

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 ¹⁾ 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

¹⁾ 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): > 10⁹ 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:

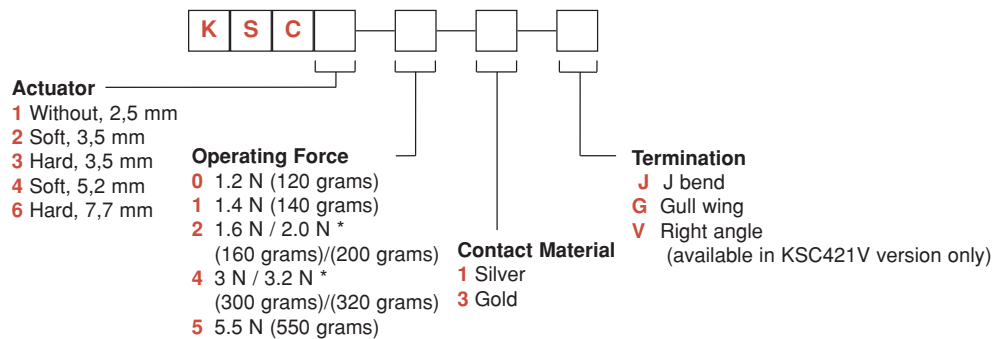
- Terminals being Tin/Lead plated over a nickel barrier, the use of slightly activated flux is suitable.
- Soldering on double wave machine. The bath temperature is generally 225°C $\pm$ 5°C and soldering time < 5 sec.
- Cleaning according to typical washing processes.
- Infrared Reflow Soldering in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

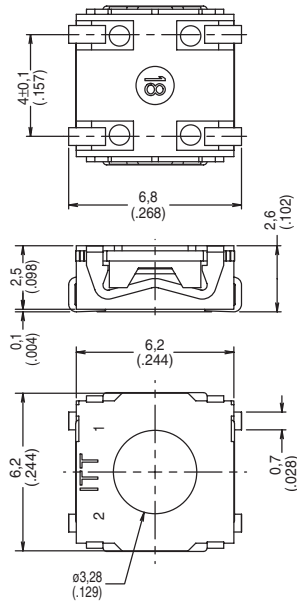


* See Mechanical chart above to confirm specifications

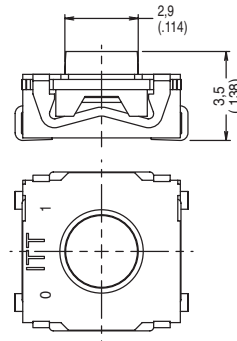
KSC Series Sealed Tact Switch for SMT

ACTUATOR

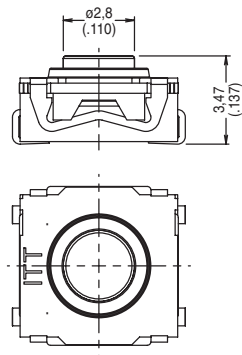
KSC1 WITHOUT, 2.5 mm high



KSC2 SOFT, 3,5 mm high

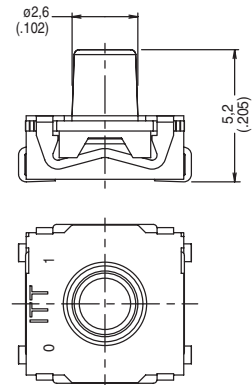


KSC3 HARD, 3,5 mm high

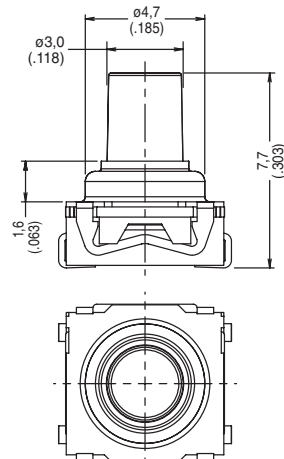


KSC4 SOFT, 5,2 mm high

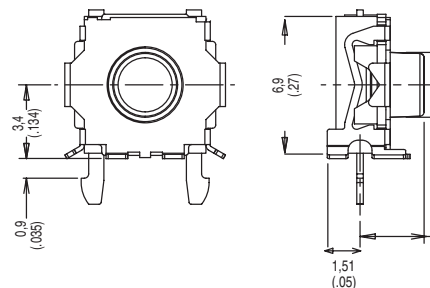
NOTE: KSC4 standard silicone material is 70 shore, the only exception is KSC401J which is 50 shore.



