



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



KSA & KSL Series Sealed Tact Switch



Features/Benefits

- Designed for automatic or manual insertion
- Cambered terminals to ensure self retention
- Top or side actuated
- Large choice of caps
- RoHS compliant and compatible

Typical Applications

- Automotive
- Industrial
- Telecommunication networks

Tactile Switches

Specification

CONTACT ARRANGEMENT: SPST, N.O.
 DOUBLE OVERMOLDING ON TERMINAL
 SEALING: IP60
 TERMINALS: PC pins, ground pin optional

Mechanical

Type	Actuation force N	Operating life (operations)	Travel to make
KSA0M211	1,4 ± 0,4	100,000	0,5 ± 0,2
KSA0M311	1,4 ± 0,4	1,000,000	0,5 ± 0,2
KSA0M411	3 ± 0,75	100,000	0,6 ± 0,2
KSA0M511	5 ± 1,5	100,000	0,7 ± 0,2
KSA0M911	3 ± 0,75	500,000	0,6 ± 0,2
KSL0M211	1,4 ± 0,4	100,000	0,5 ± 0,2
KSL0M311	1,4 ± 0,4	1,000,000	0,5 ± 0,2
KSL0M411	3 ± 0,75	100,000	0,6 ± 0,2
KSL0M511	5,4 ± 1,6	100,000	0,7 ± 0,2
KSL0M911	3 ± 0,75	500,000	0,6 ± 0,2

NOTE: Other versions in terms of force, termination length and corrosion protection available. Please contact your sales representative.
 This data sheet does not provide enough information for applications which require a certain level of quality or safety such as automotive, medical systems, safety equipment. Please contact your sales representative to get contractual specification package.

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: 250 Vrms		
CONTACT RESISTANCE: ≤ 100m Ω		
INSULATION RESISTANCE (100 V): ≥ 10 ⁹ Ω		
BOUNCE TIME: ≤ 1 ms		

Environmental

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

Process

Wave soldering compatible with lead free soldering profile.

Packaging

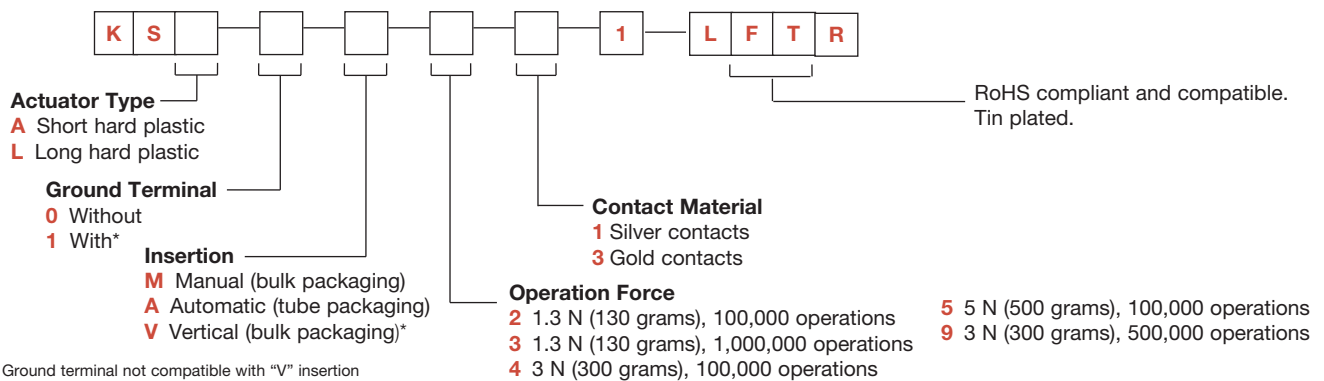
Can be delivered in tubes of 65 pieces for automatic insertion or in boxes of 500 pieces for manual insertion (250 pieces for KSL, KSLV, KSAV).

