















Tactile Switches

Product Selection Guide

B

Tactile Switches

Surface Mount											
Series	KMT2	KMT0	KMR2-4	KMS	PTS525	KSR	KSS				
Size on PCB L x W (mm)	3 X 2,6	3 X 2,6	4,6 x 2,8	4,6 x 2,8	6,4 x 5,25	7,15x3,8 7,3x3,8	7 x 3,5				
Total Height (mm)	0,46	0,46	1,9 2,5	1,42	6,4 x 5,25	2,5	1,7				
Travel (mm)	0,13	0,15	0,2 to 0,35	0,25 to 0,3	0,3	0,3 to 0,5	0,3				
Actuation Force (N)	1.0 1.6	1.0 1.6 2.3 3.4	1.2 2 3 4	2 3	1.6 2.6	1.2 2 3 4.5	2 2.5 4				
Contact Type	Silver	Silver	Silver Gold	Silver Gold	Silver Gold	Silver Gold	Silver Gold				
Max. Voltage (V)	32	32	32 32	32 32	32 32	32 32	32 32				
Max. Switching Power (VA)	0.5	0.5	1 0.2	1 0.2	1 0.2	1 0.2	1 0.2				
Life Cycles	150,000	300,000	100,000 300,000	100,000	100,000	100,000 200,000	100,000				
IP Rating	IP54	IP68	IP40	IP40	IP40	IP50	IP40				
Page Number	B-5	B-7	B-9/B-11	B-13	B-15	B-17	B-21				
Surface Mount											
Series	KSC1	2	3	4	6	7	KSC4 V	KSC5	KSC6V	KSC-ST	
Size on PCB L x W (mm)	J 6,8x6,2	G 10x6,2					7,4 x 3,8	J 6,8x6,2	G 10x6,2	J 6,8x6,2	G 10x6,2
Total Height (mm)	2,6	3,5	3,5	5,2	7,7	4,3	6,9	5,6	6,9	5,2	
Travel (mm)		0,20 to 0,75		0,375 to 0,5		axial: 0,25 lateral: 0,5		0,5	0,3 to 1,0		
Actuation Force (N)		1,1 to 5,5		1,7 3,2		2,0 3,0		1,5	3,4 4,5/8,0		
Contact Type	Silver	Gold		Silver	Gold	Silver	Gold	Silver	Gold	Silver	Gold
Max. Voltage (V)	32	32		32	32	32	32	32	32	32	32
Max. Switching Power (VA)	1	0.2		1	0.2	1	0.2	1	0.2	1	0.2
Life Cycles	100,000 to 1,000,000		300,000		10,000 100,000		100,000		100,000 300,000		
IP Rating	IP67		IP67		IP50		IP67		IP67		
Page Number	B-23		B-23		B-30		B-23		B-32		

Tactile Switches Product Selection Guide

SMT, Thru-hole Sealed High Performance							
Series	KSx	KST	KT	K5AT	K5V SMT	K5V THT	K5V PM
Footprint	7,62 x 5,08	J 6,8x6,2 G 10x6,2	SA 7,5x5 SA2 7,5x7	G 8,4x10,8	8 x 9 x 17	8 x 9 x 17	9 x 13
Total Height (mm)	3,5 5,2	5	6,6 7,11 with tab	6,1	9	9	13
Travel (mm)	0,75	1,33	0,3 to 0,5	0,5	1,2	1,2	1,2
Actuation Force (N)	1,2 to 5,5	2.0 3.5	3	4	4.0	4.0	4.0
Contact Type	Gold	Silver Gold	Silver Gold	Gold	Gold	Gold	Gold
Max. Voltage (V)	32	30 30	50 50	32	32	32	32
Max. Switching Power (VA)	0.2	.50 0.2	1 0.2	1	1	1	1
Life Cycles	300,000	100,000	100,000	25,000	25,000	25,000	25,000
IP Rating	IP67	IP40	IP57	IP40	IP40	IP40	IP40
Page Number	B-35	B-43	B-39	B-45	B-47	B-49	B-51

Thru-hole Sealed High Performance							
Series	KSB	KSF	KSA	KSA MKII	KSA-V	KSI	KSI-V
Footprint	7,62 x 5,08	7,62 x 5,08	7,62 x 5,08	7,62 x 5,08	7,62 x 2,54	7,62 x 5,08	7,62 x 2,54
Total Height (mm)	2,01	2,6	4,7 button option	4,7	8	5,4	8
Travel (mm)	0,2	0,3 to 0,5	0,3 to 0,5	0,3 to 0,5	0,3 to 0,5	0,4 to 1,1	0,4 to 1,1
Actuation Force (N)	1.6 3.0	1.3 1.6 3.0 5.0	1.3 3.0 5.0	1.3 3.0 5.0	1.3 3.0 5.0	1.1 3.0	1.1 3.0
Contact Type	Silver Gold	Silver Gold	Silver Gold	Silver Gold	Silver Gold	Silver Gold	Silver Gold
Max. Voltage (V)	32 32	32 32	32 32	32 32	32 32	32 32	32 32
Max. Switching Power (VA)	1 0.2	1 0.2	1 0.2	1 0.2	1 0.2	1 0.2	1 0.2
Life Cycles	100,000	100,000	100,000	100,000 1,000,000	100,000	100,000	100,000
IP Rating	IP40	IP60	IP60	IP67	IP60	IP60	IP60
Page Number	B-53	B-53	B-55	B-60	B-55	B-62	B-62



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





Tactile Switches

Product Selection Guide

Tactile Switches

B

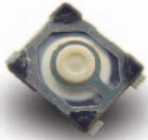
Thru-hole						
Series	KSL	KSL-V	KSJ	KSJ-V	PTS635	PTS635-V
Footprint	7,62 x 5,08	7,62 x 2,54	7,62 x 5,08	7,62 x 2,54	6,5	7,0 x 2,5
Total Height (mm)	9,9	8	6,65	8	4,3 5,0	4,3
Travel (mm)	0,3 to 0,5	0,3 to 0,5	0,55 to 0,7	0,55 to 0,7	0,25	0,25
Actuation Force (N)	1.3 3.0	1.3 3.0	2.0 3.0	2.0 3.0	1.3 2.0	1.3 2.0
Contact Type	Silver Gold	Silver Gold	Silver Gold	Silver Gold	Silver	Silver
Max. Voltage (V)	32 32	32 32	32 32	32 32	12	12
Max. Current (mA)	1 0.2	1 0.2	1 0.2	1 0.2	50	50
Life Cycles	100,000	100,000	100,000 30,000	100,000 30,000	20,000	20,000
IP Rating	IP60	IP60	IP60	IP60	IP40	IP40
Page Number	B-55	B-55	B-64	B-64	B-66	B-66

				
Series	PTS645	PTS 645-V	PTS 125	PTS125-V
Footprint	6,5 x 4,5	7,0 x 2,5	12,5 x 5,0	3,20 x 11,53
Total Height (mm)	4,3; 5,0; 7,0; 7,3 Sq.; 9,5; 13,0; 17,0	7,1	4,3 7,3 Sq. 8,5 12,0	14,90
Travel (mm)	0,25	0,25	0,30	0,30
Actuation Force (N)	1.3 1.6 2.0	1.3 1.6 2.0	1.6 2.6	1.6 2.6
Contact Type	Silver	Silver	Silver	Silver
Max. Voltage (V)	12	12	12	12
Max. Switching Power (VA)	50	50	50	50
Life Cycles	100,000	100,000	200,000	200,000
IP Rating	IP40	IP40	IP40	IP40
Page Number	B-69	B-69	B-72	B-72



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

KMT2 Series Nano-Miniature SMT Top Actuated



Features

- **Smallest footprint**
- **High number of cycles within the smallest packaging**
- **Smallest thickness with integrated actuator**
- **Ground pin option**
- **Halogen free**

Typical Applications

- **Mobile Phones**
- **Hearing Aids**
- **MP3 accessories**
- **Bluetooth Headset**

Specification

FUNCTION: momentary action
CONTACT ARRANGEMENT: 1 make contact = SPST, N.O.
TERMINALS: Gullwing type for SMT

Mechanical

Type G and NG	Operating force Newtons (grams)	Operating Life	Tactile Feeling	Travel mm
KMT 211 HF LFS	1.0 (100) ± 0.25	150,000	≥ 10%	0.13 ± 0.06
KMT 221 HF LFS	1.6 (160) ± 0.40	150,000	≥ 30%	0.13 ± 0.06

Electrical

	Silver
MAXIMUM POWER:	0.5 VA
MAXIMUM VOLTAGE:	32 VDC
MINIMUM VOLTAGE:	20mV
MAXIMUM CURRENT DC:	50 mA
MINIMUM CURRENT DC:	1 mA
DIELECTRIC STRENGTH:	≥ 250 Vrms (1mn)
CONTACT RESISTANCE:	≤ 300 mΩ
INSULATION RESISTANCE:	≥ 50 MΩ
BOUNCE TIME:	≤ 6 ms

Environmental

	Silver
OPERATING TEMPERATURE:	-40°C to 85°C
STORAGE TEMPERATURE:	-55°C (10 days) +85°C (4 days)

Process

SOLDERING: This component is suited to the following methods:
- Infrared Reflow Soldering in accordance with IEC61760-1

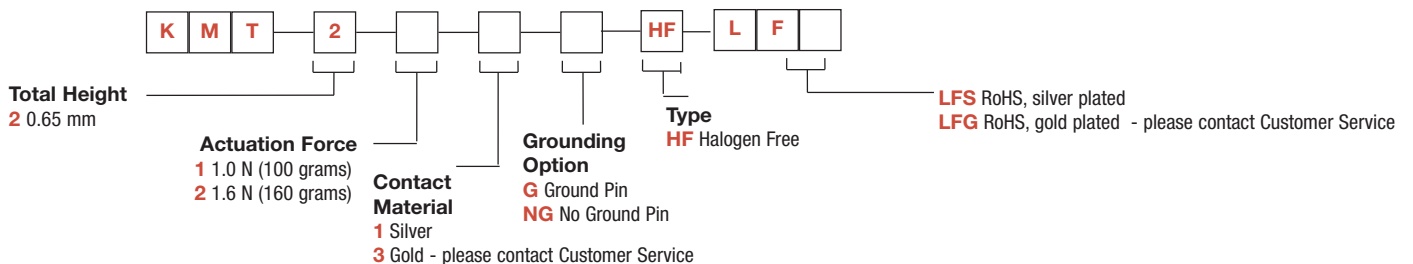
Packaging

In reels of 4,000 pieces.
Dimensions of reels according to EIA 481B
External diameter 180 mm

NOTE: Specifications listed above are for switches with standard options.
For information on specific and custom switches, consult Customer Service Center.

Part Number Description

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

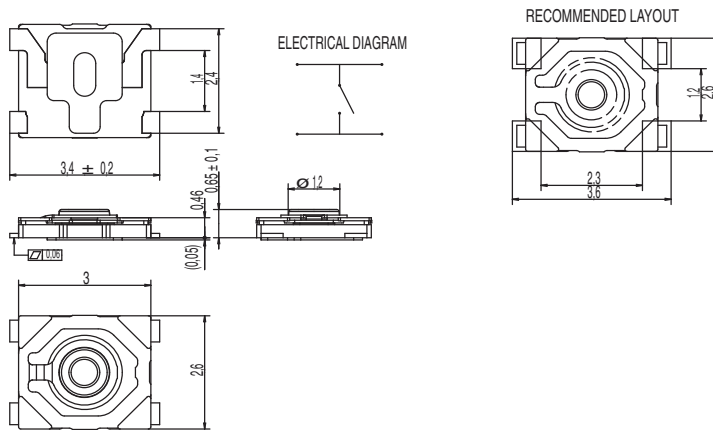


Dimensions are shown: Inch (mm)
Specifications and dimensions subject to change

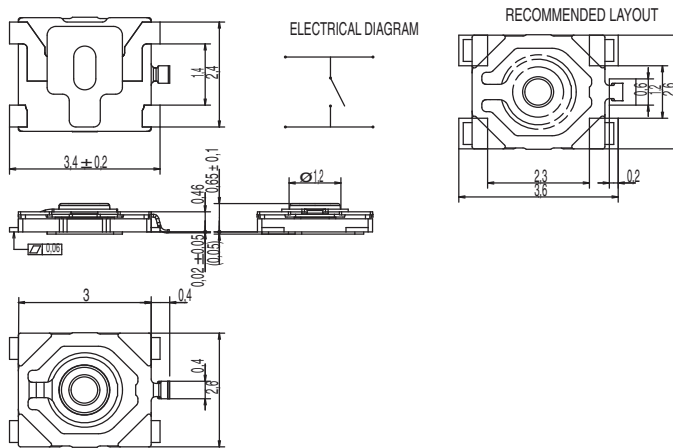


KMT2 Series Nano-Miniature SMT Top Actuated

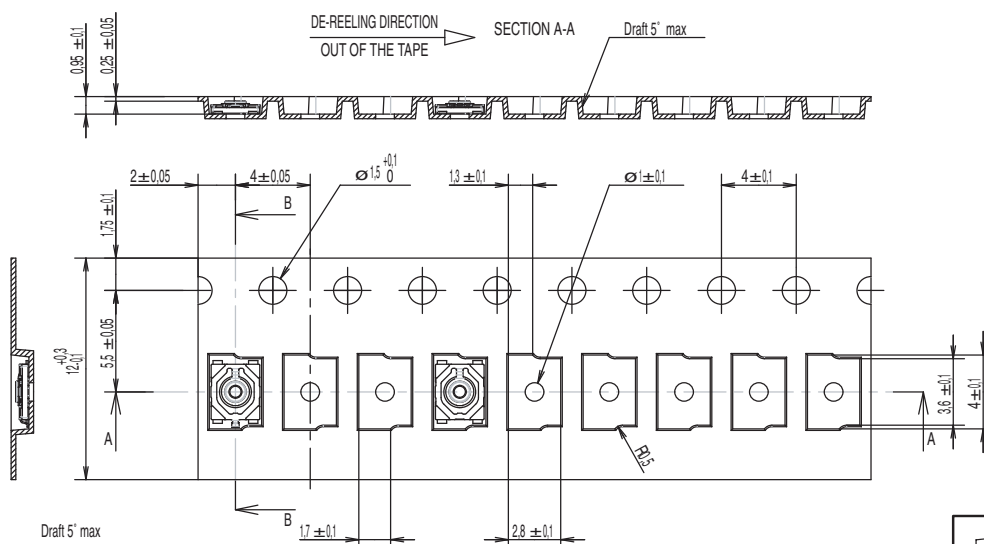
KMT Series – No Ground Pin



KMT Series – With Ground



TAPE & REEL

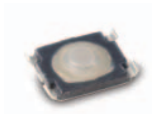


Dimensions are shown: Inch (mm)
Specifications and dimensions subject to change

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KMT0 Series Nano-Miniature SMT Top Actuated



Features

- **Smallest footprint**
- **Smallest thickness with integrated actuator**
- **High number of cycles within the smallest packaging**
- **IP68**

Typical Applications

- **Mobile Phones**
- **Hearing Aids**
- **MP3 accessories**
- **Bluetooth Headset**

Specification

FUNCTION: momentary action
CONTACT ARRANGEMENT: 1 make contact = SPST, N.O.
TERMINALS: J lead type for SMT

Mechanical

OPERATING LIFE: 300,000 cycles

	Operating force Newtons (grams)	Tactile Feeling	Travel mm
KMT011NGJLHS	1.0 (100) ± 0.25	≥ 10%	0.15 ± 0.1
KMT021NGJLHS	1.6 (160) ± 0.25	≥ 30%	0.15 ± 0.1
KMT071NGJLHS	2.3 (230) ± 0.25	≥ 30%	0.15 ± 0.1
KMT031NGJLHS	3.4 (340) ± 0.25	≥ 30%	0.15 ± 0.1

Electrical

MAXIMUM POWER: 0.5 VA
MAXIMUM VOLTAGE: 32 VDC
MINIMUM VOLTAGE: 20mV
MAXIMUM CURRENT DC: 50 mA
MINIMUM CURRENT DC: 1 mA
DIELECTRIC STRENGTH: ≥ 250 Vrms (1mm)
CONTACT RESISTANCE: ≤ 300 mΩ
INSULATION RESISTANCE: ≥ 50 MΩ
BOUNCE TIME: ≤ 6 ms

Environmental

OPERATING TEMPERATURE: -40°C to 85°C
STORAGE TEMPERATURE: -55°C (10 days)
+85°C (4 days)

Process

SOLDERING: This component is suited to the following methods:
– Infrared Reflow Soldering in accordance with IEC61760-1

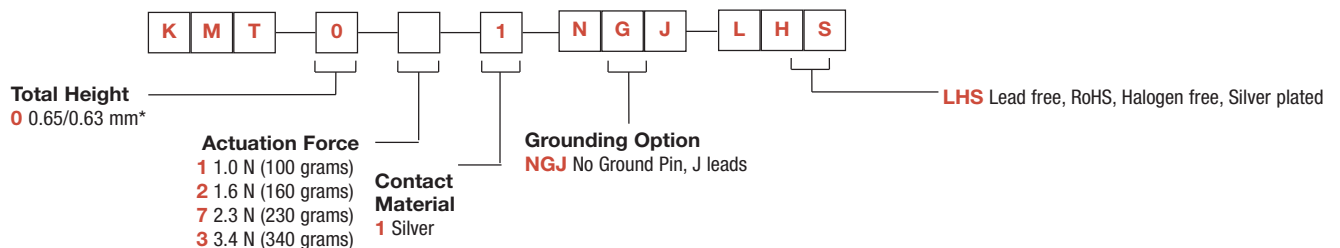
Packaging

In reels of 4,000 pieces.
Dimensions of reels according to EIA 481B
External diameter 180 mm

NOTE: Specifications listed above are for switches with standard options.
For information on specific and custom switches, consult Customer Service Center.

