

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



B

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 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 m Ω
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

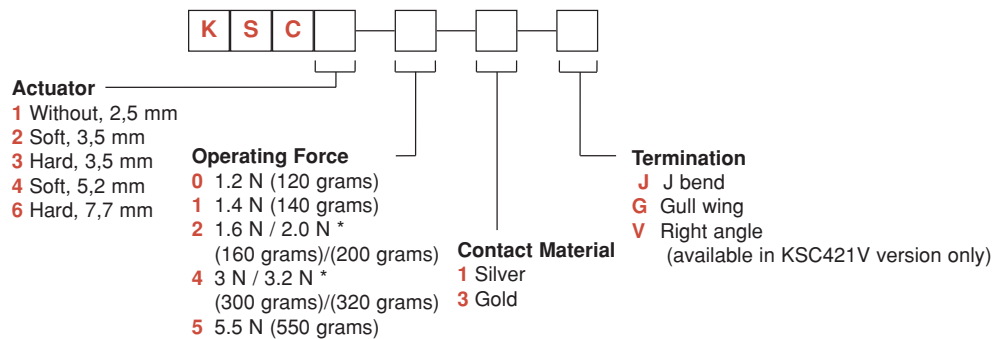
SOLDERING: Depending on the application, this component is suited to the following methods:
- Terminals being Tin/Lead plated over a nickel barrier, the use of slightly activated flux is suitable.
- Soldering on double wave machine. The bath temperature is generally 225°C \pm 5°C and soldering time < 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.

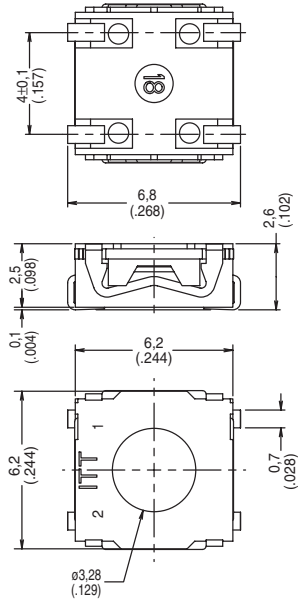


* See Mechanical chart above to confirm specifications

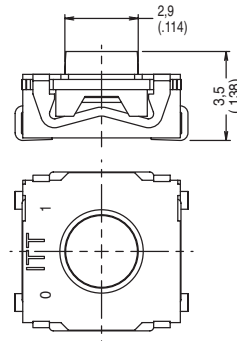
KSC Series Sealed Tact Switch for SMT

ACTUATOR

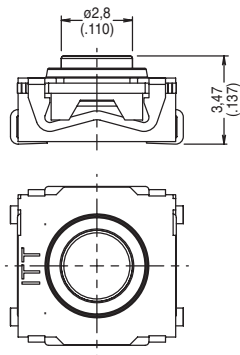
KSC1 WITHOUT, 2.5 mm high



KSC2 SOFT, 3.5 mm high

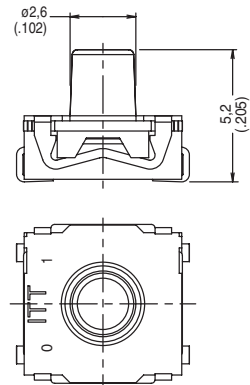


KSC3 HARD, 3.5 mm high

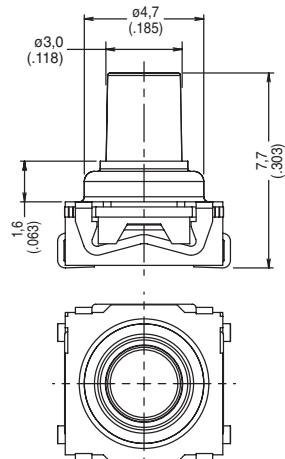


KSC4 SOFT, 5.2 mm high

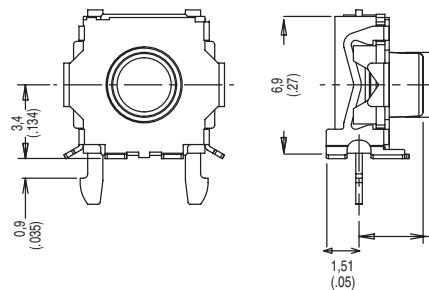
NOTE: KSC4 standard silicone material is 70 shore, the only exception is KSC401J which is 50 shore.