How To Order

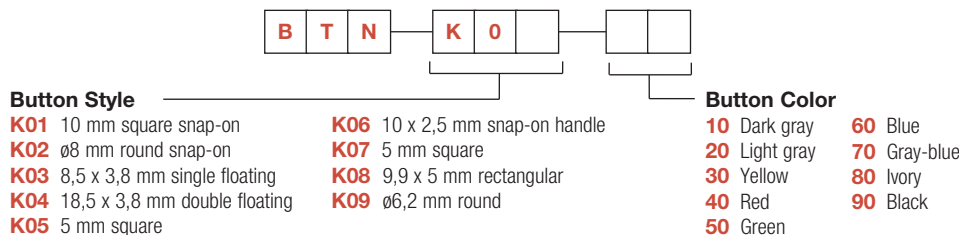
Our easy build-a-switch concept allows you to mix and match options to create the switch you need. To order, select desired option from each category and place it in the appropriate box.

However, please note that all the combinations of these options are not feasible.

For any part number different from those listed above, please consult your local representative.



BUTTONS Buttons must be ordered separately and will be supplied in bulk.



***NOTE:** Please note that all buttons are not RoHS compliant. Please check the compliance with your C&K sales representative.

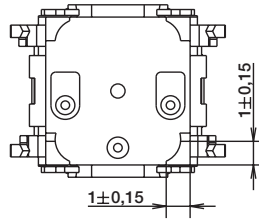
Dimensions are shown: mm (inches)
 Specifications and dimensions subject to change



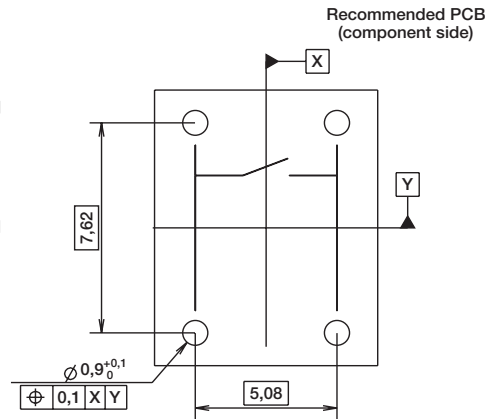
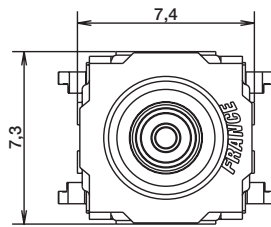
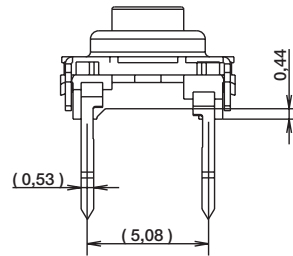
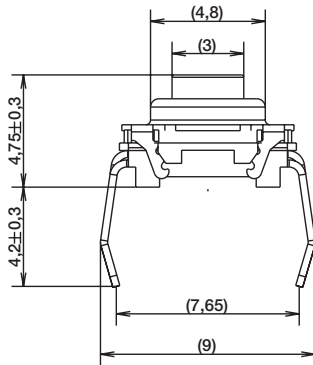
KSA & KSL Series Sealed Tact Switch

ACTUATOR TYPE

KSA & KSL



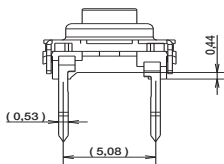
Type	H mm	inch
KSA	4,75±0,3	(.185)
KSL	9,9±0,3	(.390)



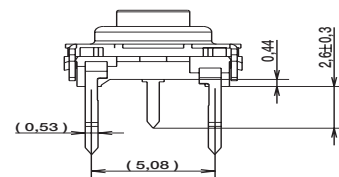
B Tactile Switches

GROUND TERMINAL

0 WITHOUT



1* WITH



*Not compatible with "V" insertion



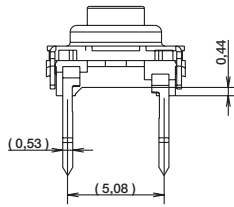
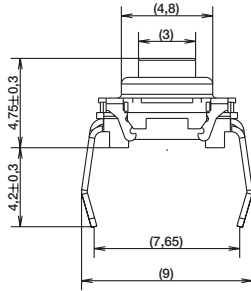
First Angle Projection

Dimensions are shown: mm (inches)
Specifications and dimensions subject to change

