



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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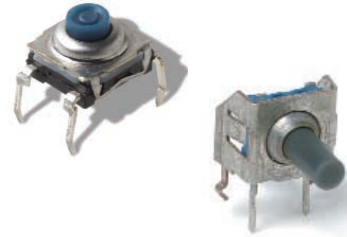
KSA & KSL Series Sealed Tact Switch

Features/Benefits

- Designed for automatic or manual insertion
- Cambered terminals to ensure self retention
- Top or side actuated
- Washable option available
- Large choice of caps

Typical Applications

- Automotive
- Industrial
- Telecommunication networks



B
Tactile Switches

Specification

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

Electrical

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

Mechanical

Type	Actuation force N (grams)	Operating life (operations)	Travel to make
KSA0M211	1.3 (130)	500,000	0,5 ± 0,2
KSA0M311	1.3 (130)	1,000,000	0,5 ± 0,2
KSA0M411	3.0 (300)	100,000	0,6 ± 0,2
KSA0M511	5.0 (500)	100,000	0,7 ± 0,2
KSA0M911	3.0 (300)	500,000	0,6 ± 0,2
KSL0M211	1.3 (130)	500,000	0,5 ± 0,2
KSL0M311	1.3 (130)	1,000,000	0,5 ± 0,2
KSL0M411	3.0 (300)	100,000	0,6 ± 0,2
KSL0M511	5.0 (500)	100,000	0,7 ± 0,2
KSL0M911	3.0 (300)	500,000	0,6 ± 0,2

DIELECTRIC STRENGTH: 300 Vrms
CONTACT RESISTANCE: < 50 mΩ
INSULATION RESISTANCE (100 V): > 10¹¹ Ω
BOUNCE TIME: < 1 ms

Environmental

	Silver	Gold
OPERATING TEMPERATURE:	-40°C to 90°C	-40°C to 125°C
STORAGE TEMPERATURE:	-40°C to 90°C	-55°C to 125°C

Process

Wave soldering EIA-RS448-2

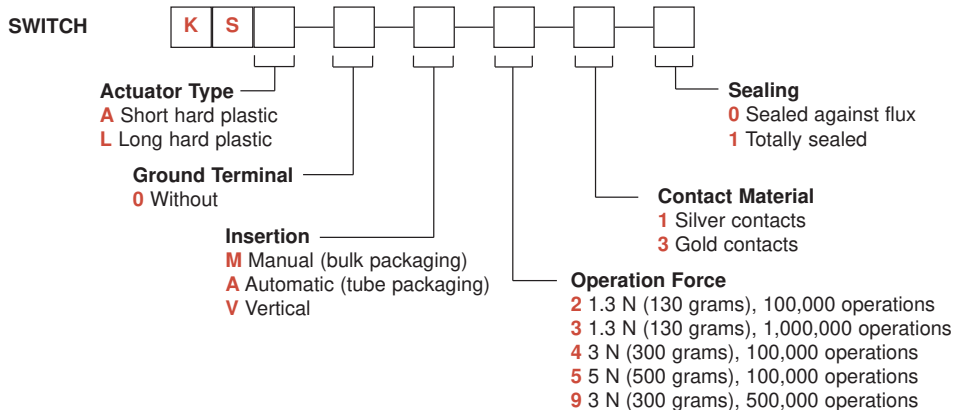
Packaging

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).

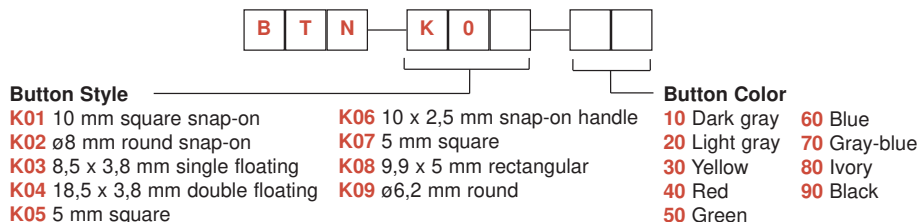
NOTE: Part numbers listed above do not represent all possible configurations. For information on specific and custom switches, consult Customer Service Center.

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.