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

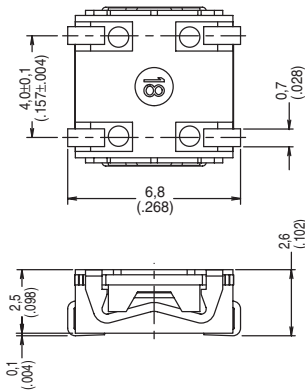
OPTION CODE	OPERATING FORCE
0	1.2 N (120 grams)
1	1.4 N (140 grams)
2	1.6 N / 2.0 N (160/200 grams)
4	3 N / 3.2 N (300/320 grams)
5	5.5 N (550 grams)

CONTACT MATERIAL

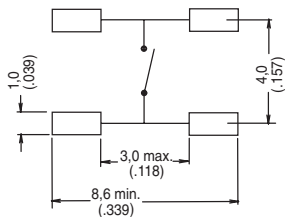
OPTION CODE	MATERIAL
1	SILVER
3	GOLD

TERMINATION

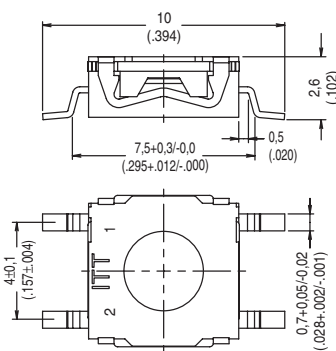
J BEND



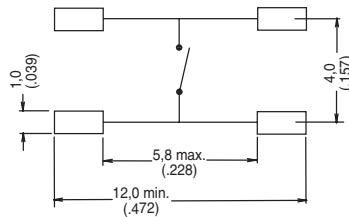
PAD LAYOUT



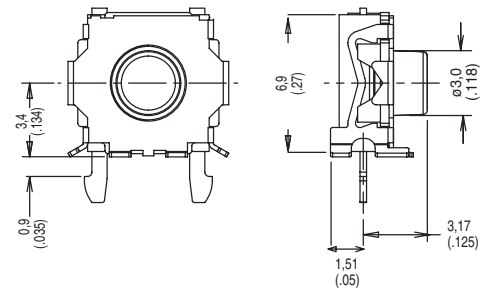
G GULLWING



PAD LAYOUT



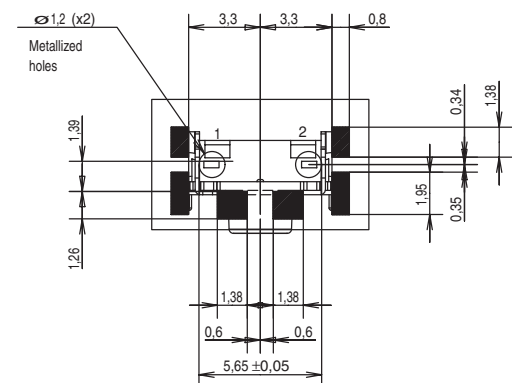
V RIGHT ANGLE - KSC421V only



PAD LAYOUT



LAYOUT



First Angle
Projection

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



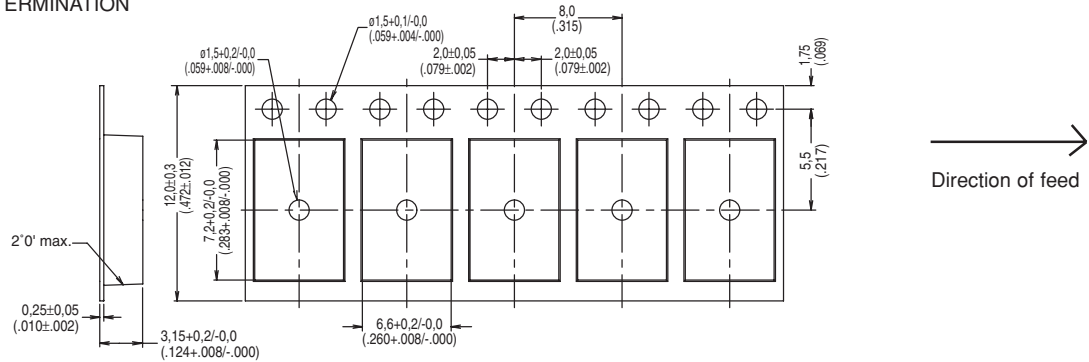
B

Tactile Switches

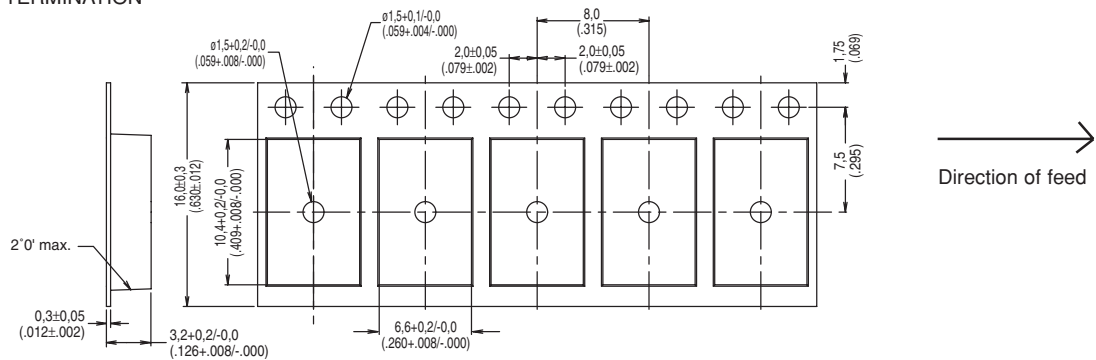
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TAPE & REEL