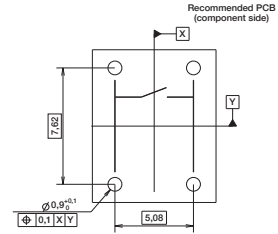
KSA & KSL Series Sealed Tact Switch

INSERTION

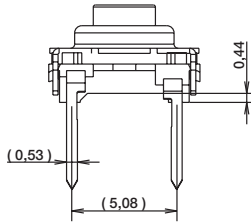
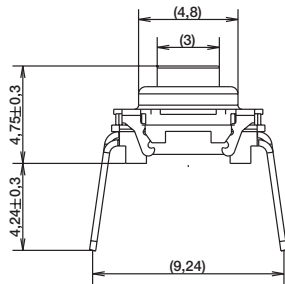
M MANUAL (BULK PACKAGING)



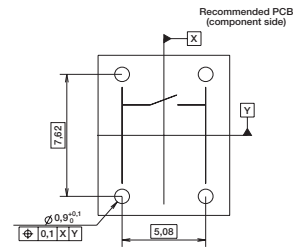
PCB LAYOUT



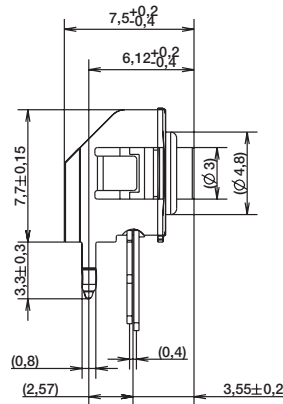
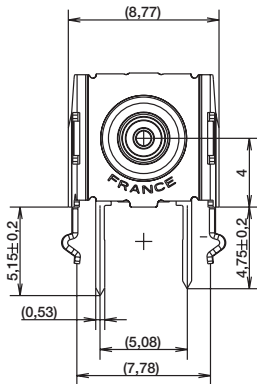
A AUTOMATIC (TUBE PACKAGING, 65 PIECES PER TUBE)



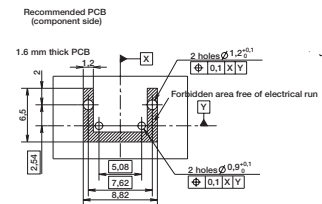
PCB LAYOUT



V VERTICAL



PCB LAYOUT



DIMENSION L

Type	L mm	inch
KSA0V	6,12 +0.2 / -0.4	.228
KSL0V	11,27+ 0.2 / -0.4	.437

OPERATING FORCE

OPTION CODE	OPERATING FORCE
2	1.3 N (130 grams) 100,000 operations
3	1.3 N (130 grams) 1,000,000 operations
4	3.0 N (300 grams) 100,000 operations
5	5.0 N (500 grams) 100,000 operations
9	3.0 N (300 grams) 500,000 operations



First Angle
Projection

Dimensions are shown: mm (inches)
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CONTACT MATERIAL



OPTION CODE	CONTACT MATERIAL
1	Silver contacts
3	Gold contacts

SEALING



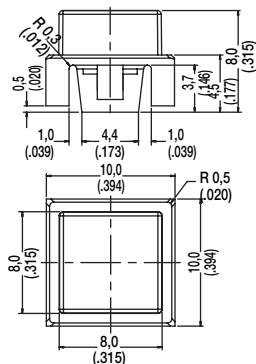
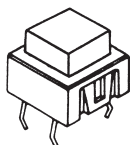
OPTION CODE	SEALING
1	Sealing level IP60

BUTTONS

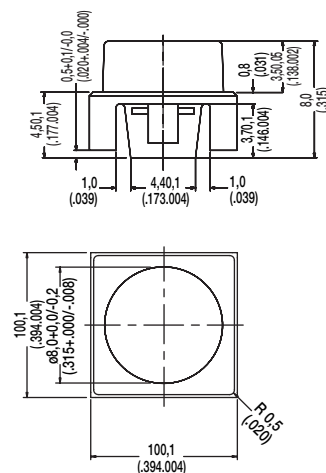
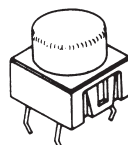
Buttons must be ordered separately and will be supplied in bulk.