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



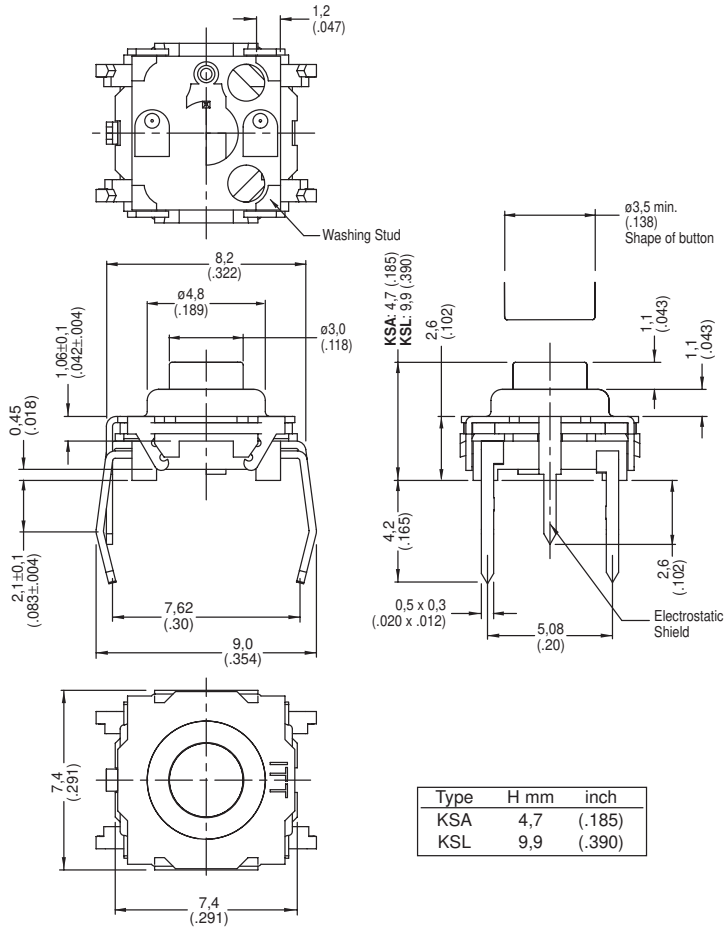
KSA & KSL Series Sealed Tact Switch

ACTUATOR TYPE

KSA & KSL

Tactile Switches

B



GROUND TERMINAL

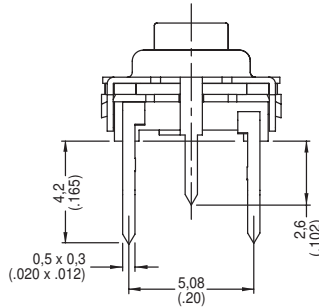
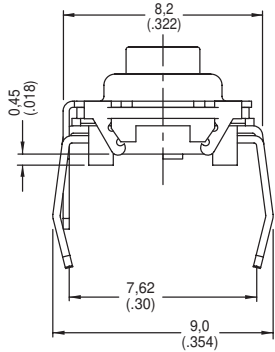
0 WITHOUT

KSA & KSL Series Sealed Tact Switch

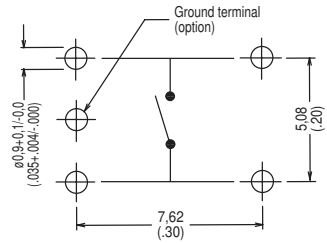
INSERTION

M MANUAL (bulk packaging)

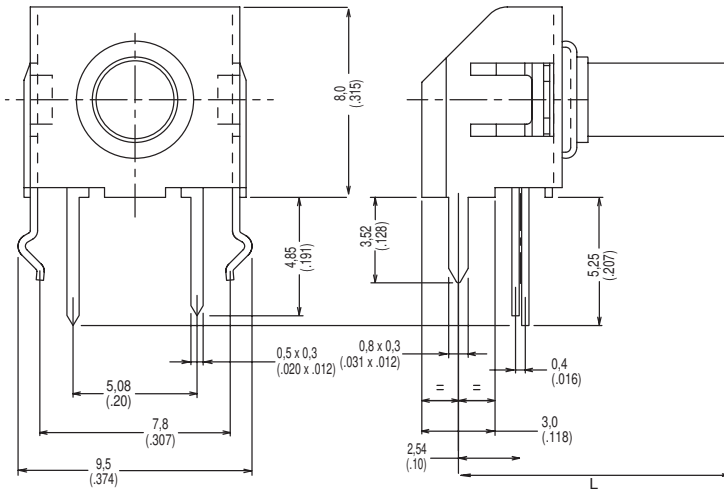
A AUTOMATIC (tube packaging, 65 pieces per tube)