Part Number Description

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



* Height varies with actuation force (see drawing)



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



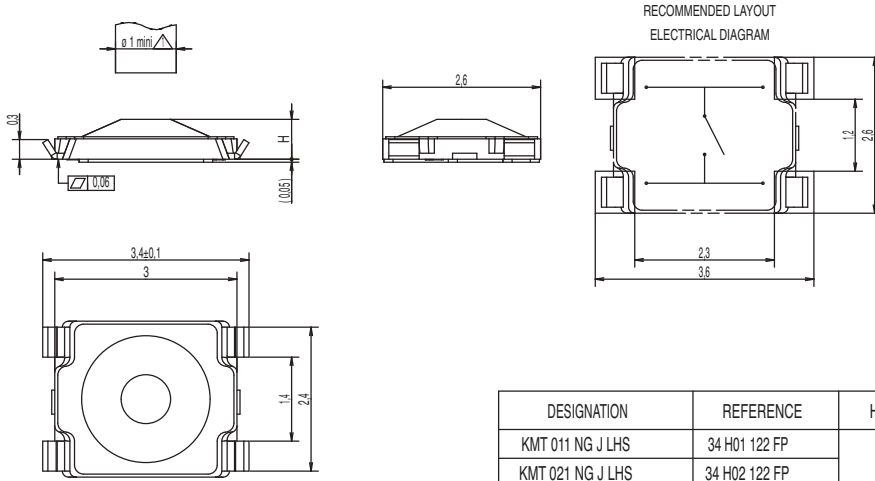
Tactile Switches

KMT0 Series Nano-Miniature SMT Top Actuated

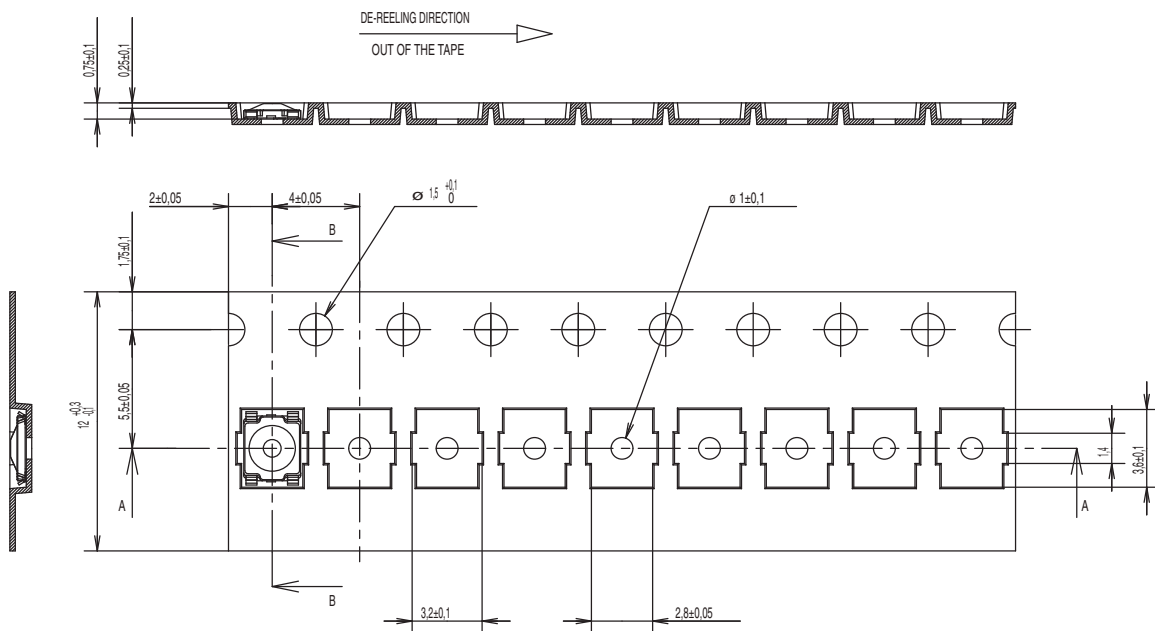
Minimum actuator diameter is 1.0mm. It is recommended to enlarge this diameter to a full flat surface covering the switch.

B

Tactile Switches



TAPE & REEL



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



KMR 2 Series Microminiature SMT Top Actuated



Features/Benefits

- Long Life version
- 4 actuation forces
- Optional ground pin
- Ultra low current capabilities
- Excellent tactile feel

Typical Applications

- Automotive
- Cellular phones
- Industrial electronics
- Medical equipment

Specification

FUNCTION: momentary action
CONTACT ARRANGEMENT: 1 make contact = SPST, N.O.
TERMINALS: Gullwing type for SMT

Mechanical

Type G and NG (except gold version G only) See description below	Operating force N (grs)	Operating life (cycles)	Travel (mm)
KMR211 LFS	1.2 (120) ± 0.30	200 000	0.20 mm ± 0.1
KMR213 LFG	1.2 (120) ± 0.30	200 000	0.20 mm ± 0.1
KMR221 LFS	2.0 (200) ± 0.50	200 000	0.25 mm ± 0.1
KMR223G LFG	2.0 (200) ± 0.50	200 000	0.25 mm ± 0.1
KMR231 LFS	3.0 (300) ± 0.75	150 000	0.25 mm ± 0.1
KMR233G LFG	3.0 (300) ± 0.75	150 000	0.25 mm ± 0.1
KMR231 ULC LFS	3.0 (300) ± 0.75	150 000	0.25 mm ± 0.1
KMR232 LFS	3.0 (300) ± 0.75	300 000	0.25 mm ± 0.1
KMR232 ULC LFS	3.0 (300) ± 0.75	300 000	0.25 mm ± 0.1
KMR241 LFS	4.0 (400) ± 1.00	100 000	0.30 mm ± 0.1
KMR243G LFG	4.0 (400) ± 1.00	100 000	0.30 mm ± 0.1
KMR241 ULC LFS	4.0 (400) ± 1.00	100 000	0.30 mm ± 0.1
KMR242 LFS	4.0 (400) ± 1.00	200 000	0.30 mm ± 0.1
KMR242 ULC LFS	4.0 (400) ± 1.00	200 000	0.30 mm ± 0.1

TACTILE FEELING: for KMR 2 series: ≥ 30% (1.2N at 20%)

Electrical

	Silver	Gold
MAXIMUM POWER:	1 VA	0.2 VA
MAXIMUM VOLTAGE:	32 VDC	32 VDC
MINIMUM VOLTAGE:	20 mVDC	20 mVDC
MAXIMUM CURRENT:	50 mA	10 mA
MINIMUM CURRENT:	1 mA*	1 mA*
DIELECTRIC STRENGTH:	≥ 250 Vrms	
CONTACT RESISTANCE:	≤ 100 mΩ	
INSULATION RESISTANCE:	≥ 1GΩ	
BOUNCE TIME:	≤ 3 ms	

*For ULC version minimum current is 1μA at 1.8 VDC

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

Infrared Reflow Soldering in accordance with IEC61760-1

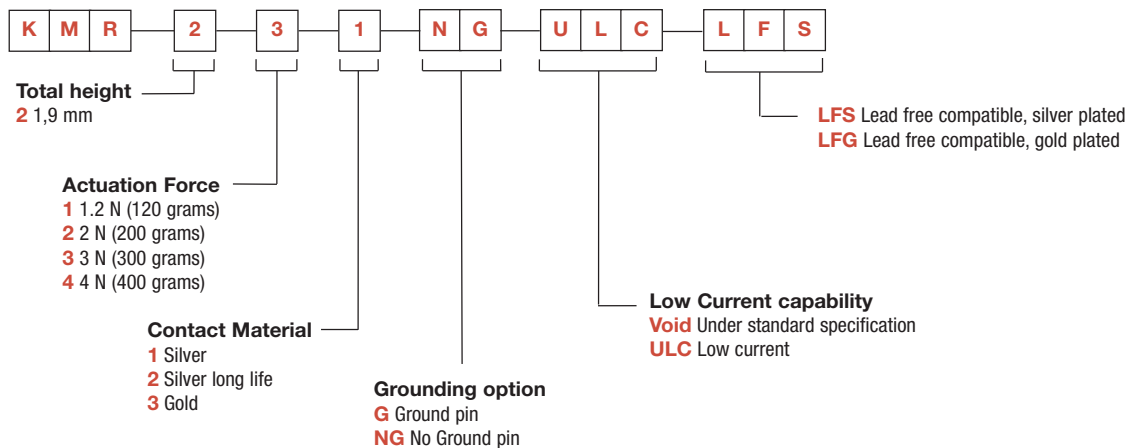
Packaging

In reels of 7,000 pieces for KMR 2
External diameter 330 mm ± 2 mm

NOTE: Specifications listed above are for switches with standard options.
For information on specific and custom switches, consult Customer Service Center.

Part Number Description

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



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

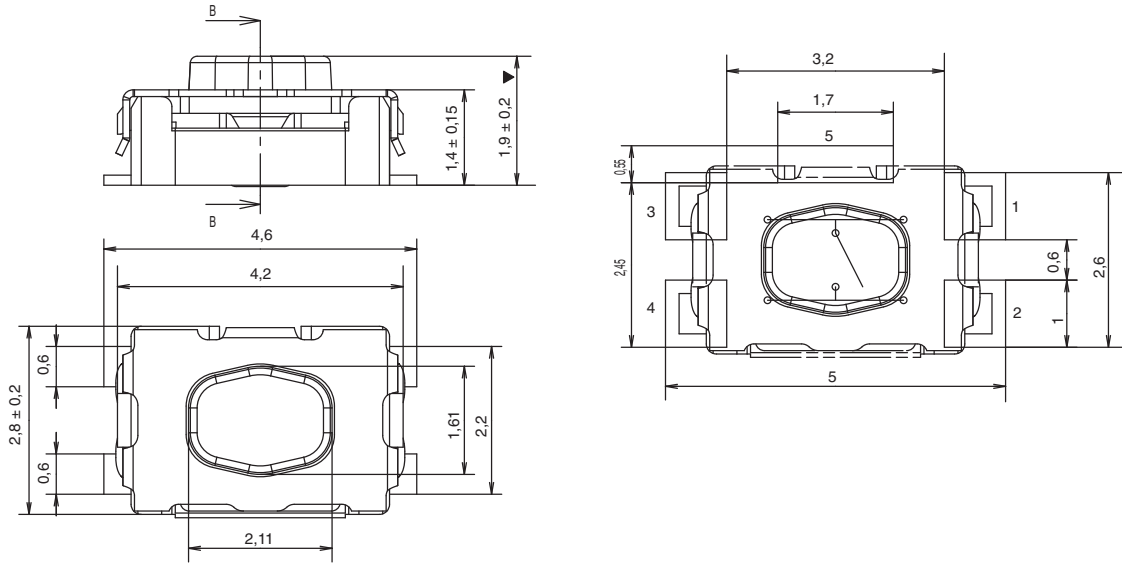
KMR 2 Series Microminiature Tact Switch for SMT

KMR 2 Series - 1.9 mm height

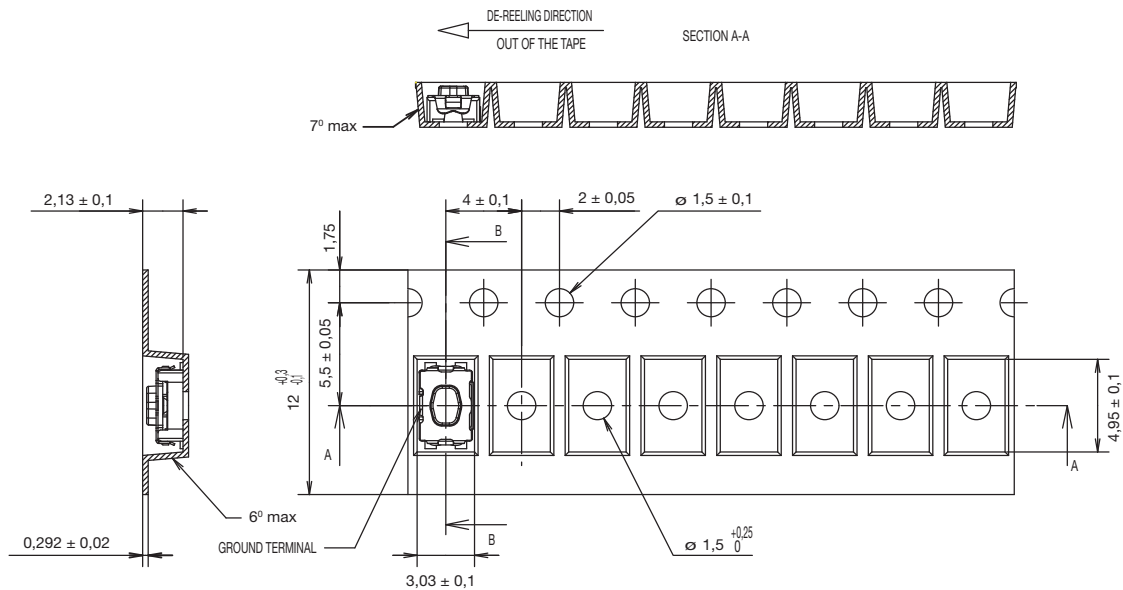
PCB layout shown with ground pin option

Tactile Switches

B



TAPE & REEL



→
DIRECTION OF FEED

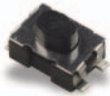
First Angle
Projection

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

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KMR 4 Series Microminiature SMT Top Actuated



Features/Benefits

- Long Life version
- 4 actuation forces
- Optional ground pin
- Ultra low current capabilities
- Excellent tactile feel

Typical Applications

- Automotive
- Cellular phones
- Industrial electronics
- Medical equipment



Tactile Switches

Specification

FUNCTION: momentary action
CONTACT ARRANGEMENT: 1 make contact = SPST, N.O.
TERMINALS: Gullwing type for SMT

Mechanical

Type G and NG (except gold version G only) See description below	Operating force N (grs)	Operating life (cycles)	Travel (mm)
KMR421 LFS	2.0 (200) ± 0.50	200 000	0.25 mm ± 0.1
KMR431 LFS	3.0 (300) ± 0.75	150 000	0.30 mm ± 0.1
KMR431 ULC LFS	3.0 (300) ± 0.75	150 000	0.30 mm ± 0.1
KMR432 LFS	3.0 (300) ± 0.75	300 000	0.30 mm ± 0.1
KMR432 ULC LFS	3.0 (300) ± 0.75	300 000	0.30 mm ± 0.1
KMR441 LFS	4.0 (400) ± 1.00	100 000	0.35 mm ± 0.1
KMR441 ULC LFS	4.0 (400) ± 1.00	100 000	0.35 mm ± 0.1
KMR442 LFS	4.0 (400) ± 1.00	200 000	0.35 mm ± 0.1
KMR442 ULC LFS	4.0 (400) ± 1.00	200 000	0.35 mm ± 0.1

TACTILE FEELING: for KMR 4 series: ≥ 25%

Electrical

	Silver	Gold
MAXIMUM POWER:	1 VA	0.2 VA
MAXIMUM VOLTAGE:	32 VDC	32 VDC
MINIMUM VOLTAGE:	20 mVDC	20 mVDC
MAXIMUM CURRENT:	50 mA	10 mA
MINIMUM CURRENT:	1 mA*	1 mA*
DIELECTRIC STRENGTH:	≥ 250 Vrms	
CONTACT RESISTANCE:	≤ 100 mΩ	
INSULATION RESISTANCE:	≥ 1GΩ	
BOUNCE TIME:	≤ 3 ms	

*For ULC version minimum current is 1μA at 1.8 VDC

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

Infrared Reflow Soldering in accordance with IEC61760-1

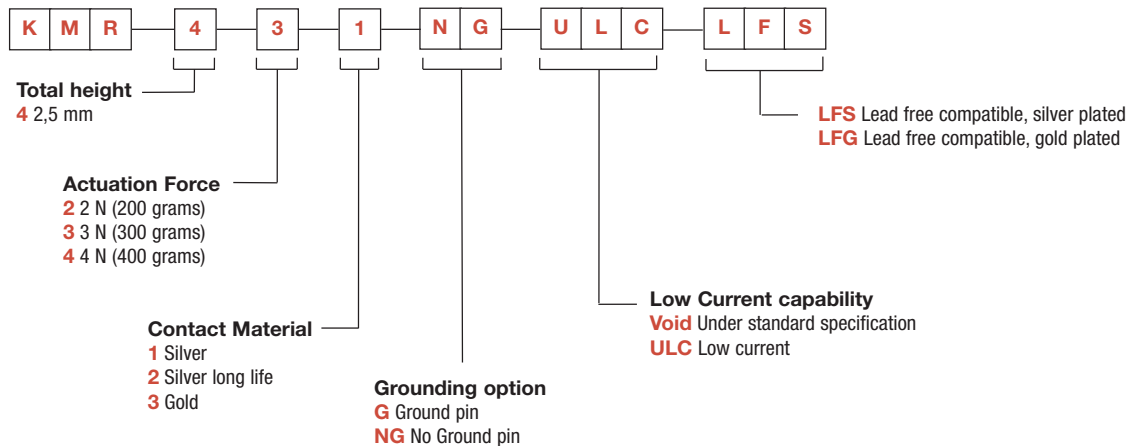
Packaging

In reels of 6,000 pieces for KMR 4
External diameter 330 mm ± 2 mm

NOTE: Specifications listed above are for switches with standard options.
For information on specific and custom switches, consult Customer Service Center.