BUTTON TYPE	KSA	KSL	KSAV	KSLV
K01	X			
K02	X			
K03	X	X	X	X
K04	X	X	X	X
K05		X		X
K06	X			
K07		X		X
K08		X		X
K09		X		X

K01



K02



First Angle
Projection

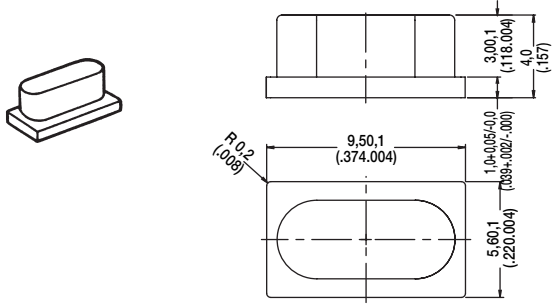
Dimensions are shown: mm (inches)
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KSA & KSL Series Sealed Tact Switch

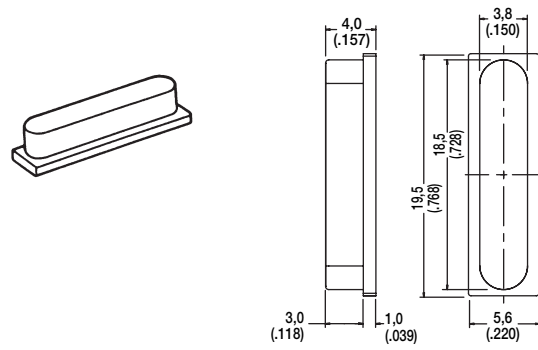
Tactile Switches

B

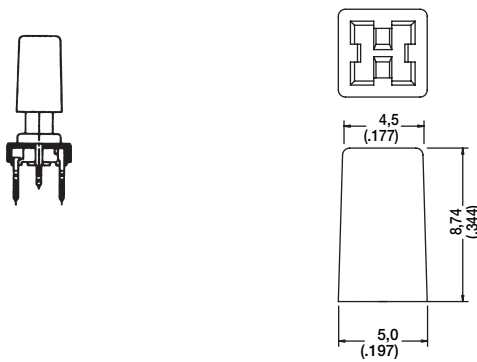
K03



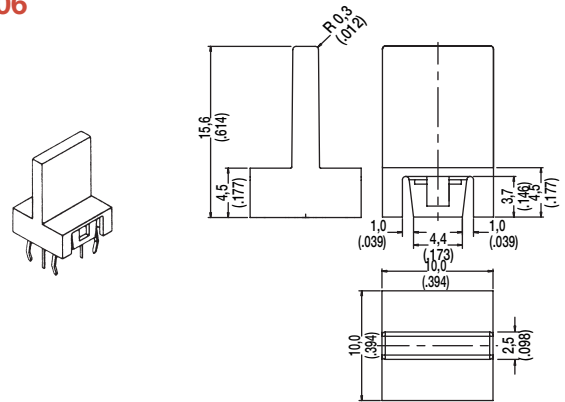
K04



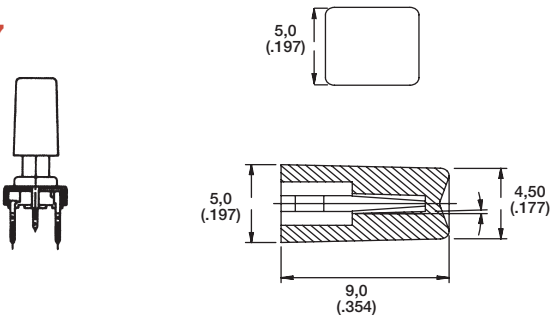
K05



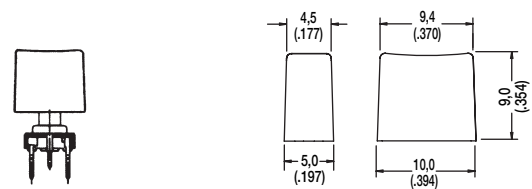
K06



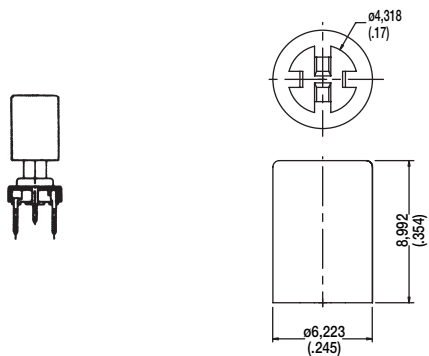
K07



K08



K09



Dimensions are shown: mm (inches)
 Specifications and dimensions subject to change