FOR KSC4 FOR G TERMINATION



FOR KSC4 FOR J TERMINATION



FOR KSC6 G & J TERMINATION



Tactile Switches

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