Part Number Description

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



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

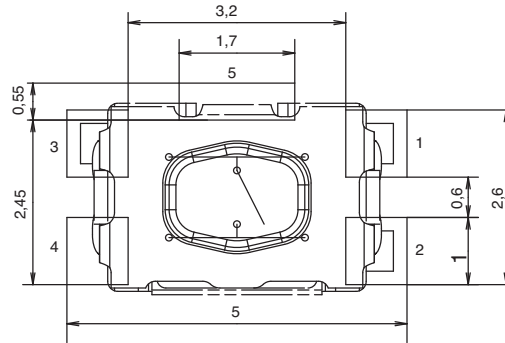
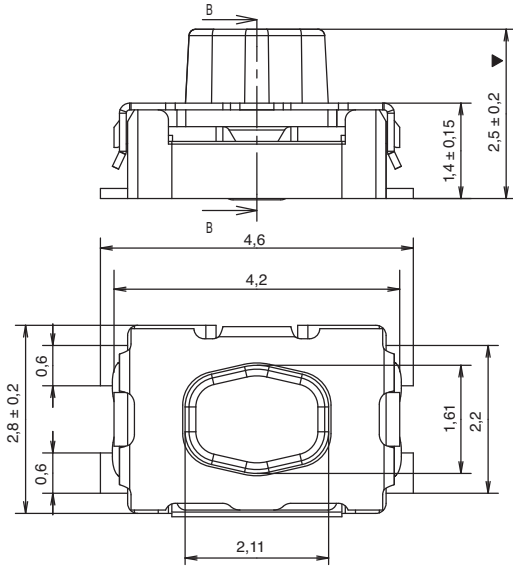
KMR 4 Series Microminiature Tact Switch for SMT

KMR 4 Series - 2.5 mm height

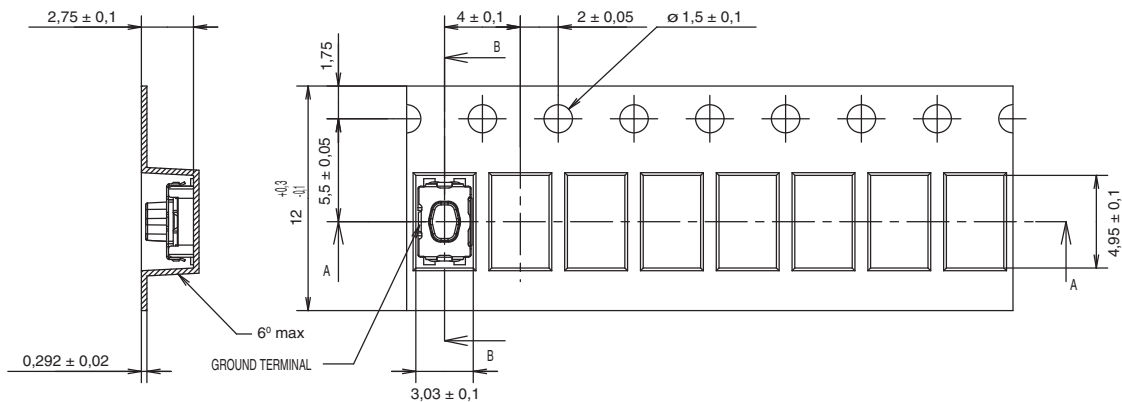
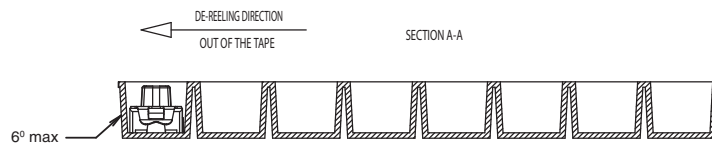
PCB layout shown with ground pin option

Tactile Switches

B



TAPE & REEL

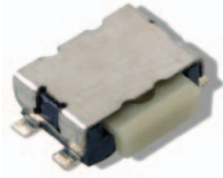


Dimensions are shown: Inch (mm)
Specifications and dimensions subject to change



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KMS Series Microminiature SMT Side Actuated



Features/Benefits

- Compact size
- Excellent tactile feel
- ESD protection
- Positioning pegs for stability
- IP 40 sealing
- RoHS compliant and compatible

Typical Applications

- Mobile phones, pagers
- PDAs
- Medical handheld monitors
- Consumer electronics
- Telecommunication networks

Specification

FUNCTION: Momentary
CONTACT ARRANGEMENT: SPST, N.O.
TERMINALS: Gullwing type for SMT
IP40 Sealed

Mechanical

OVERLOAD: 20N
TACTILE FEELING: 15% min. for the 2N version
25% min for the 2.5N version

Type	Operating force Newtons (grams)	Operating life (operations)	Travel
KMS221G/GP	2N (200) ± 0.5	100 K cycles	0,25 ± 0,15
KMS223G/GP	2N (200) ± 0.5	100 K cycles	0,25 ± 0,15
KMS231G/GP	3N (300) ± 0.6	100 K cycles	0,3 ± 0,15
KMS233G/GP	3N (300) ± 0.6	100 K cycles	0,3 ± 0,15

Note: Specifications listed above are for switches with standard options. For information on specific and custom switches, consult Customer Service Center.

Packaging

Tape and reels in reels of 3,000 pieces.
External diameter 330mm ± 2mm.

Electrical

	Silver	Gold
MAXIMUM POWER:	1 VA	0.2 VA
MAXIMUM VOLTAGE:	32 VDC	32 VDC
MAXIMUM CURRENT DC:	50 mA	10 mA
MINIMUM CURRENT DC:	1 mA	1 mA
DIELECTRIC STRENGTH: 250 VDC		
CONTACT RESISTANCE: ≤100 mΩ		
INSULATION RESISTANCE: 10 ⁹ Ω		
BOUNCE TIME: ≤ 3 ms		

Environmental

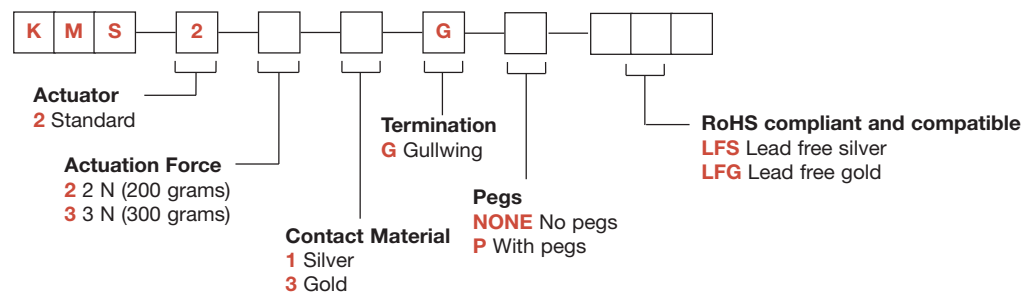
	Silver	Gold
OPERATING TEMPERATURE:	-40°C to 85°C	-40°C to 125°C
STORAGE TEMPERATURE:	-55°C to 85°C	-55°C to 125°C

Process

Infrared reflow soldering in accordance with IEC 61760-1

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.

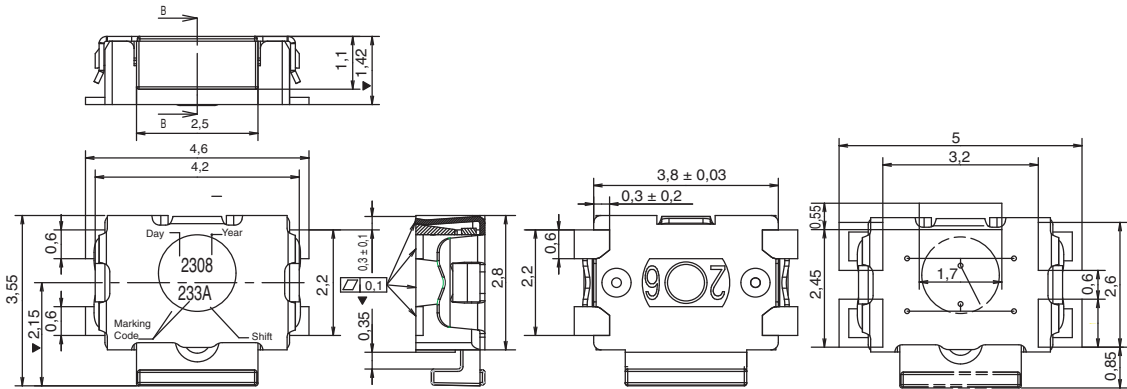


Dimensions are shown: Inch (mm)
Specifications and dimensions subject to change

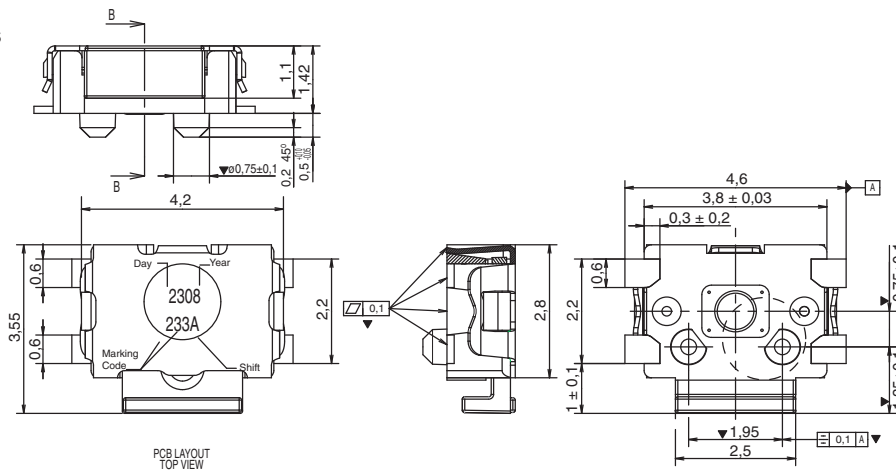
KMS Series Microminiature SMT Side Actuated

Tactile Switches

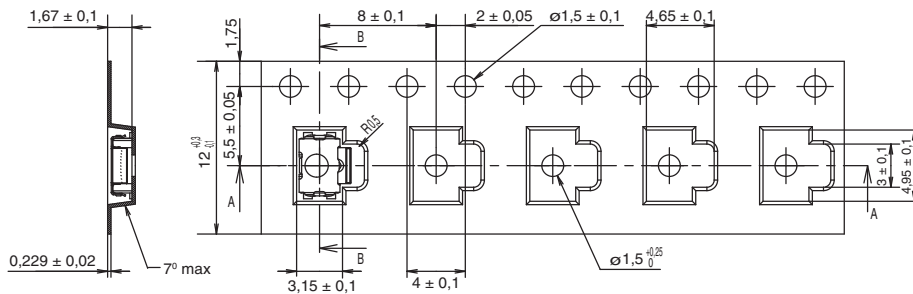
KMS



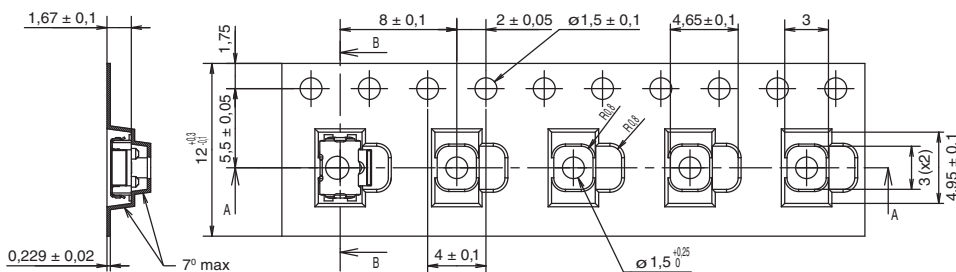
KMS WITH PEGS



TAPE & REEL



WITH PEGS



→
DIRECTION OF FEED

First Angle Projection

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



www.ck-components.com

PTS 525 Series Microminiature Tact Switch for SMT



Features/Benefits

- Ultra low profile, 0.8 & 1.5 mm actuator height
- Long life
- Compact package of 5.25 x 5.25 mm saves PCB space
- RoHS compliant and compatible

Typical Applications

- Consumer products
- Instrumentation
- Computer products
- Hand-held devices

Specification

FUNCTION: Momentary action
CONTACT ARRANGEMENT: SPST, N.O.
TERMINALS: PC pins

Mechanical

ACTUATION FORCE: PTS525 models: 160 grams, 260 grams
LIFE EXPECTANCY: 100,000 operations.

Electrical

CONTACT RATING: 50 mA @ 12 V DC.
DIELECTRIC STRENGTH: 250 V AC min.
CONTACT RESISTANCE: 100 mΩ max. initial.
INSULATION RESISTANCE: 10¹¹ Ω min.
ELECTRICAL TRAVEL: 0,30 ± 0,15 mm

NOTE: Specifications listed above are for switches with standard options.
For information on specific and custom switches, consult Customer Service Center.

Environmental

OPERATING TEMPERATURE: -40°C to 60°C

Process

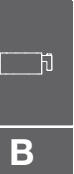
SMT capable of IR solder process. Lead free soldering process compatible. Do not clean switch with solvents.

Materials

BASE: 6/6 nylon or glass filled polyester (PBT) (UL 94V-0).
ACTUATOR: 6/6 nylon or polyacetal (UL 94HB).
DOME CONTACTS: Phosphor bronze, silver clad.
STATIONARY CONTACTS: Brass, silver plated.
TERMINALS: Brass, silver plated. Insert molded.

Packaging

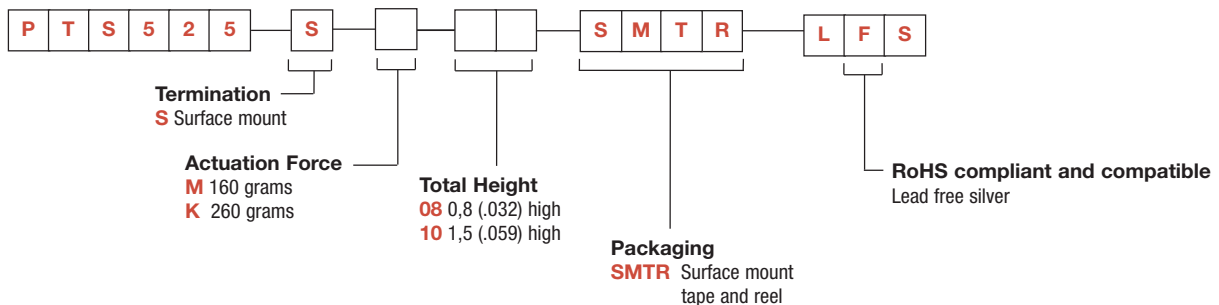
3000 pieces per Tape and Reel



Tactile Switches

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.



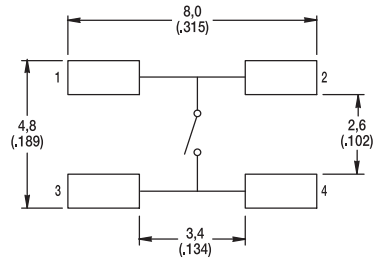
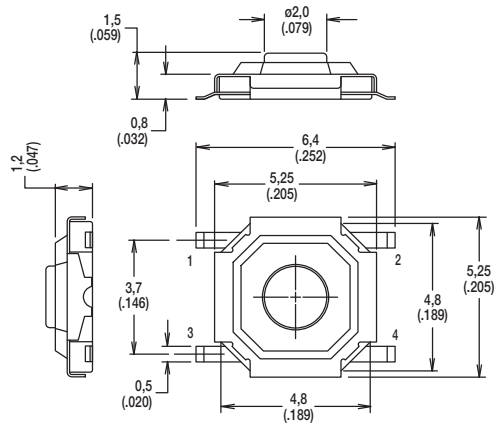
Dimensions are shown: Inch (mm)
Specifications and dimensions subject to change

PTS 525 Series Microminiature Tact Switch for SMT

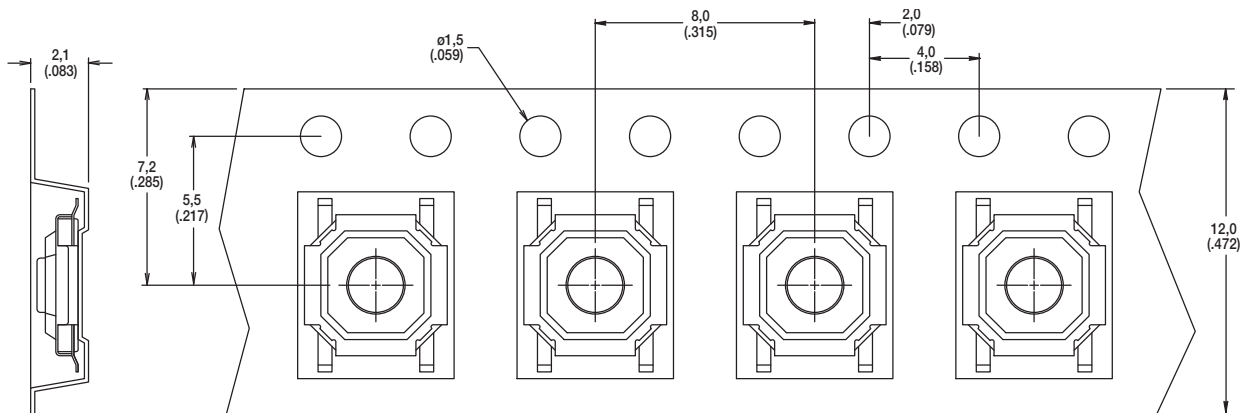
PTS525



PTS525SM10SMTR



TAPE & REEL



→
DIRECTION OF FEED

First Angle
Projection

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



KSR Series Subminiature Tact Switch for SMT

Features/Benefits

- Saves PCB space
- Range of 4 actuation forces
- G terminations
- N.O.
- Detect type available
- Rubber actuator
- IP 50 sealed
- RoHS compliant and compatible

Typical Applications

- Automotive
- Cellular phones & accessories
- Industrial electronics
- Computers & network equipment



Tactile Switches

Specification

FUNCTION: momentary action
CONTACT ARRANGEMENT: Normally Open
TERMINALS: Gullwing type for SMT

Mechanical

Type	Operating force Newtons (grams)	Operating life (operations)	Travel
KSR211/213	1.8 (180) ± 20%	100,000	0,25 ± 0,15
KSR221/223	2.3 (200) ± 25%	200,000	0,3 ± 0,15
KSR231/233	3.0 (300) ± 25%	200,000	0,35 ± 0,15
KSR251/253	4.5 (450) ± 25%	100,000	0,5 ± 0,15
KSR223GNC	2 (200) ± 25%	30,000	0,3 ± 0,15

A detect switch version is available KSR2D3.
Please see Detect chapter.