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

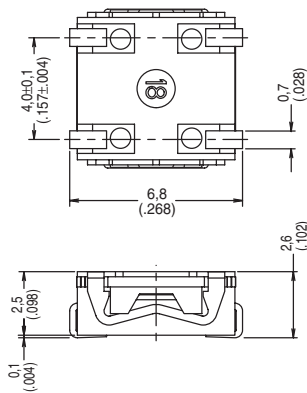
| OPTION CODE | OPERATING FORCE |
|-------------|-------------------------------|
| 0 | 1.2 N (120 grams) |
| 1 | 1.4 N (140 grams) |
| 2 | 1.6 N / 2.0 N (160/200 grams) |
| 4 | 3 N / 3.2 N (300/320 grams) |
| 5 | 5.5 N (550 grams) |

CONTACT MATERIAL

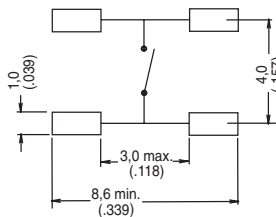
| OPTION CODE | MATERIAL |
|-------------|----------|
| 1 | SILVER |
| 3 | GOLD |

TERMINATION

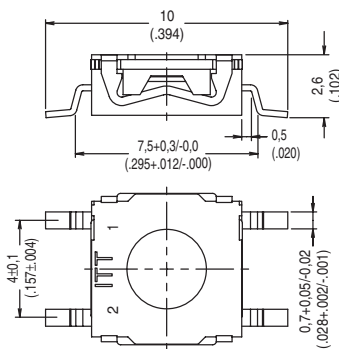
J J BEND



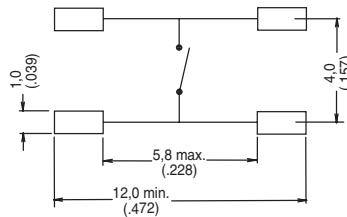
PAD LAYOUT



