

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



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 - 1,8	100,000	0,5 ± 0,2
KSA0M311	1 - 1,8	1,000,000	0,5 ± 0,2
KSA0M411	2,25 - 3,75	100,000	0,6 ± 0,2
KSA0M511	3,5 - 6,5	100,000	0,7 ± 0,2
KSA0M911	2,25 - 3,75	500,000	0,6 ± 0,2
KSL0M211	1 - 1,8	100,000	0,5 ± 0,2
KSL0M311	1 - 1,8	1,000,000	0,5 ± 0,2
KSL0M411	2,25 - 3,75	100,000	0,6 ± 0,2
KSL0M511	3,5 - 6,5	100,000	0,7 ± 0,2
KSL0M911	2,25 - 3,75	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: 300 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.

SWITCH

Actuator Type	Ground Terminal	Insertion	Contact Material	Operation Force	RoHS compliant and compatible.
A Short hard plastic	0 Without	M Manual (bulk packaging)	1 Silver contacts	2 1.3 N (130 grams), 100,000 operations	Tin plated.
L Long hard plastic	1 With*	A Automatic (tube packaging)	3 Gold contacts	3 1.3 N (130 grams), 1,000,000 operations	
		V Vertical (bulk packaging)*		4 3 N (300 grams), 100,000 operations	
				5 5 N (500 grams), 100,000 operations	
				9 3 N (300 grams), 500,000 operations	

*Note: "1" Ground terminal not compatible with "V" insertion

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

Button Style	Button Color
K01 10 mm square snap-on	10 Dark gray
K02 ø8 mm round snap-on	20 Light gray
K03 8,5 x 3,8 mm single floating	30 Yellow
K04 18,5 x 3,8 mm double floating	40 Red
K05 5 mm square	50 Green
K06 10 x 2,5 mm snap-on handle	60 Blue
K07 5 mm square	70 Gray-blue
K08 9,9 x 5 mm rectangular	80 Ivory
K09 ø6,2 mm round	90 Black

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



KSA & KSL Series
Sealed Tact Switch

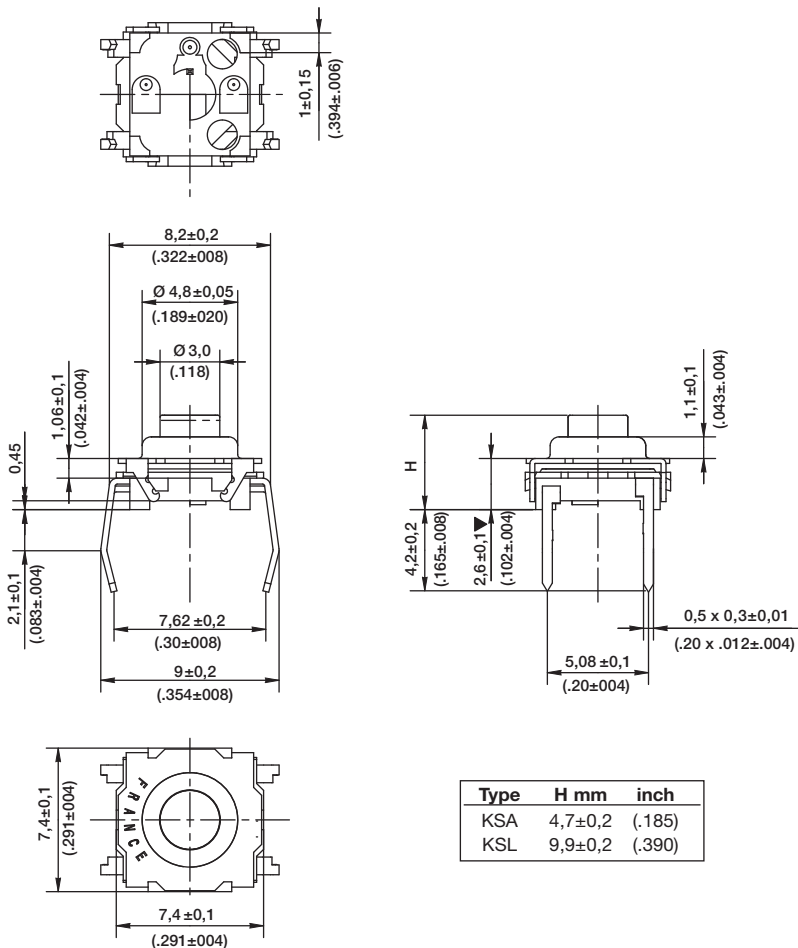
ACTUATOR TYPE

KSA & KSL



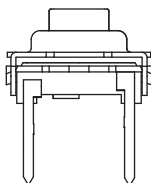
B

Tactile Switches

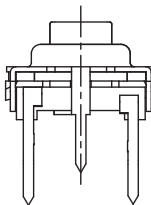


GROUND TERMINAL

0 WITHOUT



1* WITH



*Not compatible with "V" insertion



13 feb 14

B-70



First Angle
Projection

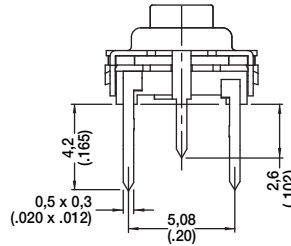
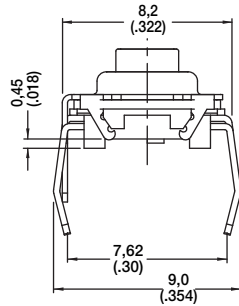
Dimensions are shown: mm (inches)
Specifications and dimensions subject to change