Packaging

Switches are delivered on continuous tape, in reels of 2,500 pieces.

Electrical

	Silver	Gold
MAXIMUM POWER:	1 VA	0.2 VA
MAXIMUM VOLTAGE:	32 VDC	32 VDC
MINIMUM VOLTAGE:	20 mV	20 mV
MAXIMUM CURRENT DC:	50 mA	10 mA
MINIMUM CURRENT DC:	1 mA	1 mA

CONTACT RESISTANCE: ≤ 100 mΩ
INSULATION RESISTANCE: (100 V): 10⁹ Ω
BOUNCE TIME: 1 ms max.

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: Compatible with lead free reflow soldering process.

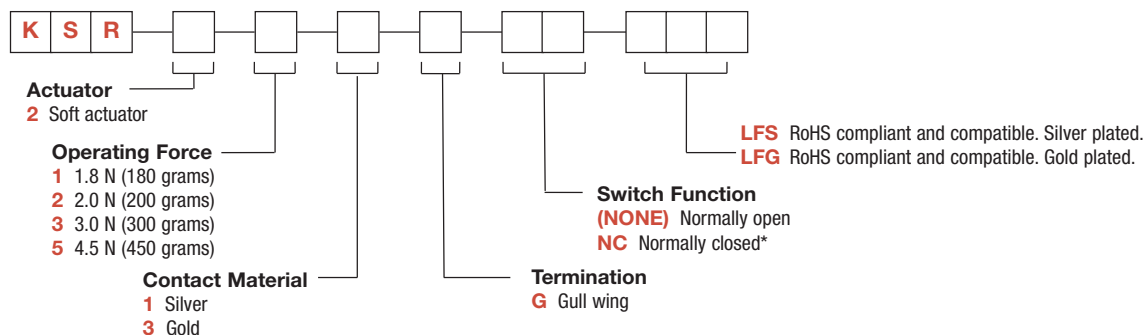
NOTE: Specifications listed above are for switches with standard options.
For information on specific and custom switches, consult Customer Service Center.

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.

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.



*Available on KSR223G only.



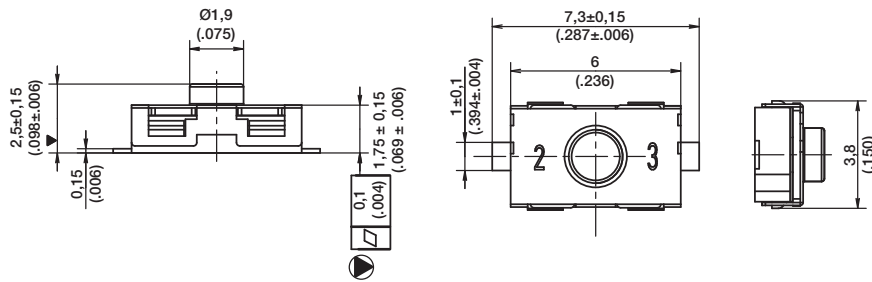
Dimensions are shown: Inch (mm)
Specifications and dimensions subject to change

KSR Series Subminiature Tact Switch for SMT

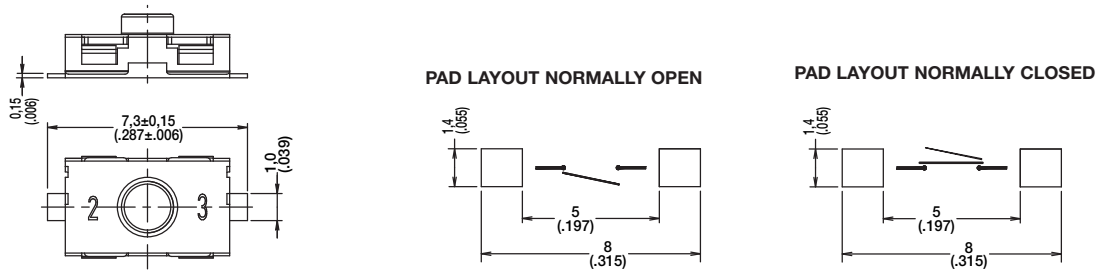
KSR

B

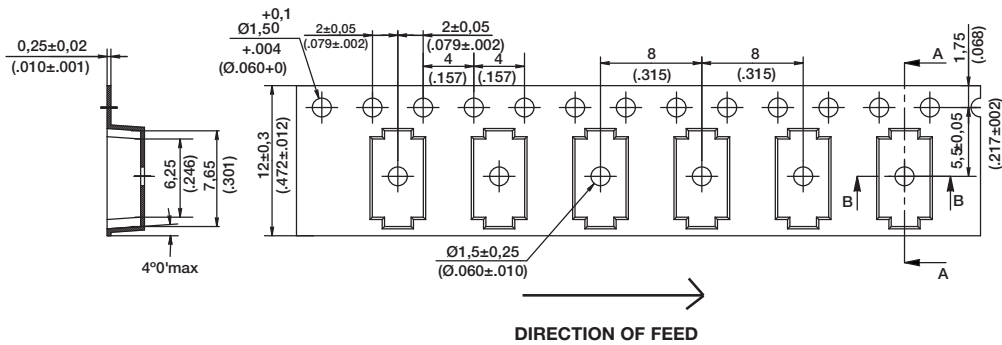
Tactile Switches



G GULLWING



TAPE & REEL



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



KSR Long Life-200,000 cycles-Gold and Silver Series Subminiature Tact Switch for SMT

Features/Benefits

- Saves PCB space
- Range of 4 actuation forces
- G terminations
- N.O.
- Detect type available
- Rubber actuator
- IP 50 sealed
- RoHS compliant and compatible

Typical Applications

- Automotive
- Cellular phones & accessories
- Industrial electronics
- Computers & network equipment



B

Tactile Switches

Specification

FUNCTION: momentary action
CONTACT ARRANGEMENT: Normally Open
TERMINALS: Gullwing type for SMT

Mechanical

Type	Operating force(Fa) Newtons (grams)	Operating life (operations)	Travel
<i>Silver versions</i>			
KSR212G LFS	1.5 < Fa < 2.2	200,000	0,25 ± 0,15
KSR222G LFS	1.9 < Fa < 2.6	200,000	0,3 ± 0,15
KSR232G LFS	2.25 < Fa < 3.75	200,000	0,35 ± 0,15
KSR252G LFS	3.37 < Fa < 5.6	200,000	0,5 ± 0,15
<i>Gold versions</i>			
KSR214G LFS	1.5 < Fa < 2.2	200,000	0,25 ± 0,15
KSR224G LFS	1.9 < Fa < 2.6	200,000	0,3 ± 0,15
KSR234G LFS	2.25 < Fa < 3.75	200,000	0,35 ± 0,15
KSR254G LFS	3.37 < Fa < 5.6	200,000	0,5 ± 0,15

OVERLOAD: 20 Newtons

Packaging

Switches are delivered on continuous tape, in reels of 2,500 pieces.

Electrical

	Silver	Gold
MAXIMUM POWER:	1 VA	0.2 VA
MAXIMUM VOLTAGE:	32 V dc	32 V dc
MINIMUM VOLTAGE:	20 m Vdc	20 m Vdc
MAXIMUM CURRENT DC:	50 mA	10 mA
MINIMUM CURRENT DC:	1 mA	1 mA

CONTACT RESISTANCE: ≤ 100 m_Ω
INSULATION RESISTANCE (100 V): 1 G_Ω
BOUNCE TIME: 1 ms max

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: Compatible with lead free reflow soldering process.

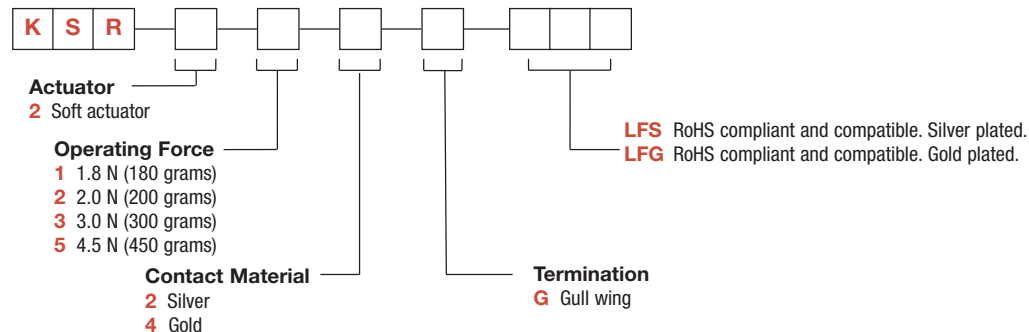
NOTE: Specifications listed above are for switches with standard options.
For information on specific and custom switches, consult Customer Service Center.

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.

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

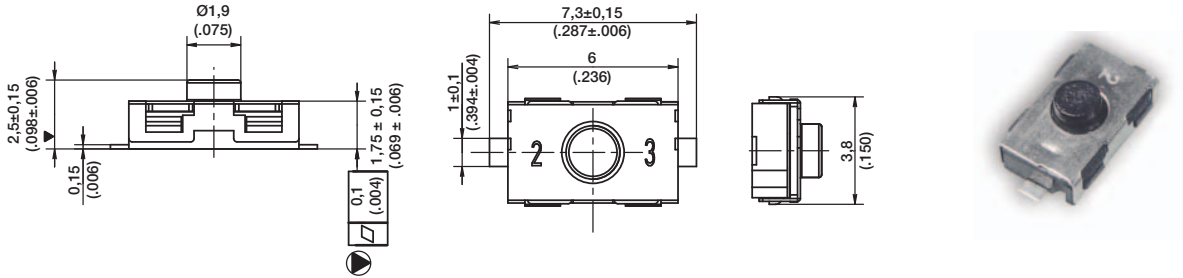
For any part number different from those listed above, please consult your local representative.



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

KSR Long Life-200,000 cycles-Gold and Silver Series Subminiature Tact Switch for SMT

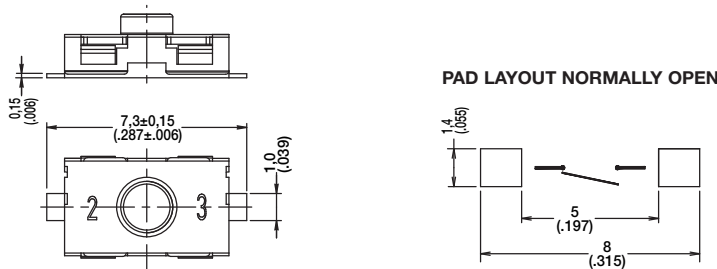
KSR



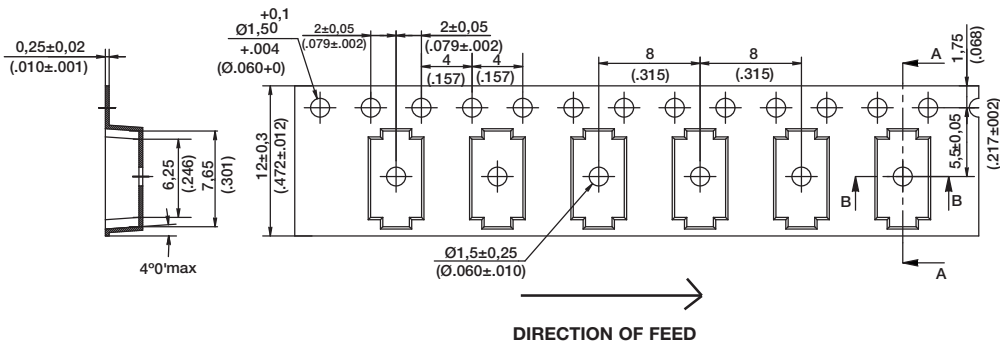
B

Tactile Switches

G GULLWING



TAPE & REEL



First Angle
Projection

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



KSS Series Subminiature SMT Side Actuated



Features/Benefits

- Low profile of 1.6 mm
- Excellent tactile feel
- High shear force
- Range of actuation forces
- Large flat top
- Redundant contacts option
- IP 40 sealed
- RoHS compliant and compatible

Typical Applications

- Cellular phone
- PA, pagers
- Industrial electronics
- Health diagnostic electronics

Specification

FUNCTION: momentary action
CONTACT ARRANGEMENT: N.O.
TERMINALS: Gullwing / 3-Way type for SMT
IP40 sealed

Mechanical

OVERLOAD: 20N
TACTILE FEELING: 2 and 4N: 25% min.
2.5N: 30% min.

Type	Operating force Newtons (grams)	Operating life (operations)	Travel
KSS221G	2.0 (200) ± 0.5	100,000	0,3 ± 0,15
KSS231G	2.5 (250) ± 0.5	100,000	0,3 ± 0,10
KSS233W	2.5 (250) ± 0.6	100,000	0,3 ± 0,15
KSS241G	4.0 (400) ± 1.0	100,000	0,3 ± 0,15

NOTE: Specifications listed above are for switches with standard options.
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
MAXIMUM CURRENT:	50 mA	10 mA
MINIMUM CURRENT:	1 mA	1 mA
DIELECTRIC STRENGTH: ≥ 250 VDC		
CONTACT RESISTANCE: < 100 mΩ		
INSULATION RESISTANCE (100 VDC): ≥ 10 ⁹ Ω		
BOUNCE TIME: < 3 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

Infrared reflow soldering in accordance with IEC 61760-1

Packaging

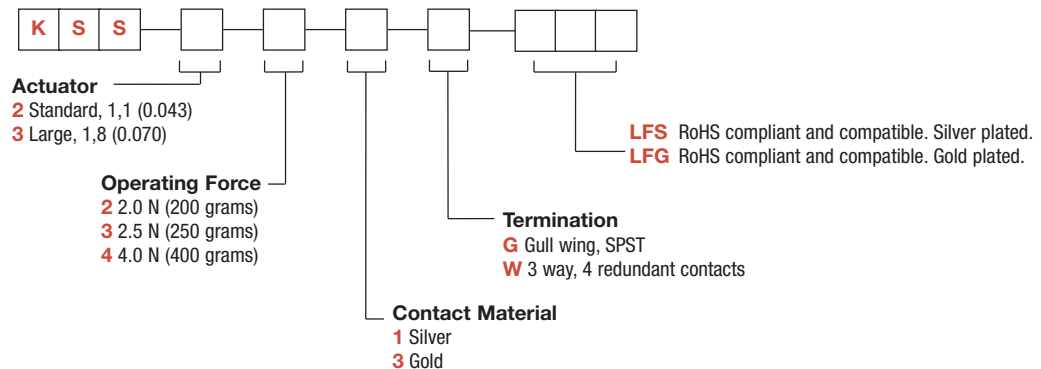
Tape and reels in reels of 3,000 pieces.
External diameter 330mm ± 2mm.

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.



