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
MEMBRANE SEALING
TERMINALS: PC pins, ground pin optional

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

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 90˚C	-40˚C to 125˚C
STORAGE TEMPERATURE:	-40˚C to 90˚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 ITT representative.

SWITCH K S [ ] [ ] [ ] [ ] [ ] [ ] L F T

Actuator Type
A Short hard plastic
L Long hard plastic

Ground Terminal
0 Without
1 With*

Insertion
M Manual (bulk packaging)
A Automatic (tube packaging)
V Vertical (bulk packaging)*

Operation Force
2 1.3 N (130 grams), 100,000 operations
3 1.3 N (130 grams), 1,000,000 operations
4 3 N (300 grams), 100,000 operations
5 5 N (500 grams), 100,000 operations
9 3 N (300 grams), 500,000 operations

Contact Material
1 Silver contacts
3 Gold contacts

Sealing
1 Totally sealed (IP 65)

RoHS compliant and compatible.
Tin plated.

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

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

B T N K 0 [ ] [ ]

Button Style

K01 10 mm square snap-on	**K06** 10 x 2,5 mm snap-on handle	
K02 ø8 mm round snap-on	**K07** 5 mm square	
K03 8,5 x 3,8 mm single floating	**K08** 9,9 x 5 mm rectangular	
K04 18,5 x 3,8 mm double floating	**K09** ø6,2 mm round	
K05 5 mm square		

Button Color

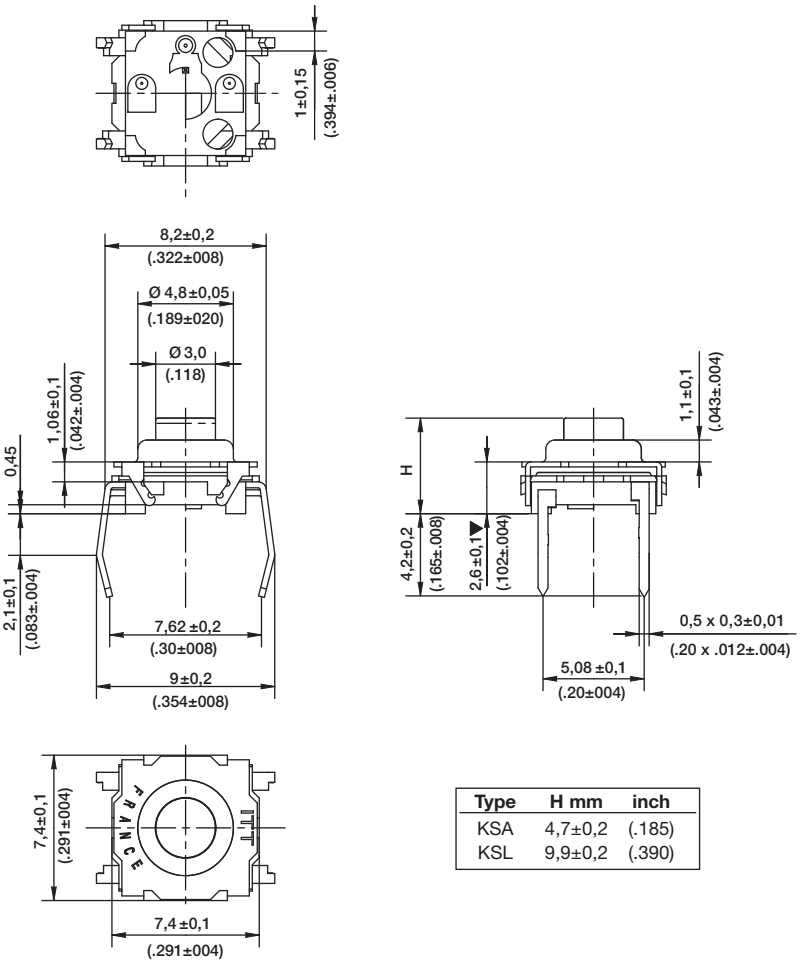
10 Dark gray	**60** Blue
20 Light gray	**70** Gray-blue
30 Yellow	**80** Ivory
40 Red	**90** Black
50 Green	