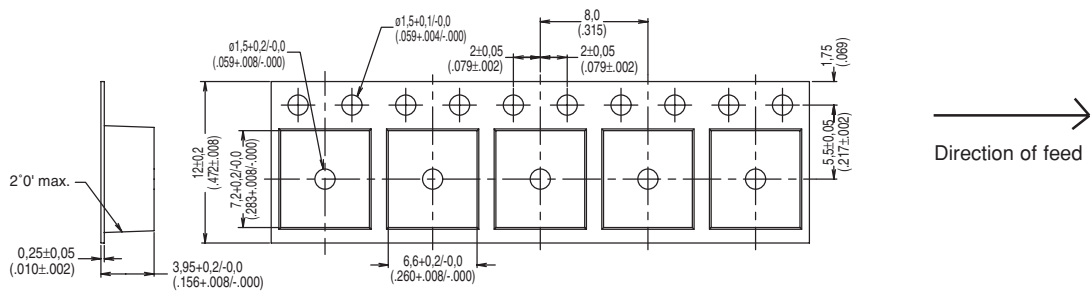
FOR KSC1 J TERMINATION



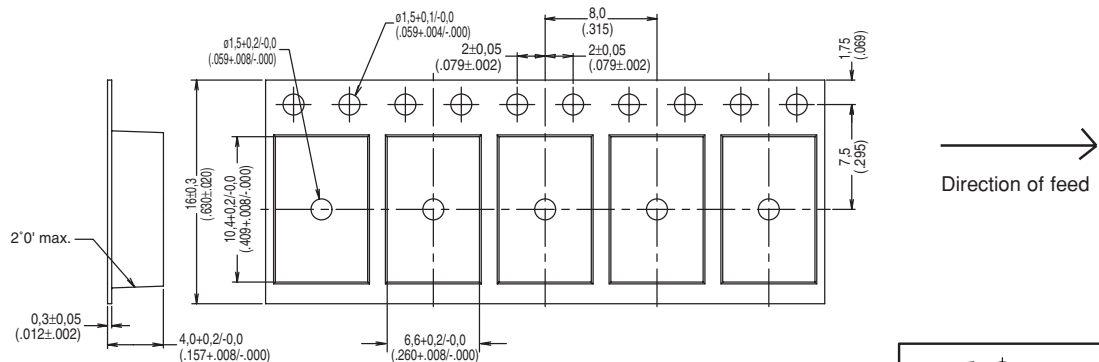
FOR KSC1 G TERMINATION



FOR KSC2 & KSC3 J TERMINATION



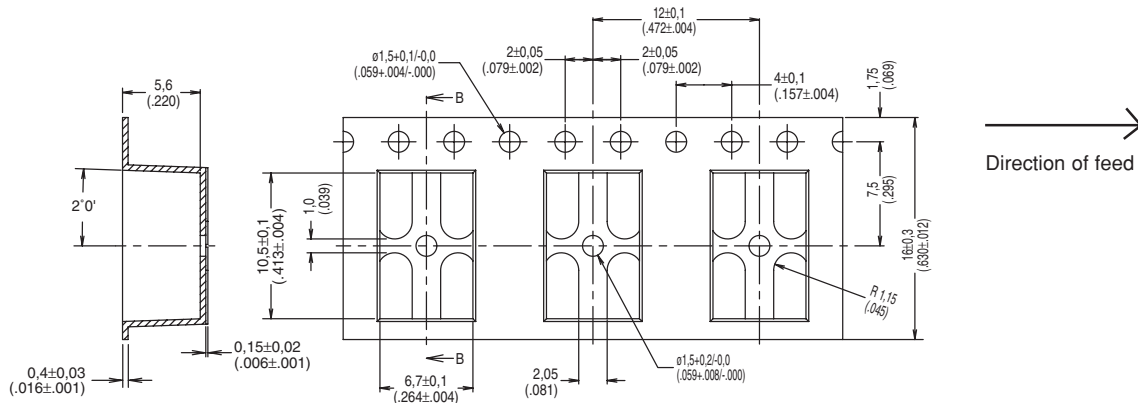