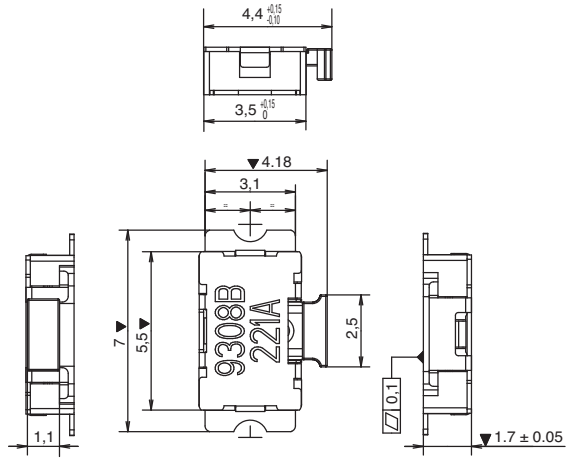
Dimensions are shown: Inch (mm)
Specifications and dimensions subject to change

KSS Series Subminiature SMT Side Actuated

KSS

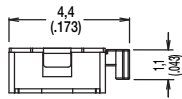
B

Tactile Switches

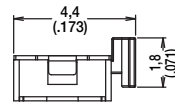


ACTUATOR

2 STANDARD, 1,1 (0.043)

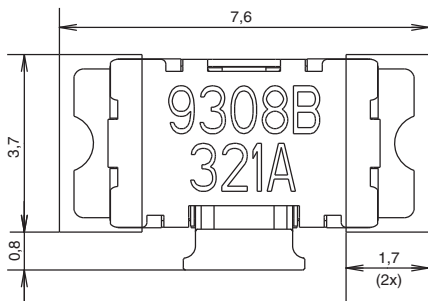


3 LARGE, 1,8 (0.070)

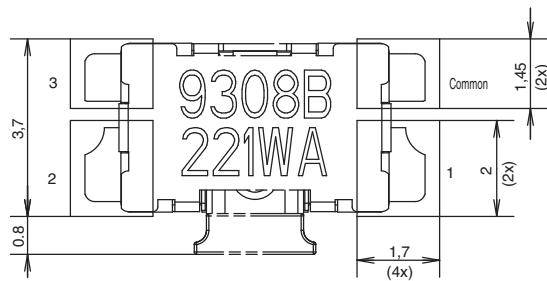


TERMINATION

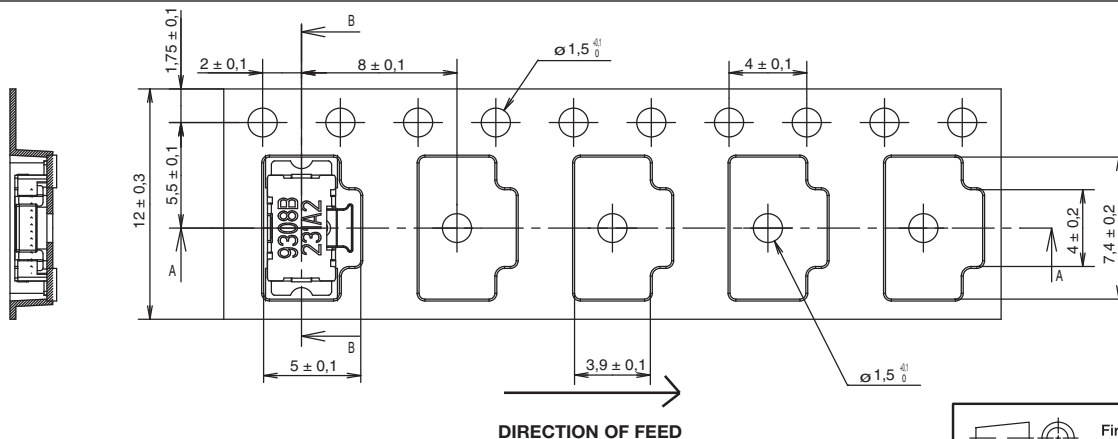
G GULLWING



W 3 WAY, 4 REDUNDANT CONTACTS



TAPE & REEL



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



KSC Series Sealed Tact Switch for SMT

Features/Benefits

- Positive tactile feeling
- Range of 6 actuation forces
- J or G terminations
- Tape & reel
- IP 67

Typical Applications

- Automotive
- Cellular phones
- Industrial electronics
- Network infrastructure and IT



Specification

FUNCTION: Momentary action
CONTACT ARRANGEMENT: 1 make contact = SPST, N.O.
TERMINALS: J bend & Gullwing type for SMT

Mechanical

Type	Operating force FA (Newtons) Min/Max	Operating life (operations)	Travel (mm)
KSC121J	1.2 / 2.5	200,000	0.3 ± 0.15
KSC141J	2.25 / 3.75	200,000	0.3 ± 0.15
KSC151J	4.1 / 6.9	100,000	0.35 ± 0.15
KSC201J	0.9 / 2.0	300,000	0.3 +0.2 / -0.15
KSC221J	1.5 / 2.5	500,000	0.35 +0.3 / -0.1
KSC222J	1.5 / 2.5	1,000,000	0.35 +0.3 / -0.1
KSC241J	2.6 / 4.4	300,000	0.5 ± 0.2
KSC251J	4.1 / 7.0	300,000	0.5 ± 0.2
KSC321J	1.6 / 2.4	300,000	0.2 +0.3 / 0
KSC341J	2.25 / 3.75	300,000	0.2 +0.3 / 0
KSC351J	4.0 / 6.0	100,000	0.25 +0.3 / 0
KSC401J 50SH	0.82 / 1.38	1,000,000	0.3 ± 0.15
KSC411J 70SH	1.05 / 1.75	1,000,000	0.35 ± 0.20
KSC421J 70SH	1.25 / 2.12	300,000	0.5 ± 0.25
KSC422J 70SH	1.25 / 2.12	1,000,000	0.5 ± 0.25
KSC441J 70SH	3.0 / 5.0	300,000	0.75 ± 0.25
KSC442J 70SH	3.0 / 5.0	1,000,000	0.75 ± 0.25
KSC621J	1.0 / 1.65	300,000	0.5 ± 0.2
KSC641J	2.25 / 3.75	300,000	0.5 ± 0.2
KSC421V	1.4 / 2.2	300,000	0.375 ± 0.225
KSC621V	1.1 / 1.9	100,000	0.5 ± 0.2
KSC721 J	1.7 / 2.8	300,000	0.3 ± 0.15
KSC741J	2.9 / 4.9	300,000	0.4 ± 0.20

A detect switch version is available KSC4D1J and KSC4D1G.
Please see Detect chapter.
KSC vertical series have an IP40 sealing level.

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 mΩ
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 silver or gold plated over a nickel barrier, the use of slightly activated flux is suitable.
– Soldering on double wave machine for vertical versions: soldering time < 5 sec.
– Cleaning according to typical washing processes.
– Infrared Reflow Soldering in accordance with IEC 61760-1.

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. KSC7 in reels of 1,000 pieces. KSCV in boxes of 500 pieces. Dimensions of reels according to EIA RS481 or IEC 2863. External diameter 330 mm ± 2 mm.

NOTE: Specifications listed above are for switches with standard options.
For information on specific and custom switches, consult Customer Service Center.

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.

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.

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

<p>Actuator</p> <p>1 Without, H=2,5 mm 2 Soft, H=3,5 mm 3 Hard, H=3,5 mm 4 Soft, H=5,2 mm 6 Hard, H=7,7 mm 7 Soft, H=4,3 mm</p>	<p>Operating Force</p> <p>0 1.2 N (120 grams) 1 1.4 N (140 grams) 2 1.6 N / 1.7 N * (160 grams)/(170 grams) 4 3 N / 4 N * (300 grams)/(400 grams) 5 5.5 N (550 grams) 6 4.5 N / 8.0 (450 grams)/(800 grams)</p>	<p>Contact Material</p> <p>1 Silver 2 Silver long life 3 Gold 4 Gold long life</p>	<p>Termination</p> <p>J J bend G Gull wing V Right angle (available in KSC421V and KSC621V versions only)</p>	<p>Rubber Hardness Indication</p> <p>50 Shore** 70 Shore***</p>	<p>LFS Lead free compatible, silver plated. LFG Lead free compatible, gold plated.</p>
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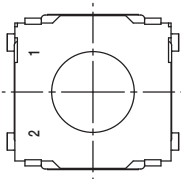
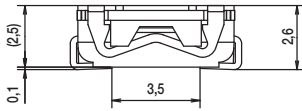


Dimensions are shown: Inch (mm)
Specifications and dimensions subject to change

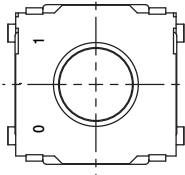
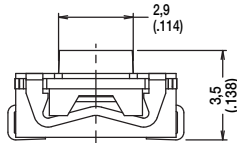
KSC Series Sealed Tact Switch for SMT

ACTUATOR

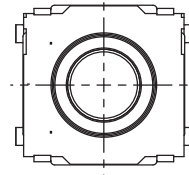
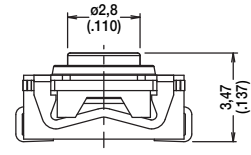
KSC1 WITHOUT, 2,5 mm HIGH



KSC2 SOFT, 3,5 mm HIGH



KSC3 HARD, 3,5 mm HIGH

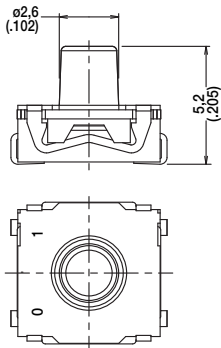


B

Tactile Switches

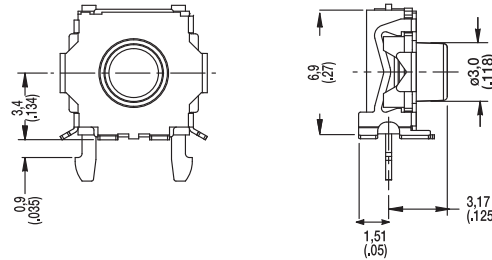
KSC4 SOFT, 5,2 mm HIGH

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

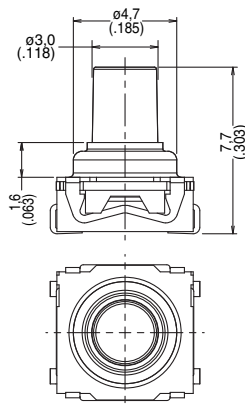


KSC4 KSC421V ONLY

NOTE: KSC421V requires metalized holds for simultaneous reflow soldering of switch terminals and bracket terminals.

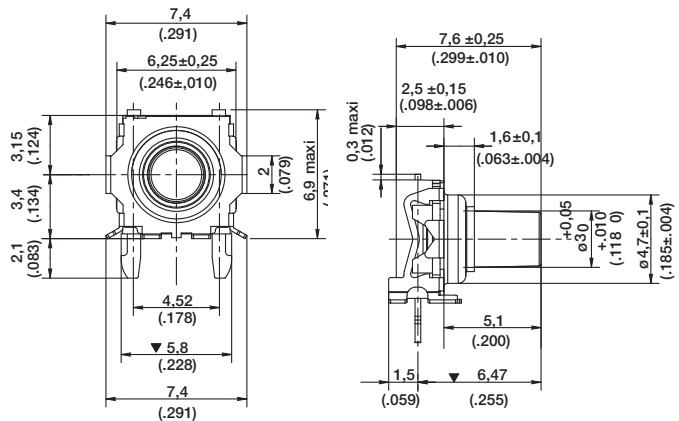


KSC6 HARD, 7,7 mm HIGH



KSC6 KSC621V ONLY

NOTE: KSC621V requires metalized holds for simultaneous reflow soldering of switch terminals and bracket terminals.

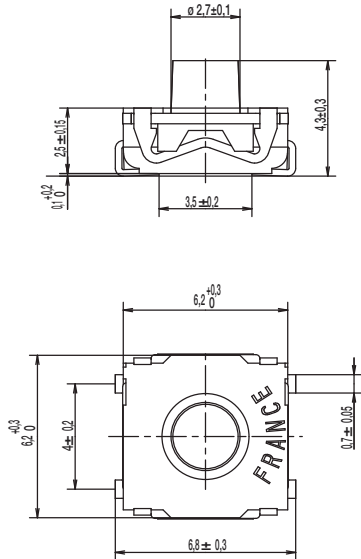


Dimensions are shown: Inch (mm)
Specifications and dimensions subject to change



KSC Series Sealed Tact Switch for SMT

KSC7 SOFT, 4,3 mm HIGH



B

Tactile Switches

OPERATING FORCE



OPTION CODE	OPERATING FORCE
0	1.2 N (120 grams)
1	1.4 N (140 grams)
2	1.6 N / 1.7 N (160/170 grams)
4	3 N / 3.5 N (300/350 grams)
5	5.5 N (550 grams)