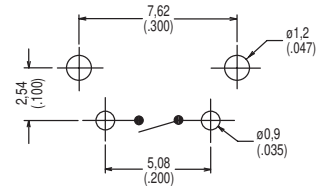
PCB LAYOUT



V VERTICAL



PCB LAYOUT



Dimension L

Type	L mm	inch
KSAOV	5,8	.228
KSLOV	11,1	.437



B

Tactile Switches

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

KSA & KSL Series Sealed Tact Switch

CONTACT MATERIAL



OPTION CODE	CONTACT MATERIAL
1	Silver contacts
3	Gold contacts



Tactile Switches

SEALING



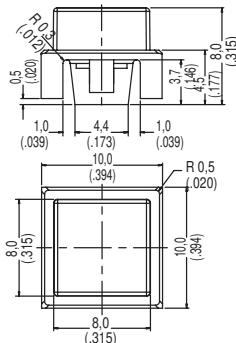
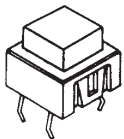
OPTION CODE	SEALING
0	Sealed against flux
1	Totally sealed

BUTTONS

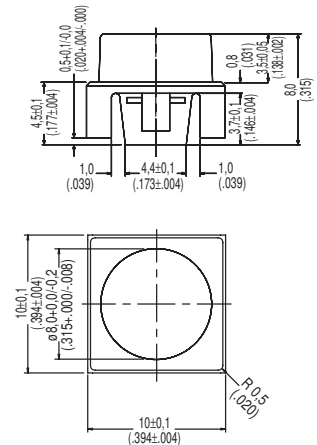
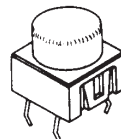
Buttons must be ordered separately and will be supplied in bulk.

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

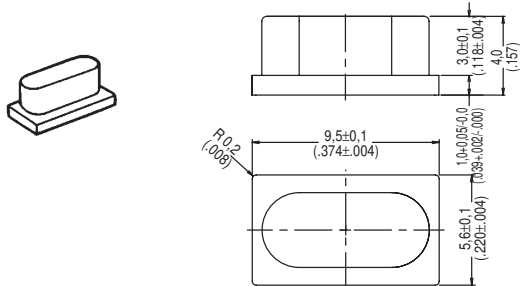


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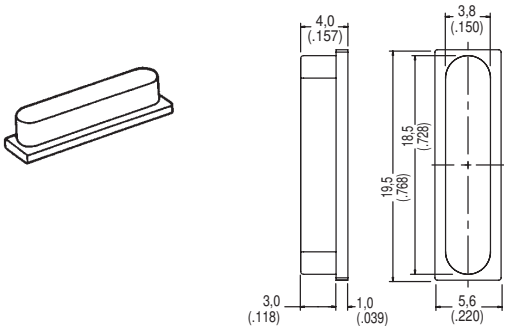


Tactile Switches

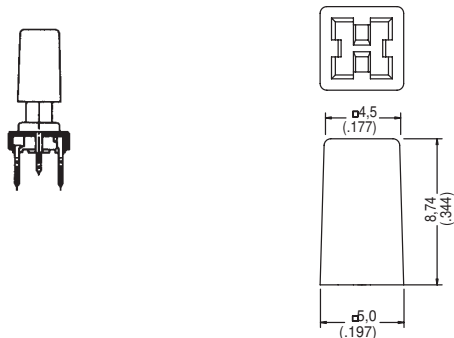
K03



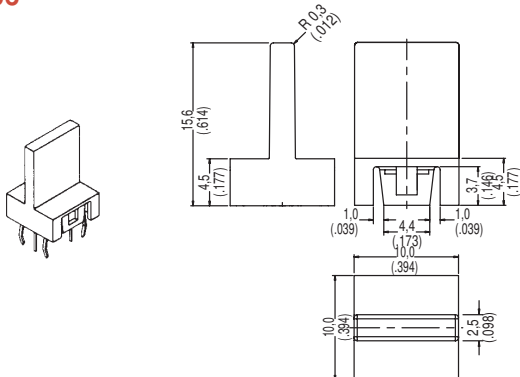
K04



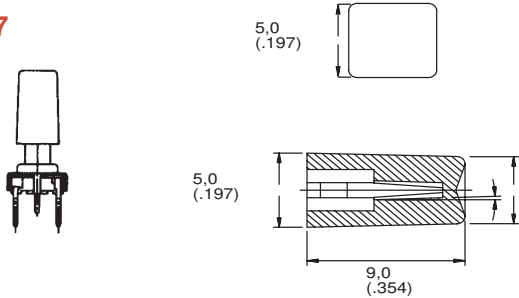
K05



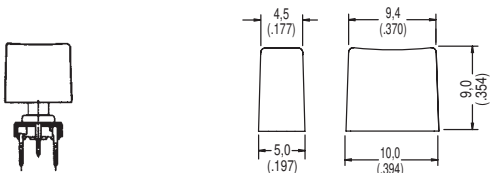
K06



K07



K08



K09