FOR KSC2 & KSC3 G TERMINATION



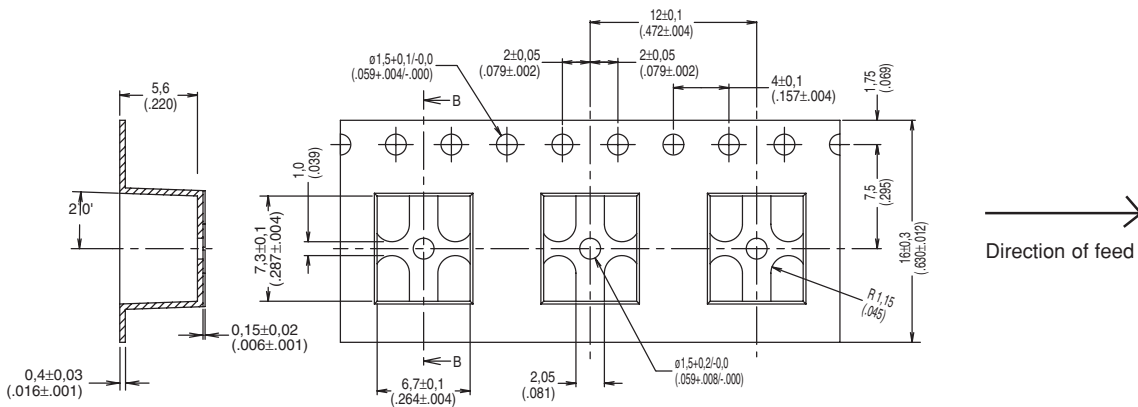
KSC Series Sealed Tact Switch for SMT

TAPE & REEL

FOR KSC4 FOR G TERMINATION



FOR KSC4 FOR J TERMINATION



FOR KSC6 G & J TERMINATION