CONTACT MATERIAL



OPTION CODE	MATERIAL
1	SILVER
3	GOLD



First Angle
Projection

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

KSC Series Sealed Tact Switch for SMT

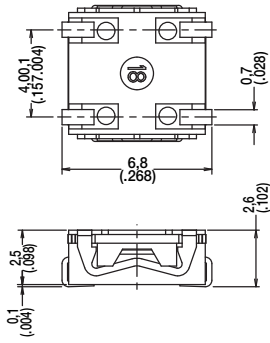
TERMINATION



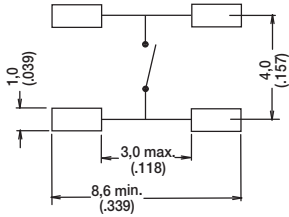
Tactile Switches

B

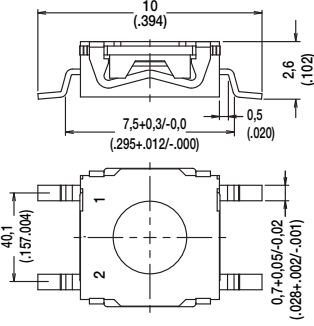
J BEND



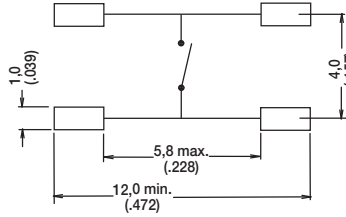
PAD LAYOUT



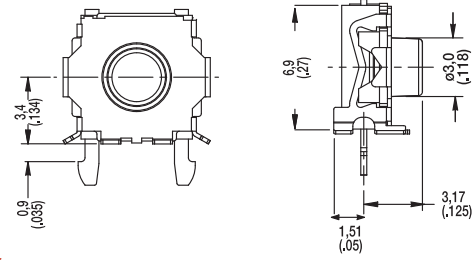
G GULLWING



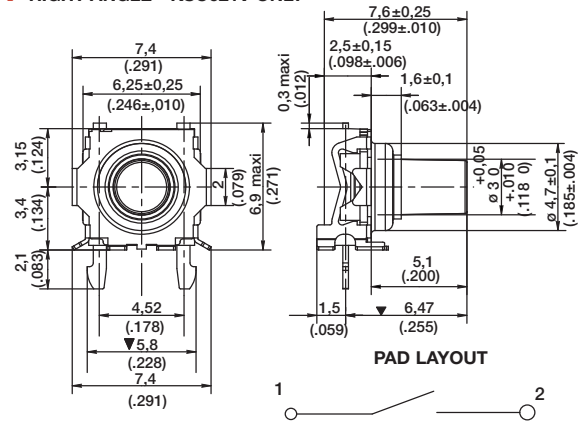
PAD LAYOUT



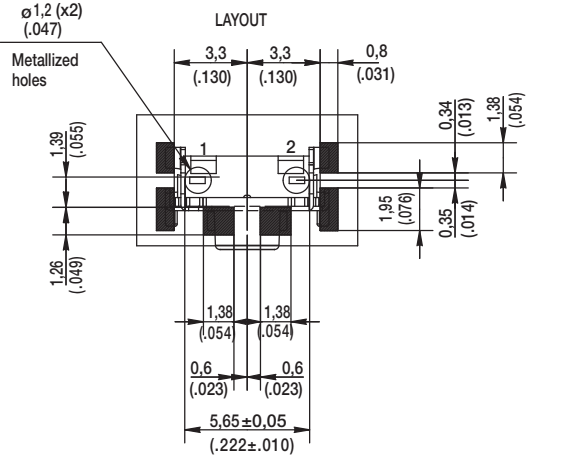
V RIGHT ANGLE - KSC421V ONLY



V RIGHT ANGLE - KSC621V ONLY



PAD LAYOUT



First Angle
Projection

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

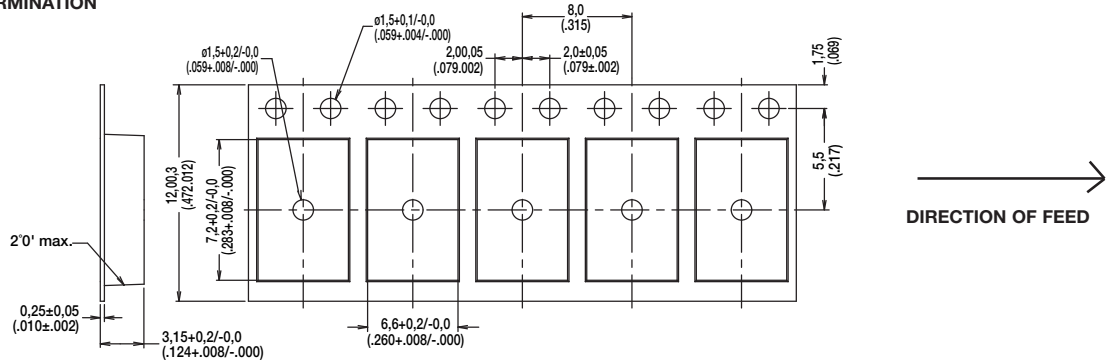
www.ck-components.com



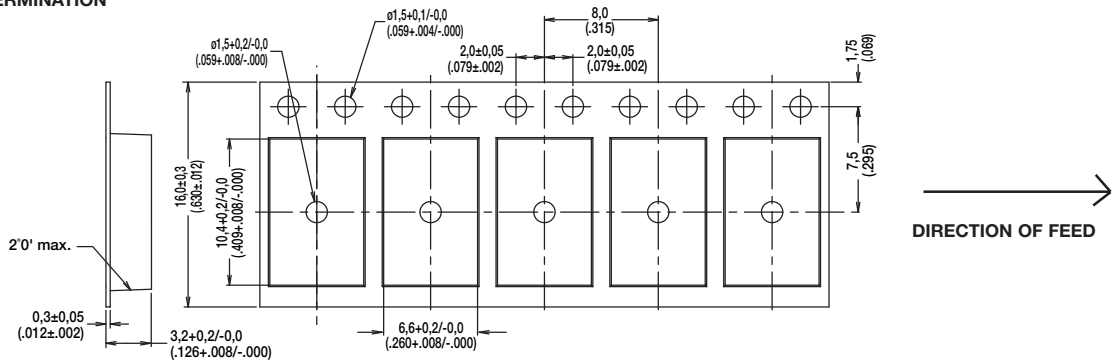
KSC Series Sealed Tact Switch for SMT

TAPE & REEL

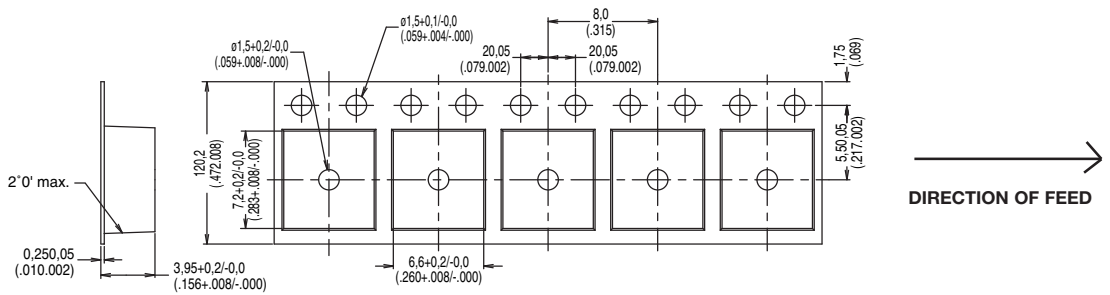
FOR KSC1 J TERMINATION



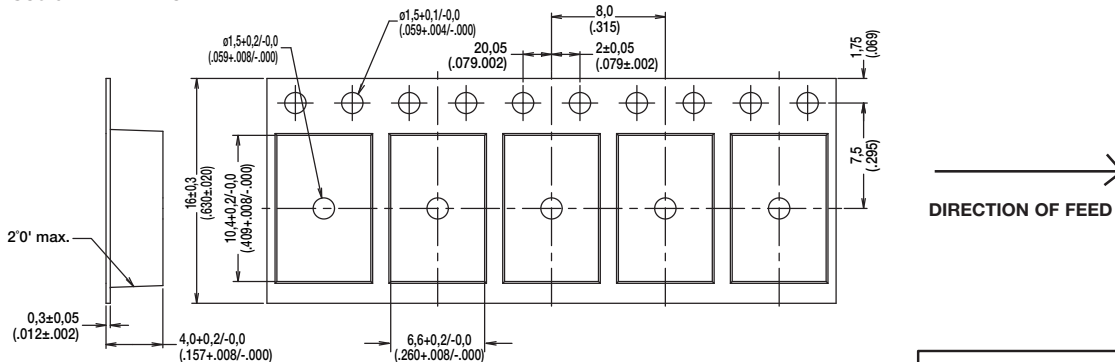
FOR KSC1 G TERMINATION



FOR KSC2 & KSC3 J TERMINATION



FOR KSC2 & KSC3 G TERMINATION



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

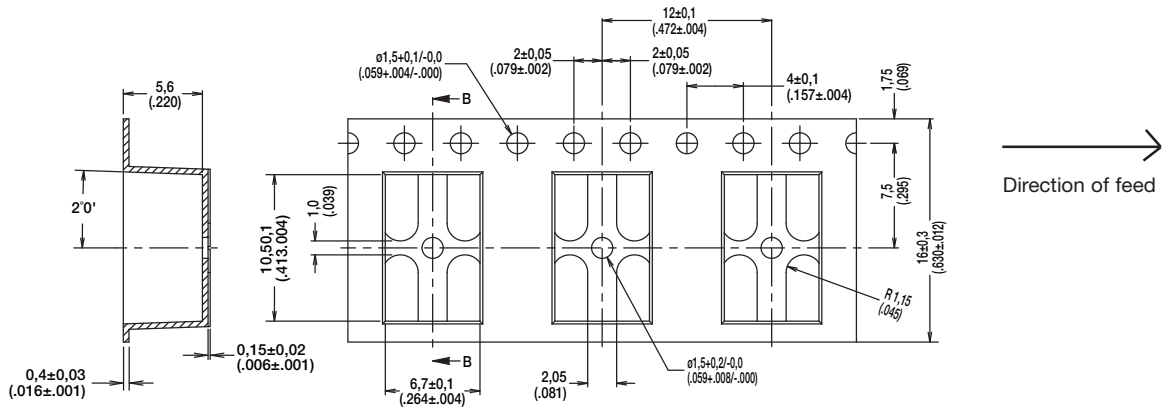


Tactile Switches

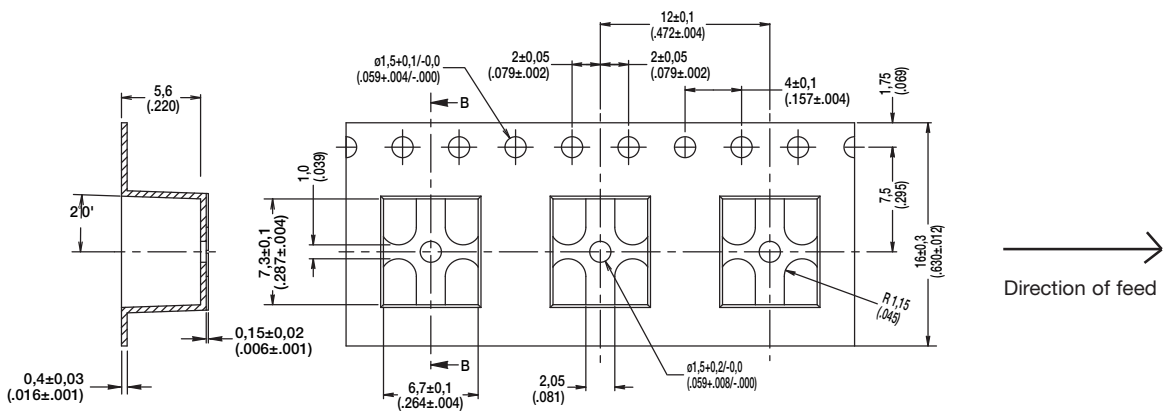
KSC Series Sealed Tact Switch for SMT

TAPE & REEL

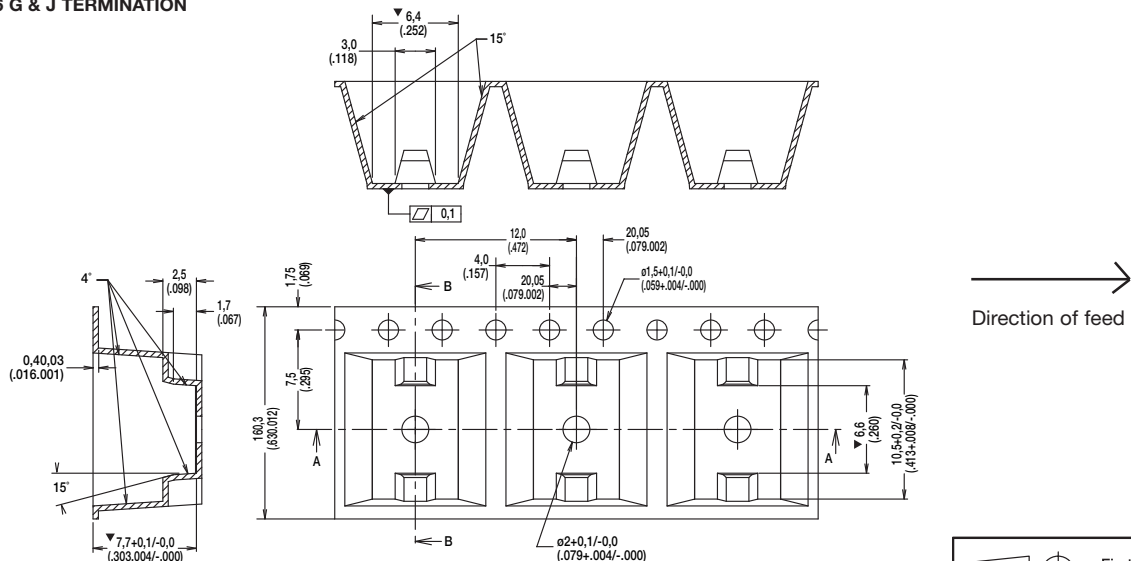
FOR KSC4 FOR G TERMINATION



FOR KSC4 FOR J TERMINATION



FOR KSC6 G & J TERMINATION



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



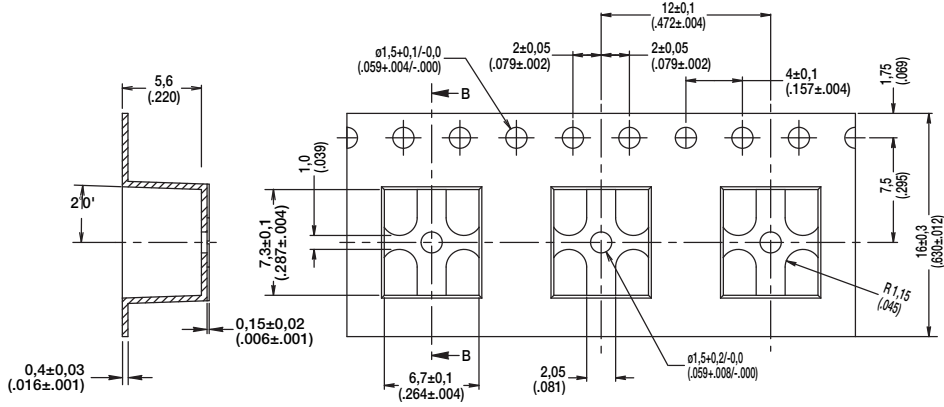
B

Tactile Switches

KSC Series Sealed Tact Switch for SMT

TAPE & REEL

FOR KSC7 FOR J TERMINATION



B

Tactile Switches



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

KSC5 Series

Tact Switch with Rocker Option for SMT



Features/Benefits

- Can be actuated from either side or top
- Silver or Gold plated terminals
- Compatible with automatic insertion machines
- IP 50
- RoHS compliant

Typical Applications

- Automotive
- Computers
- Instrumentation

Tactile Switches

Specification

FUNCTION: Momentary action
 CONTACT ARRANGEMENT: 1 make contact = SPST, N.O.
 TERMINALS: J bend & Gullwing type for SMT

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 mΩ		
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:	-55°C to 85°C	-55°C to 125°C

Process

SOLDERING: Infrared reflow in accordance with IEC61760-1

Packaging

Switches delivered on continuous tape & reels of 1,000 pieces, 330 (12.992) external diameter. Other dimensions according to EIA-RS-481 standard.

NOTE:

Specifications listed above are for switches with standard options. For information on specific and custom switches, consult Customer Service Center.

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.

Mechanical

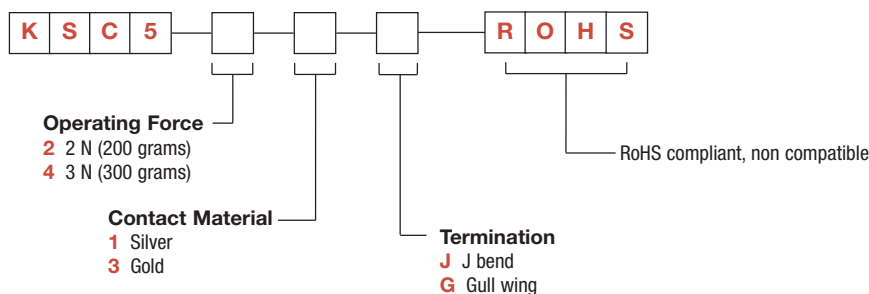
Type	Operating force axial FA N (grams) ±25%	Operating force lateral FL N (grams) ±30%	Travel to make axial (mm)	Travel to make lateral (mm)	Life expectancy cycles, axial	Life expectancy cycles, lateral
KSC521G	1,5 - 2,5	1,2 - 2,6	0,25 ± 0,15	0,5 ± 0,25	100,000	10,000
KSC541G	2,25 - 3,75	1,8 - 3,8	0,25 ± 0,15	0,5 ± 0,25	100,000	10,000

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.



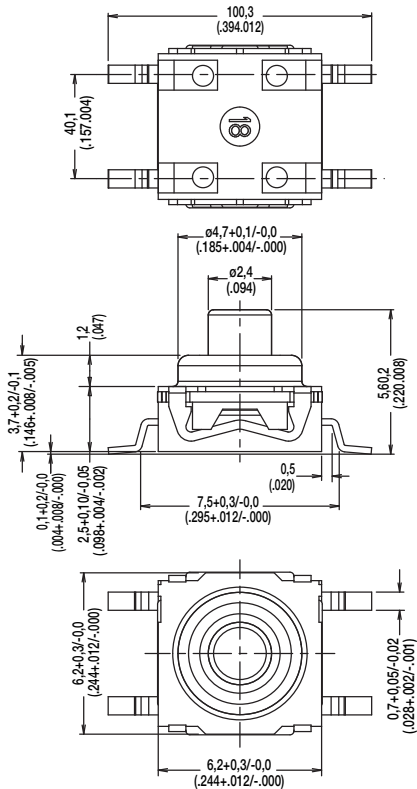
Dimensions are shown: Inch (mm)
 Specifications and dimensions subject to change

KSC5 Series Tact Switch with Rocker Option for SMT

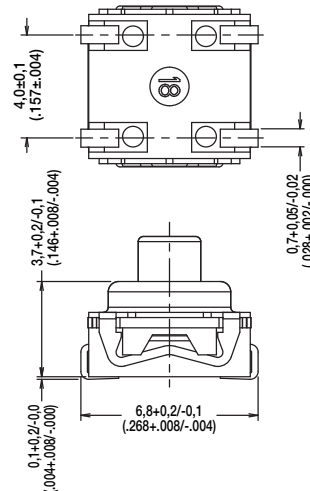
KSC5



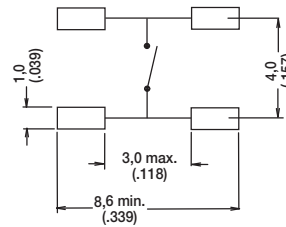
KSC521G



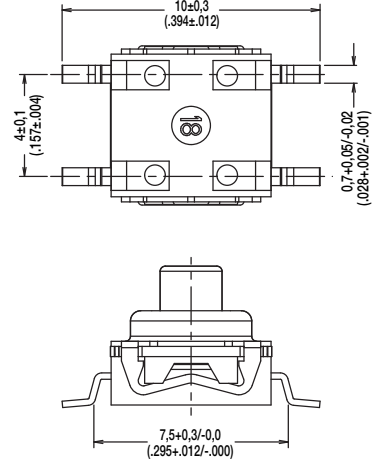
J BEND



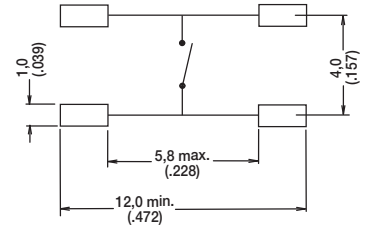
PAD LAYOUT



G GULLWING

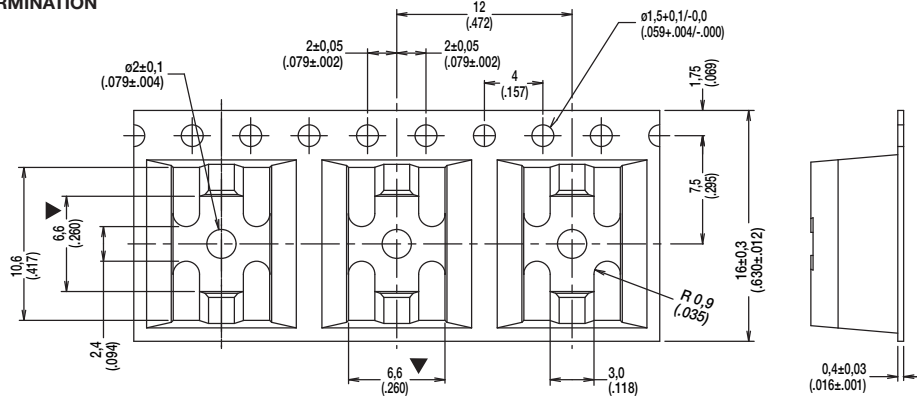


PAD LAYOUT



TAPE & REEL

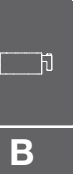
FOR KSC5 G & J TERMINATION



DIRECTION OF FEED



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



Tactile Switches

KSC-ST Series Sound Tunable Tact Switch

Features/Benefits

- Positive tactile feeling
- Range of 2 sound intensity
- J or G terminations
- Tape & reel
- IP 67

Typical Applications

- Automotive
- Industrial electronics
- Keyboards
- Medical equipment



B

Tactile Switches

Specification

FUNCTION: momentary action
CONTACT ARRANGEMENT: 1 make contact = SPST, N.O.
TERMINALS: J bend & Gullwing type for SMT

Mechanical

Type	Sound Intensity *	Operating Force	Travel (mm)
KSC441J ST1 LFS	>50dBA	3.4 ± 1N	0.7 ± 0.25
KSC441J ST2 LFS	<30dBA	3.4 ± 1N	0.35 ± 0.20
KSC461J ST1 LFS	>50dBA	4.5/8.0N	1.0 ± 0.3
KSC461J ST2 LFS	<30dBA	4.5/8.0N	0.5 ± 0.2

OPERATING LIFE:

300,000 cycles for KSC44 and KSC461JST2LFS
100,000 cycles for KSC461JST1LFS

- (*) Sound intensity is given as a reference, switch isolated, outside any additive part such as PCB, button, etc. The sound intensity after product integration may change according to the surrounding parts. For other features, please refer to the KSC Series data sheets.

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 mΩ
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:

- Cleaning according to typical washing processes.
- Infrared Reflow Soldering in accordance with IEC 61760-1.

Packaging

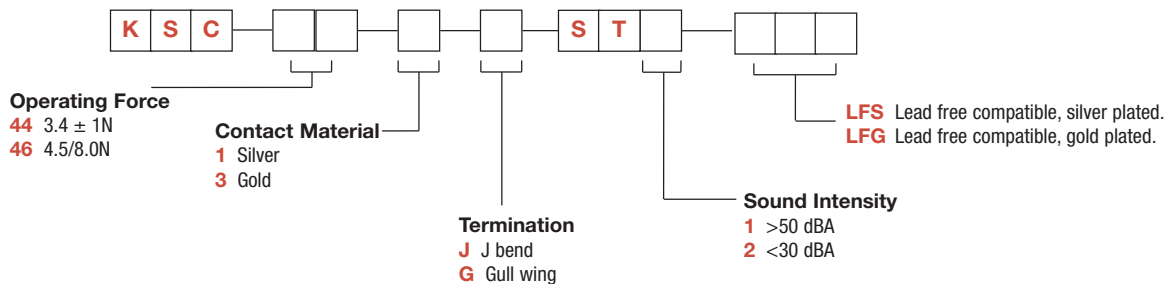
In reels of 1,000 pieces.
Dimensions of reels according to EIA RS481 or IEC 2863.
External diameter 330 mm ± 2 mm.

NOTE: Specifications listed above are for switches with standard options.
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.

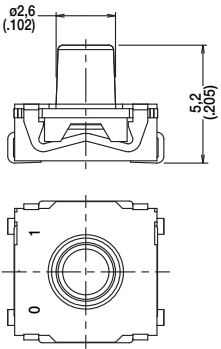
For any part number different from those listed above, please consult your local representative.