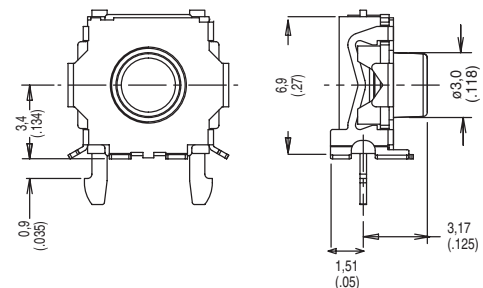
G GULLWING



PAD LAYOUT



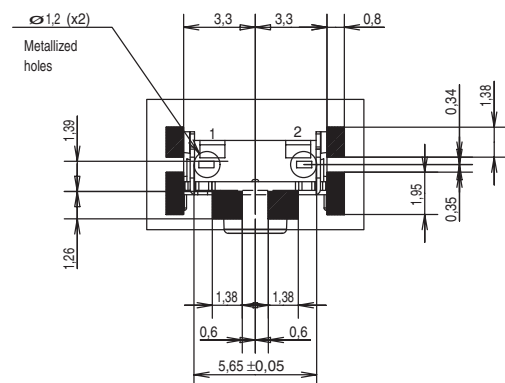
V RIGHT ANGLE - KSC421V only



PAD LAYOUT



LAYOUT

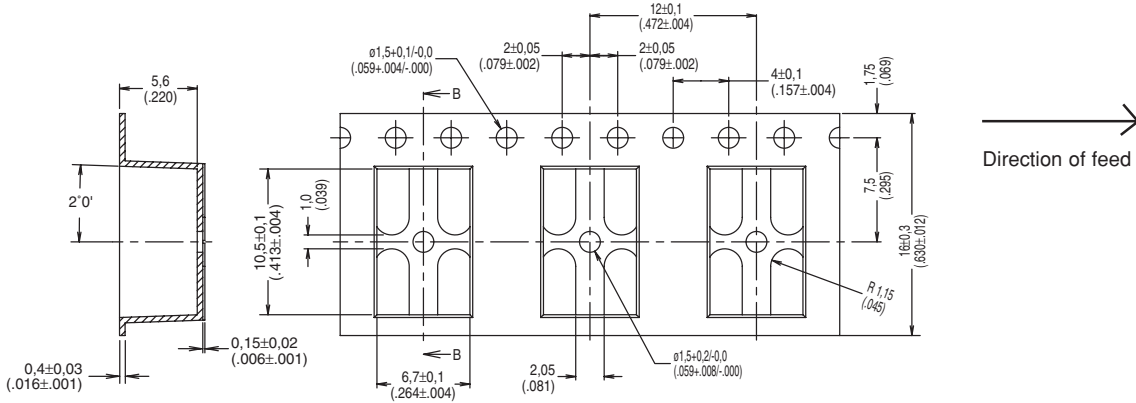


Dimensions are shown: mm (inch)
Dimensions subject to change

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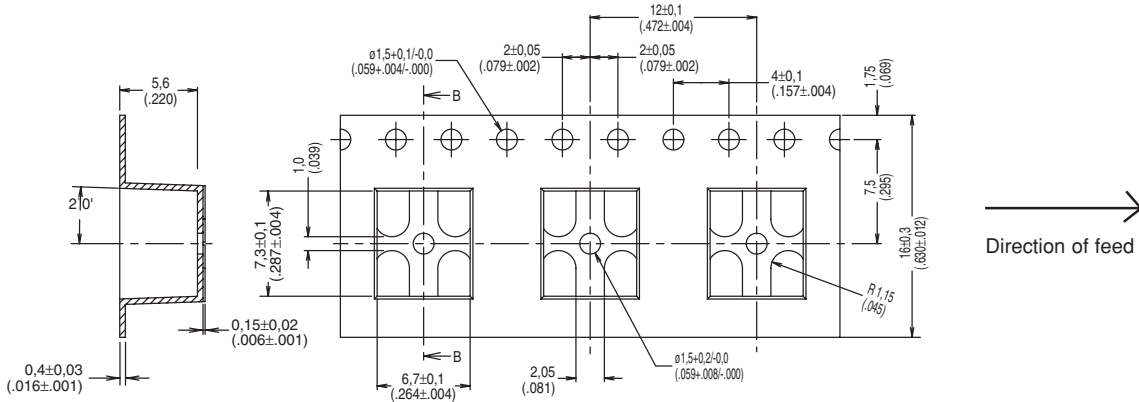
TAPE & REEL

FOR KSC4 FOR G TERMINATION



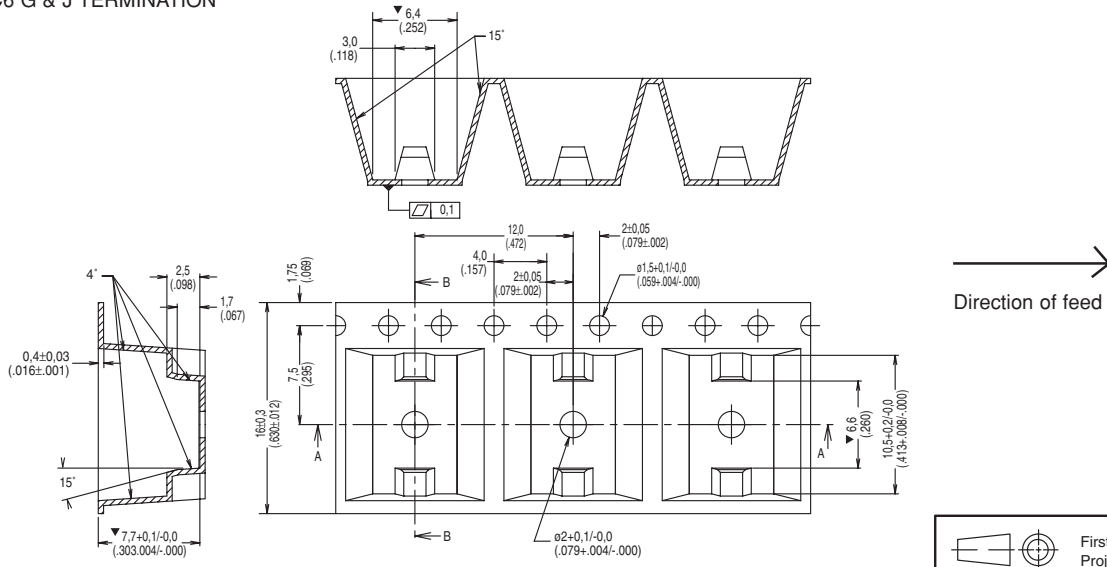
Direction of feed

FOR KSC4 FOR J TERMINATION



Direction of feed

FOR KSC6 G & J TERMINATION



Direction of feed

First Angle Projection