www.ck-components.com

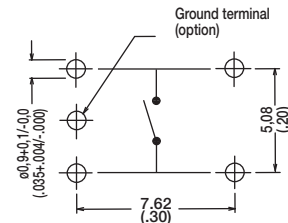
KSA & KSL Series Sealed Tact Switch

INSERTION

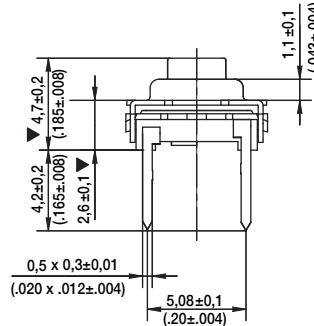
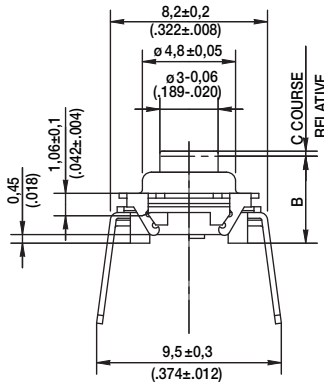
M MANUAL (BULK PACKAGING)



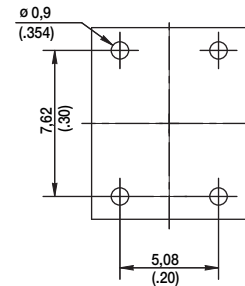
PCB LAYOUT



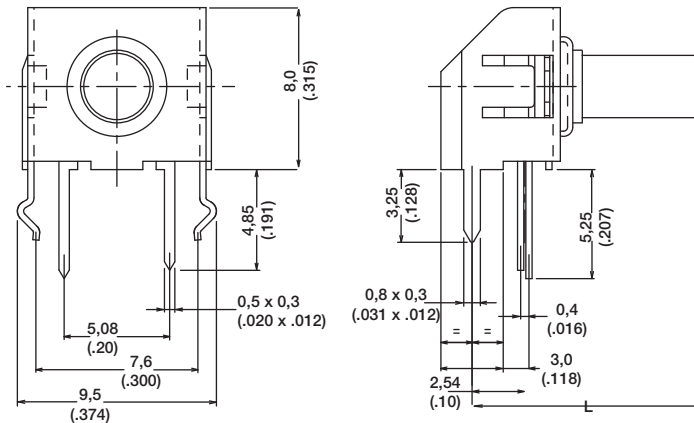
A AUTOMATIC (TUBE PACKAGING, 65 PIECES PER TUBE)



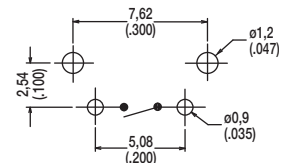
PCB LAYOUT



V VERTICAL



PCB LAYOUT



DIMENSION L

Type	L mm	inch
KSA0V	5,8	.228
KSL0V	11,1	.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)
Specifications and dimensions subject to change

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CONTACT MATERIAL

OPTION CODE	CONTACT MATERIAL
1	Silver contacts
3	Gold contacts

B

Tactile Switches

SEALING

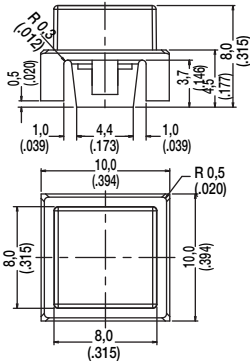
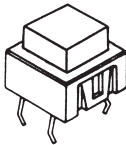
OPTION CODE	SEALING
1	Sealing level IP60

BUTTONS

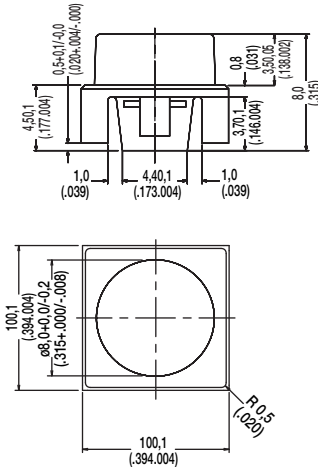
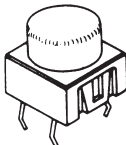
Buttons must be ordered separately and will be supplied in bulk.