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

KSC-ST Series Sound Tunable Tact Switch

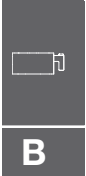
ACTUATOR



CONTACT MATERIAL

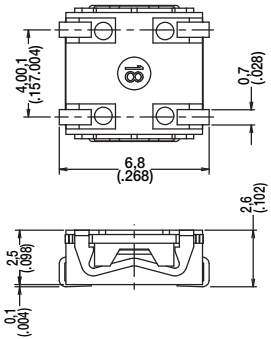
OPTION CODE	MATERIAL
1	SILVER
3	GOLD

TERMINATION

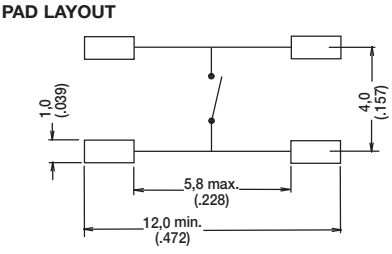
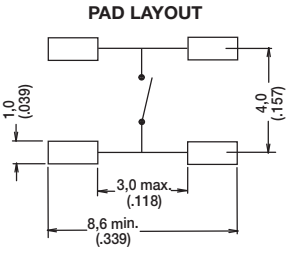
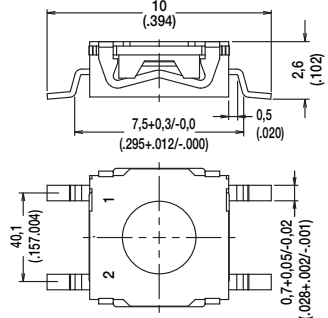


Tactile Switches

J J BEND



G GULLWING



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



KSC-ST Series Sound Tunable Tact Switch

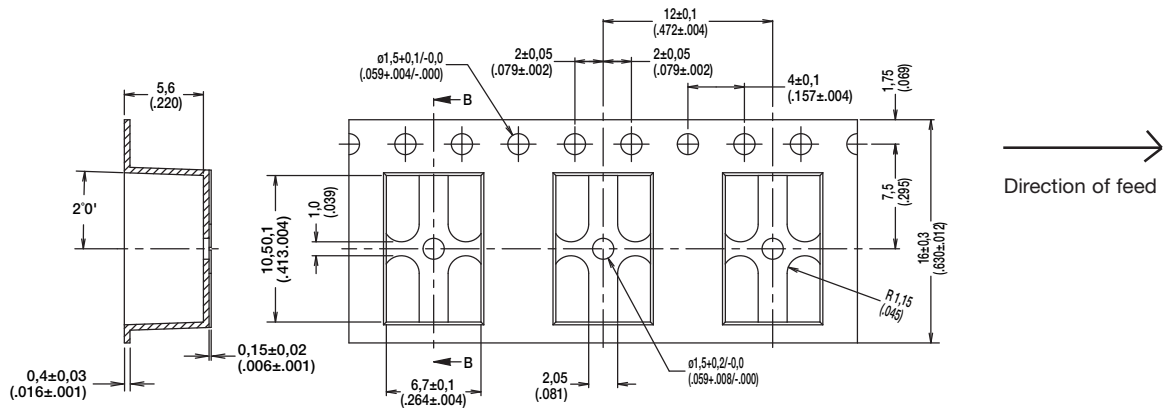
SOUND INTENSITY



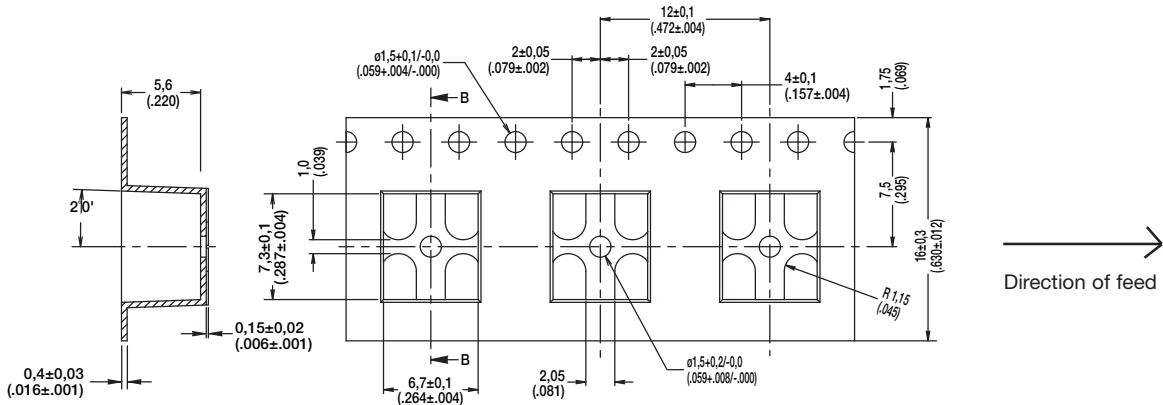
OPTION CODE	SOUND INTENSITY
ST1	>50 dBA
ST2	<30 dBA

TAPE & REEL

FOR KSC4 FOR G TERMINATION



FOR KSC4 FOR J TERMINATION



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



B

Tactile Switches

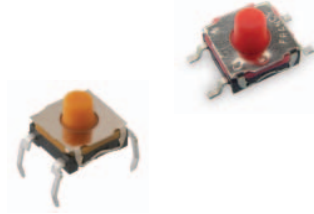
KSx Outdoor Series Sealed Tact Switch for Severe Environmental Conditions

Features/Benefits

- High corrosion resistance
- Compliant with ISO16750-4
- Various versions available
- SMT or Through-hole
- IP 67

Typical Applications

- Automotive door handles
- Automotive door locks
- Industrial electronics



Specification

FUNCTION: momentary action
 CONTACT ARRANGEMENT: 1 make contact = SPST, N.O.
 TERMINALS: J bend & Gullwing type for SMT or through-hole
 NOTE: other configurations in terms of electrical types or termination is available by request.

Mechanical

Type	Operating Force FA (Newtons) Min. Max.	Operating Life Operations	Travel (mm)
KSC445J70SHLFG	3.0/5.0	300,000*	0.75 ± 0.25
KSFI0M85270SHLFT	3.0/5.0	300,000*	0.75 ± 0.25

* Version for 1,000,000 operations available by request.
 For any other data, please refer to the KSAMKII/KSLMKII and KSC data sheets.

Electrical

MAXIMUM POWER: 0.2 VA
 MINIMUM/MAXIMUM VOLTAGE: 20 mV / 32 VDC
 MINIMUM/MAXIMUM CURRENT: 1 mA /10 mA
 DIELECTRIC STRENGTH (50 Hz, 1 min.): 250 V
 CONTACT RESISTANCE: < 100 mΩ
 INSULATION RESISTANCE (100 V): > 10⁹ Ω
 BOUNCE TIME: < 1 ms

Environmental

Compliant with ISO 16750-4
 Temperature class code: K; -40°C/125°C
 Corrosion class code: D temperature cycling 100 cycles; 40°C/125°C
 Ice water thermal shock
 Exposure and working to/under salt spray
 Cyclic and constant damp heat

Process

SOLDERING: Depending on the application, this component is suited to the following methods:
 - Terminals tin or gold plated over a nickel barrier, the use of slightly activated flux is suitable.
 - Soldering on double wave machine for vertical versions: soldering time < 5 sec.
 - Cleaning according to typical washing processes.
 - Infrared Reflow Soldering in accordance with IEC 61760-1.
 POTTING: Terminations have to be protected with polymer resin which does not allow moisture absorption. Resin level has to be lower than the top plate.

Packaging

KSC2 are delivered on continuous tape and reels of 2,000 pieces, KSC4 in reels of 1,000 pieces. KSFI MKII in boxes of 500 pieces (manual insertion) or tubes of 65 pieces (automatic insertion). Dimensions of reels according to EIA RS481 or IEC 2863. External diameter 330 mm ± 2 mm.

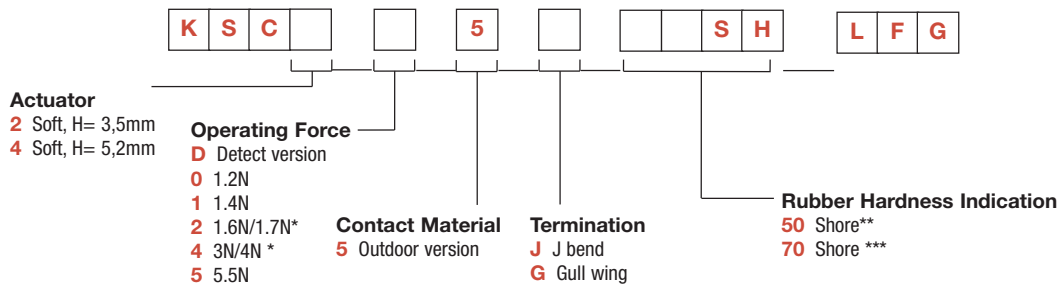
NOTE: Specifications listed above are for switches with standard options.
 For information on specific and custom switches, consult Customer Service Center.

How To Order

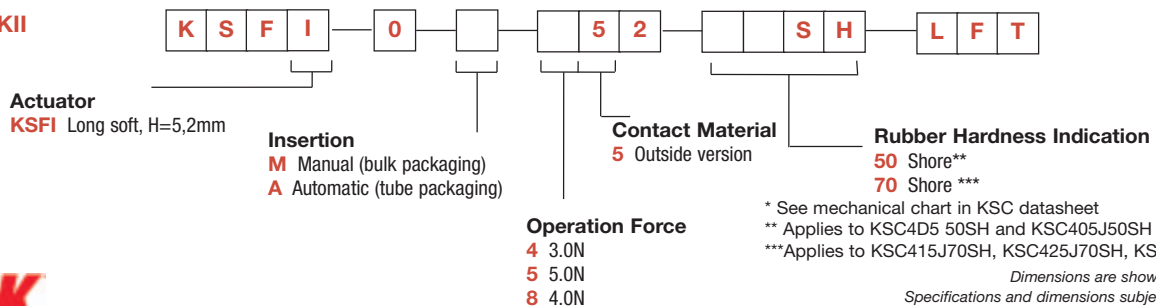
Our easy build-a-switch concept allows you to mix and match options to create the switch you need. To order, select desired option from each category and place it in the appropriate box.

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

FOR KSC



KSFI MKII



* See mechanical chart in KSC datasheet
 ** Applies to KSC4D5 50SH and KSC405J50SH only
 ***Applies to KSC415J70SH, KSC425J70SH, KSC445J70SH

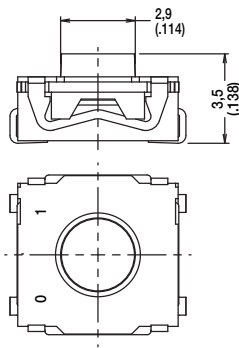
Dimensions are shown: Inch (mm)
 Specifications and dimensions subject to change



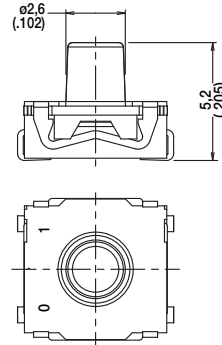
KSx Outdoor Series Sealed Tact Switch for Severe Environmental Conditions

ACTUATOR

KSC2 SOFT, 3,5 mm HIGH



KSC4 SOFT, 5,2 mm HIGH

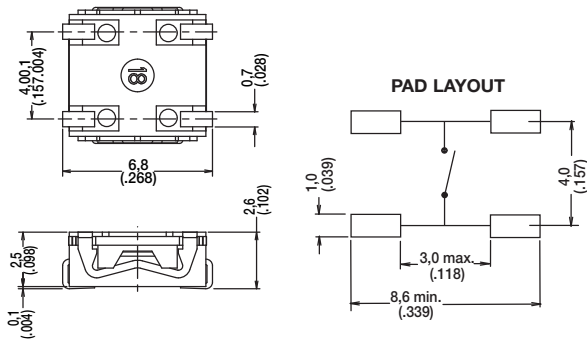


Tactile Switches

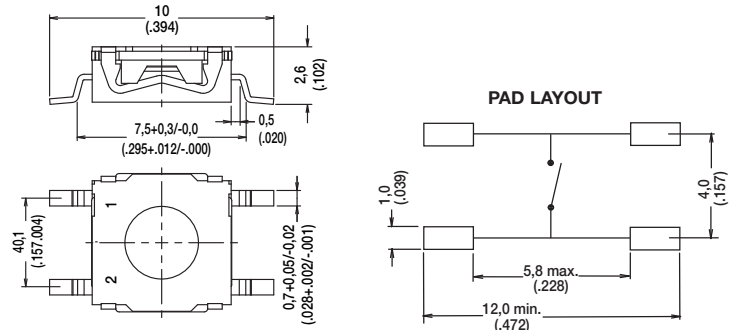
B

TERMINATION

J J BEND



G GULLWING

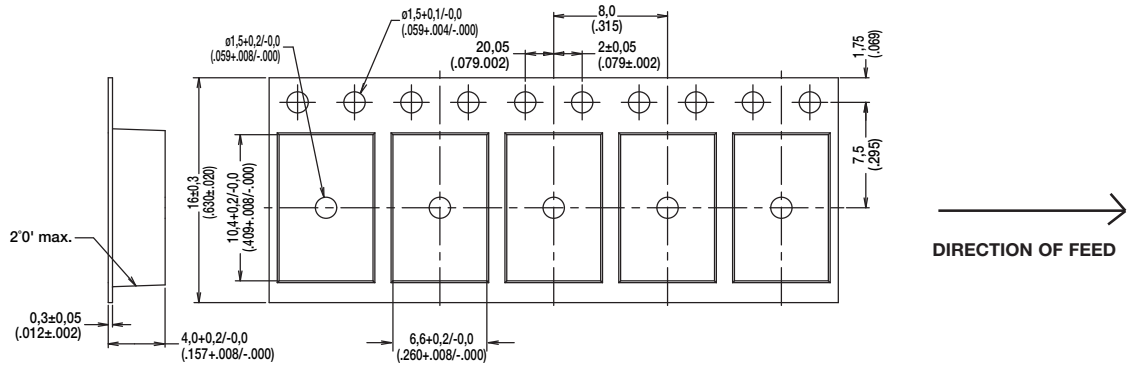


Dimensions are shown: Inch (mm)
Specifications and dimensions subject to change

KSx Outdoor Series Sealed Tact Switch for Severe Environmental Conditions

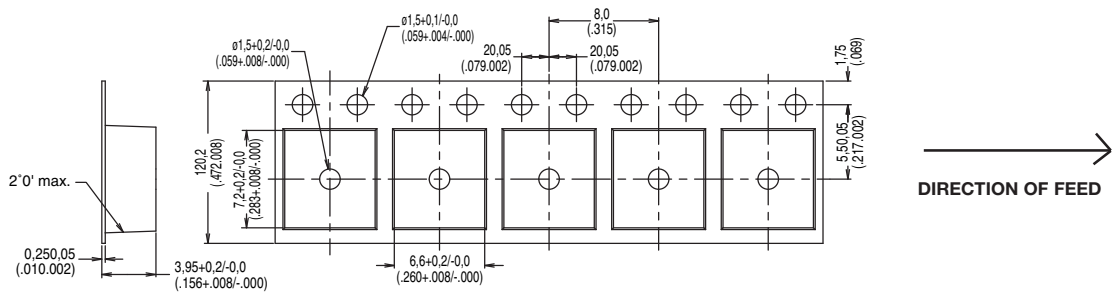
TAPE & REEL

FOR KSC2 FOR G TERMINATION



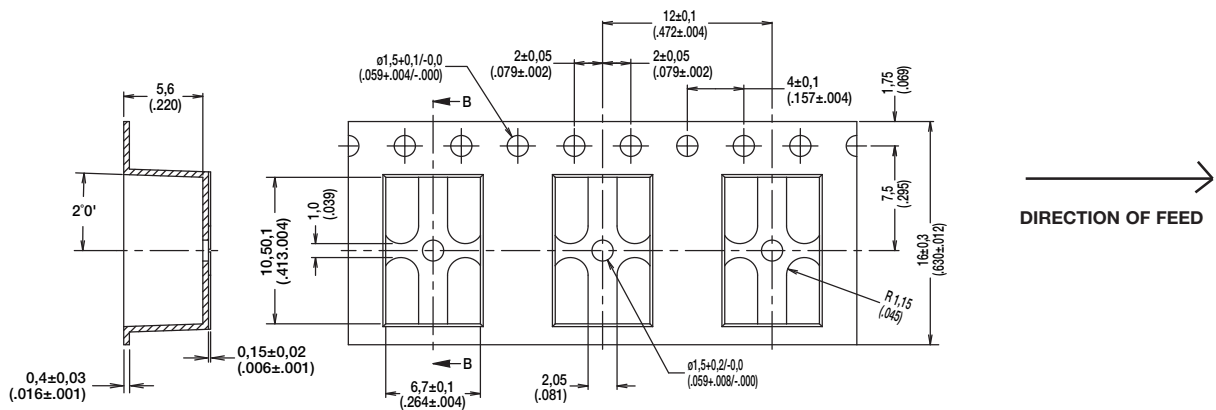
DIRECTION OF FEED

FOR KSC2 FOR J TERMINATION



DIRECTION OF FEED

FOR KSC4 FOR G TERMINATION



DIRECTION OF FEED



Tactile Switches



First Angle
Projection

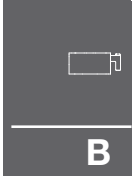
Dimensions are shown: Inch (mm)
Specifications and dimensions subject to change



KSx Outdoor Series Sealed Tact Switch for Severe Environmental Conditions

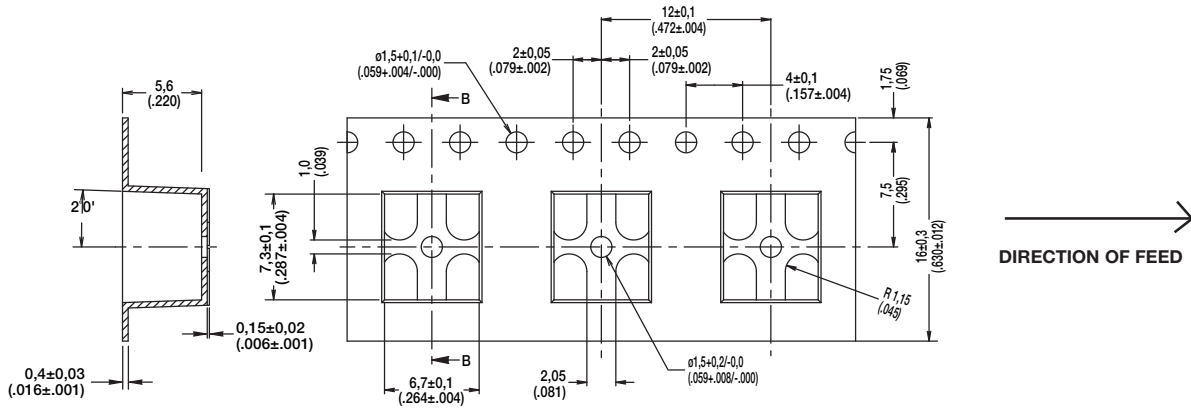
TAPE & REEL

FOR KSC4 FOR J TERMINATION



B

Tactile Switches



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



KT Series Right Angle Sealed Tact Switch for SMT



Features/Benefits

- High shear force with extended bracket
- Easy to pick & place with top plate tab
- Rubber or hard plastic actuator
- Press fit or snap fit caps
- IP 57
- RoHS compliant and compatible

Typical Applications

- Telecommunications
- Computer products
- Instrumentation
- Power supply

Specification

CONTACT ARRANGEMENT: SPST, N.O.
TERMINALS: Gullwing type for SMT

Electrical

CONTACT RATING: 1.0 VA max. @ 32 V AC or DC max.
ELECTRICAL & MECHANICAL LIFE: 100,000 make-and-break cycles at full load.
DIELECTRIC STRENGTH: 250 Vrms min. @ sea level.
CONTACT RESISTANCE: Below 50 mΩ typ. initial @ 2-4 V DC, 100 mA.
INSULATION RESISTANCE: 10⁹ Ω min.