Dimensions shown in: mm (inch)
Specifications and dimensions subject to change

ACTUATOR TYPE

KSA & KSL

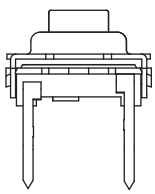




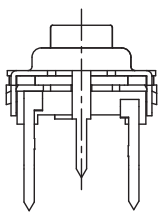
Type	H mm	inch
KSA	4,7±0,2	(.185)
KSL	9,9±0,2	(.390)

GROUND TERMINAL

0 WITHOUT



1* WITH



*Not compatible with "V" insertion

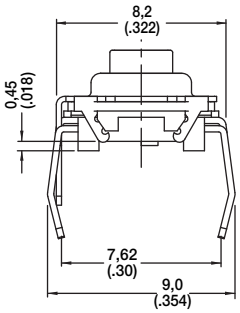
First Angle Projection

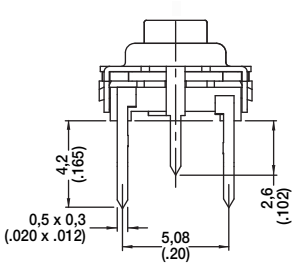
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Sealed Tact Switch

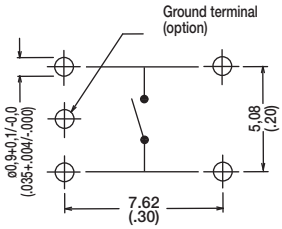
INSERTION

M MANUAL (BULK PACKAGING)

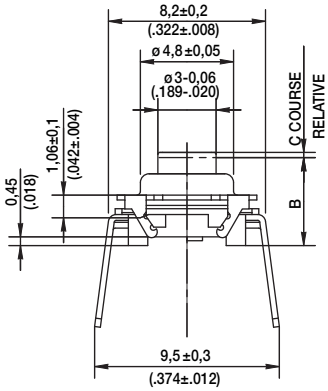


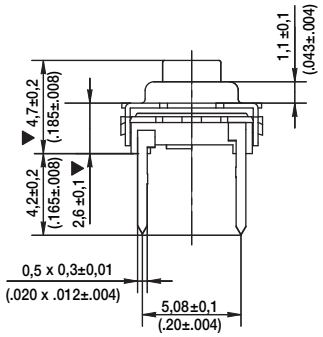


PCB LAYOUT

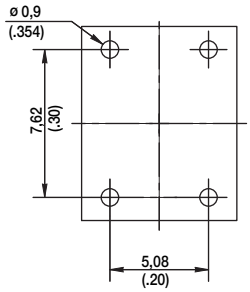


A AUTOMATIC (TUBE PACKAGING, 65 PIECES PER TUBE)

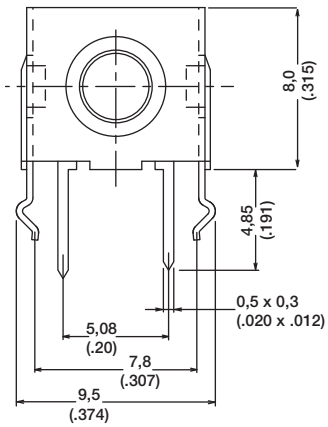


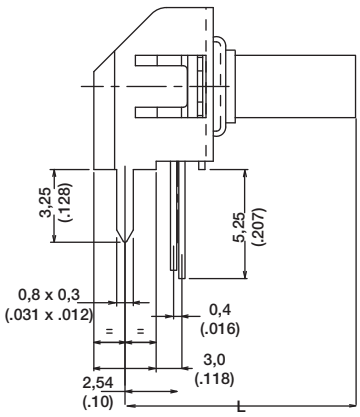


PCB LAYOUT

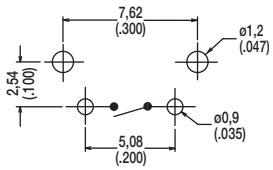


V VERTICAL





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 shown in: mm (inch)
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CONTACT MATERIAL

OPTION CODE	CONTACT MATERIAL
1	Silver contacts
3	Gold contacts

SEALING

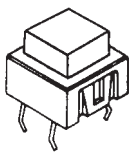
OPTION CODE	SEALING
0	Sealed against flux
1	Totally sealed