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

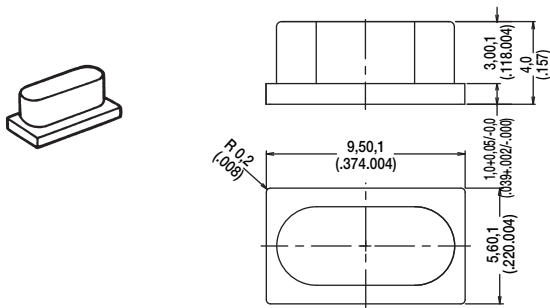


K02

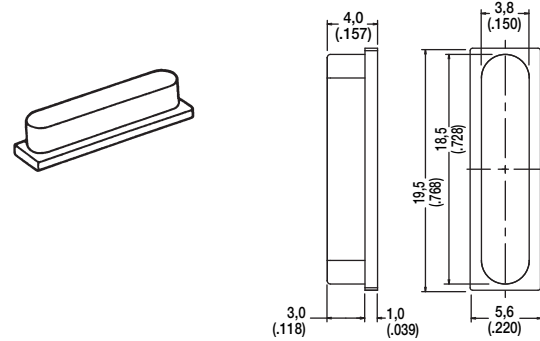


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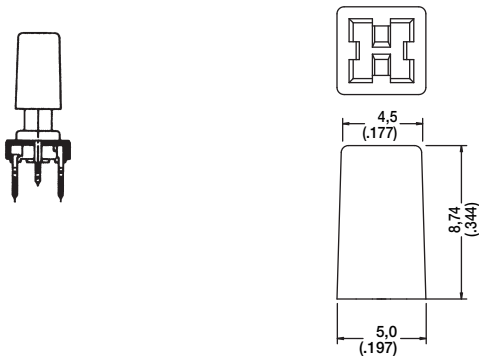
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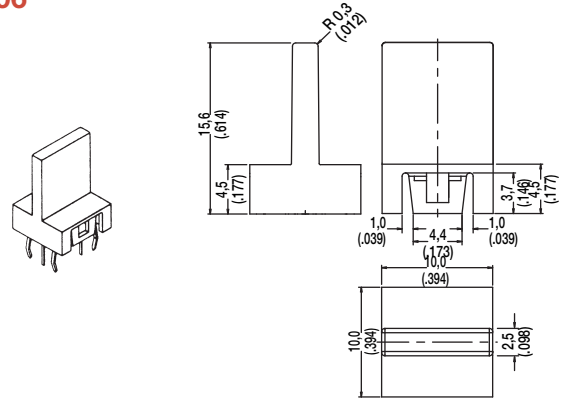
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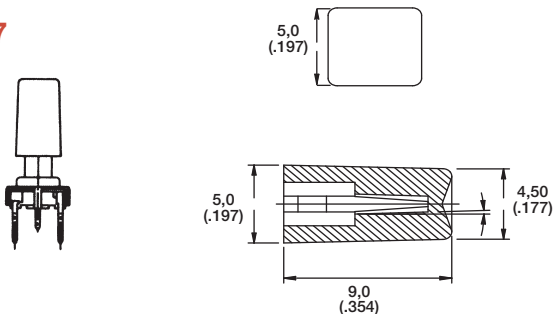
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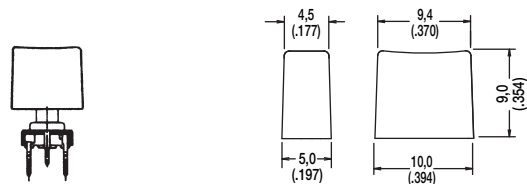
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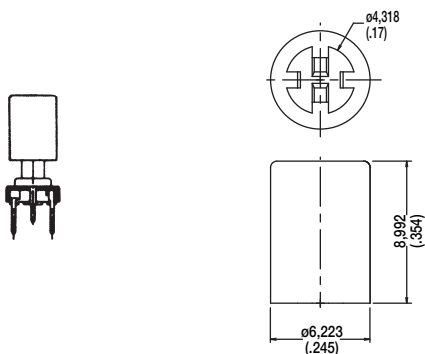
K07



K08



K09



Tactile Switches

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

C&K Components:

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[KSL0M212](#) [KSL0M211](#) [KSA0M411](#) [KSL1M411](#) [KSL0M312](#) [KSL0M412](#) [KSL0M411](#) [KSA0V211](#) [KSA0M311](#)
[KSA0M511](#) [KSL1M211](#) [KSL1M311](#) [KSL0M412 LFT](#) [KSL0M211 LFT](#) [KSA0M211 LFT](#) [KSL0V411 LFT](#) [KSA0M411](#)
[LFT](#) [KSA0V211 ACTION.H2.9 LFT](#) [KSA0A311LFT](#) [KSA0A331LFT](#) [KSA0A411LFT](#) [KSA0A431LFT](#) [KSA0A511LFT](#)
[KSA0A531LFT](#) [KSA0A931LFT](#) [Ksa0a211Act2.9Lft](#) [KSA0M212LFT](#) [KSA0M311LFT](#) [KSA0M312LFT](#) [KSA0M331LFT](#)
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