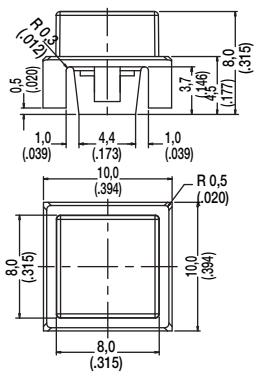
BUTTONS

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

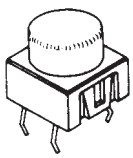
BUTTON TYPE	KSA	KSL	KSAV	KSLV
K01	X			
K02	X			
K03	X	X	X	X
K04	X	X	X	X
K05		X		X
K06	X			
K07		X		X
K08		X		X
K09		X		X

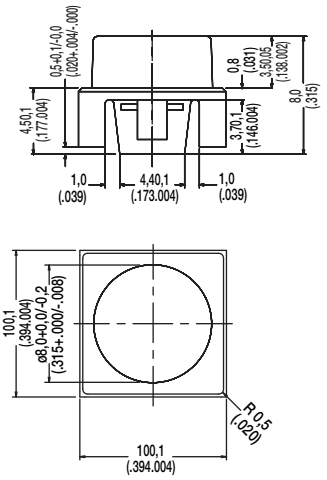
K01





K02



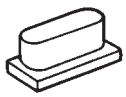


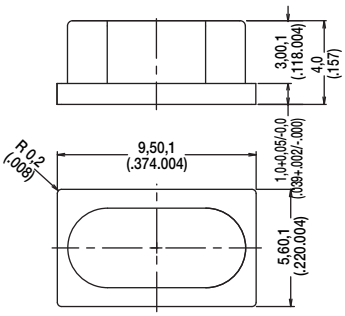
First Angle Projection

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Specifications and dimensions subject to change

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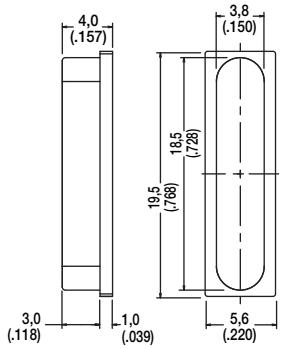
K03





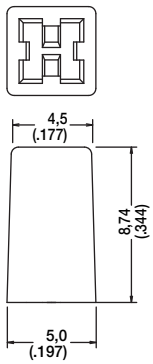
K04



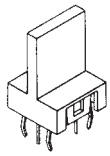


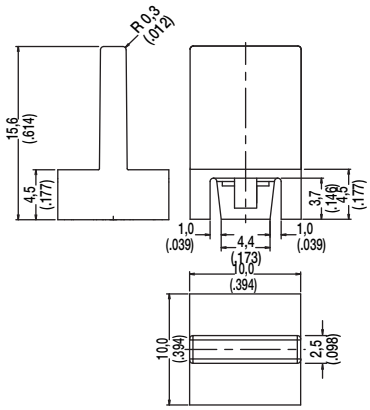
K05



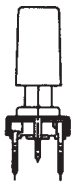


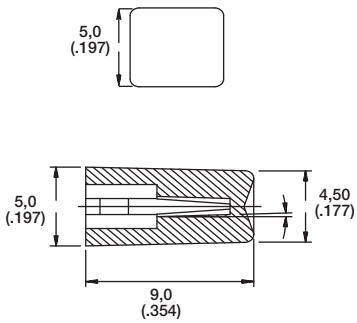
K06



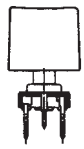


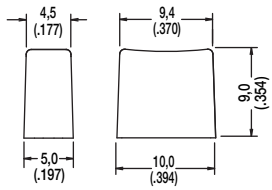
K07



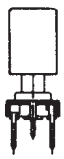


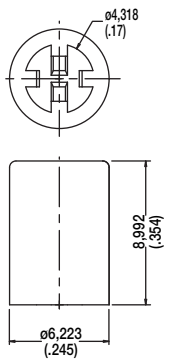
K08





K09





First Angle Projection

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