Environmental

OPERATING TEMPERATURE: -40°C to 90°C

Process

SOLDERABILITY: Per MIL-STD-202F method 208D, or EIA RS-186E method 9 (1 hour steam aging).
DEGREE OF PROTECTION: IP57; protection against harmful dust deposits, full-scale voltage protection.

Packaging

Switches supplied in anti-static tape and reels per EIA 481-2. Tape and cover strip are conductive for use near statically sensitive components.

NOTE: Specifications listed above are for switches with standard options.
For information on specific and custom switches, consult Customer Service Center.

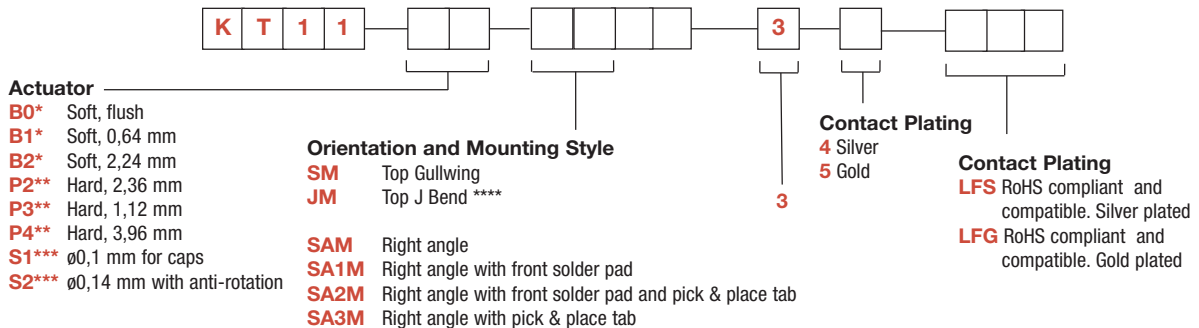
How To Order

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.

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



* B0, B1 & B2 available with A & A1 mounting bracket only.

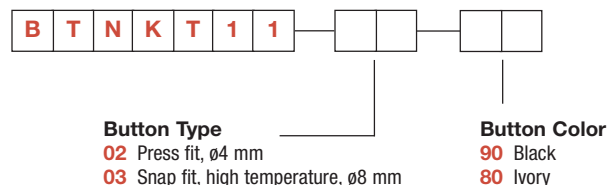
** P4 available with A1 & A2 mounting bracket only.

*** S1 & S2 available with A1 & A2 mounting bracket only.

**** JM available with B0, B1, B2, P2, P3, P4 without mounting bracket.

BUTTON

To order buttons in bulk



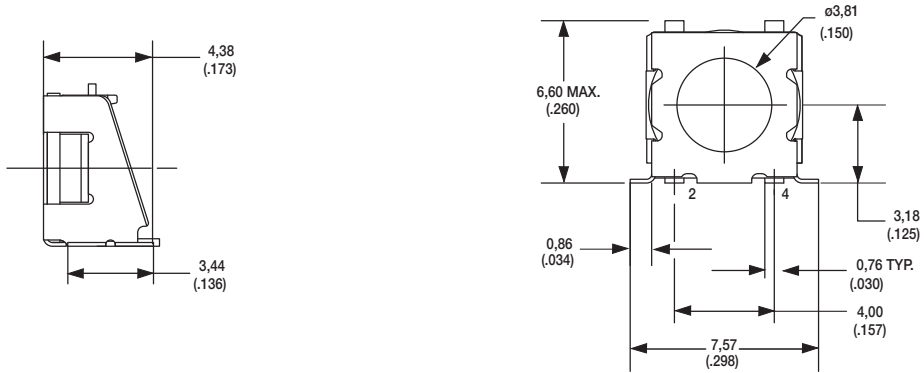
Dimensions are shown: Inch (mm)
Specifications and dimensions subject to change



KT Series Right Angle Sealed Tact Switch for SMT

SERIES 

KT11

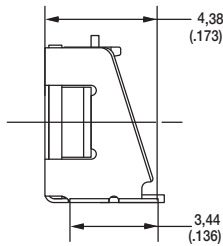


Tactile Switches

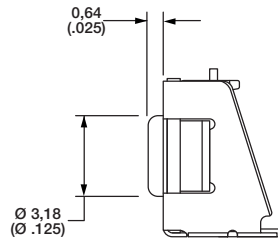
B

ACTUATOR 

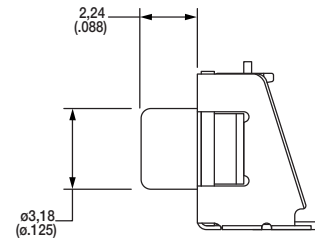
B0 SOFT, FLUSH*



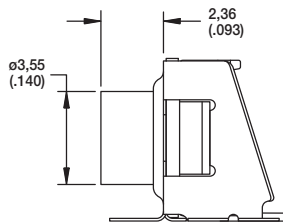
B1 SOFT, 0,64 mm*



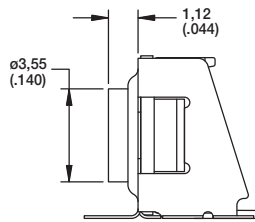
B2 SOFT, 2,24 mm*



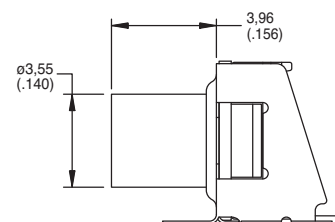
P2 HARD, 2,36 mm



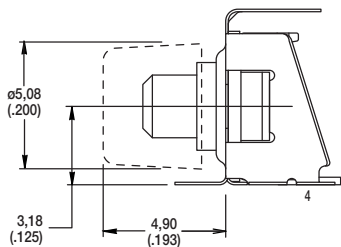
P3 HARD, 1,12 mm



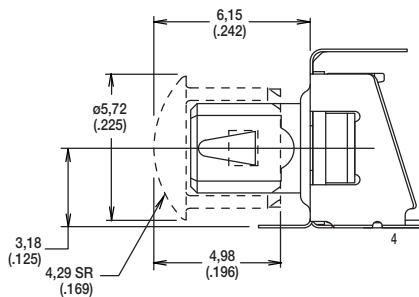
P4 HARD, 3,96 mm**



S1 $\phi 0,1$ mm FOR PRESS FIT CAPS***



S2 $\phi 0,14$ mm FOR SNAP FIT CAPS***



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



KT Series Right Angle Sealed Tact Switch

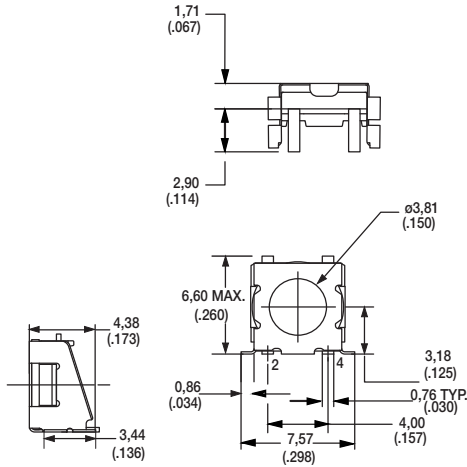
ORIENTATION & MOUNTING STYLE



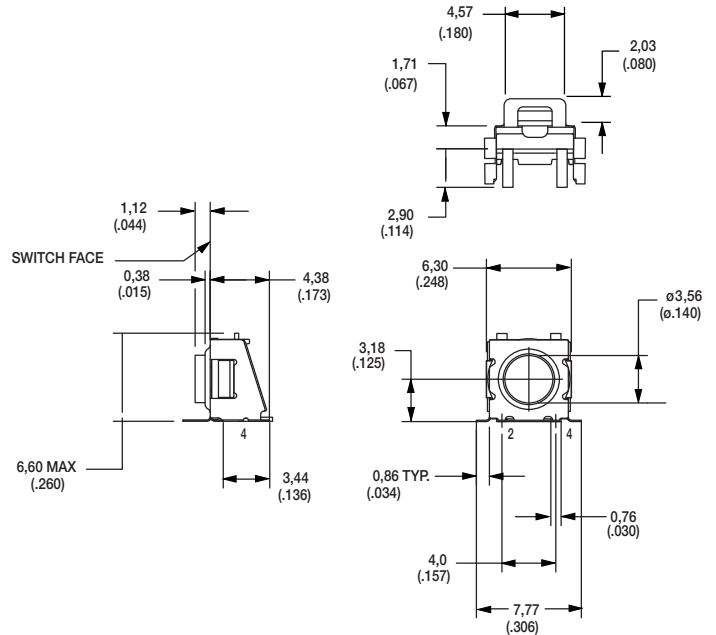
SM TOP GULLWING

JM TOP J BEND

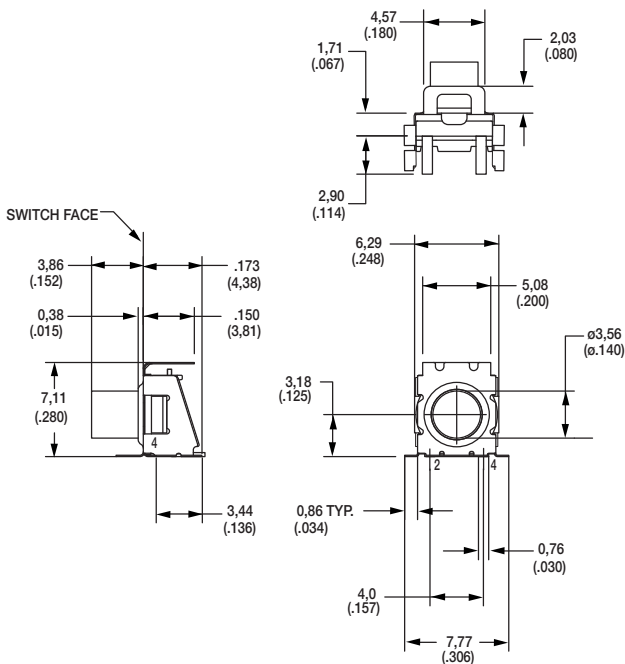
SAM RIGHT ANGLE



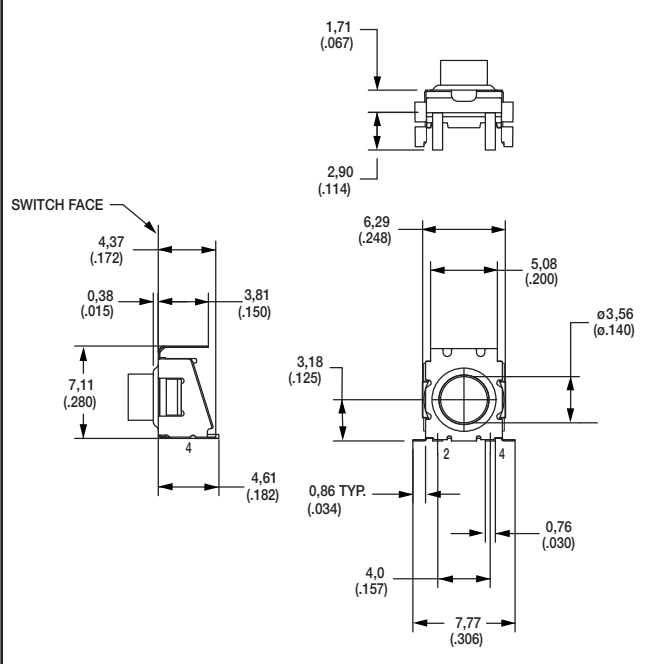
SA1M RIGHT ANGLE WITH FRONT SOLDER PAD



SA2M RIGHT ANGLE WITH FRONT SOLDER PAD AND PICK & PLACE TAB



SA3M RIGHT ANGLE WITH PICK & PLACE TAB



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

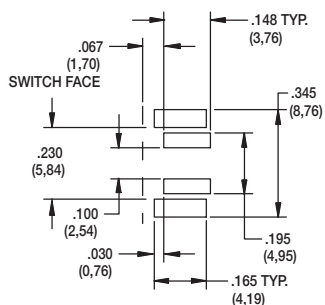


Tactile Switches

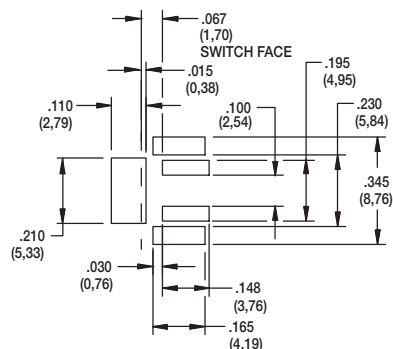
KT Series Right Angle Sealed Tact Switch

MOUNTING BRACKET

PAD LAYOUT
SAM & SA3M MOUNTING BRACKET



PAD LAYOUT
SA1M & SA2M MOUNTING BRACKET



CONTACT PLATING

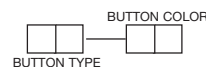
OPTION CODE	MATERIAL
4	SILVER
5	GOLD

BUTTON

BUTTON

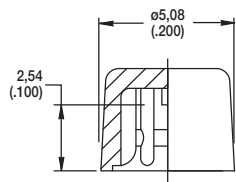
To order buttons in bulk

B T N K T 1 1

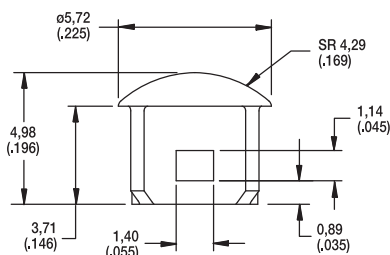


Button Type

02 PRESS FIT, Ø4 mm



03 SNAP FIT, HIGH TEMPERATURE, Ø8 mm



Button Color

OPTION CODE	BUTTON COLOR
90	BLACK
80	IVORY



First Angle
Projection

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



www.ck-components.com

KST Series Long Travel Tact Switch for SMT

Features/Benefits

- Rubber actuator
- Silver contact material
- J or G terminals
- Compatible with pick and place machines
- IP 40 sealed
- RoHS compliant and compatible

Typical Applications

- Front panel
- Car dashboards
- Telephone set
- Instrumentation



B

Tactile Switches

Specification

FUNCTION: Momentary
CONTACT ARRANGEMENT: 1 make contact = SPST N.O.
TERMINALS: J Bend or Gullwing type for SMT

Mechanical

MAXIMUM APPLIED FORCE: 40 N (400 grams)

Type	Operating force Fa N (grams)±30%	Operating life (operations)	Travel to make
KST221G / J	1,6-3,2	100,000	1,3+0,3/-0,2
KST241G / J	2,45-4,55	100,000	1,3+0,3/-0,2

Packaging

Switches are delivered on continuous tape and reels of 1,000 pieces, 330 (12.992) external diameter. Other dimensions according to EIA-RS-481 standard.

Electrical

	Silver	Gold
SWITCHING POWER MAX.:	1.0 VA	0.50 VA
MAXIMUM POWER:	1.0 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: $< 100\text{m}\Omega$		
INSULATION RESISTANCE: Initial measurement: $\geq 1\text{G}\Omega$		
After damp heat: $\geq 10\text{M}\Omega$		
BOUNCE TIME: < 5 ms		

Environmental

OPERATING TEMPERATURE:	-40°C to +85°C (Silver)
	-40°C to +125°C (Gold)
STORAGE TEMPERATURE:	-40°C to +85°C (Silver)
	-40°C to +125°C (Gold)

Process

Compatible with the lead free reflow soldering process.

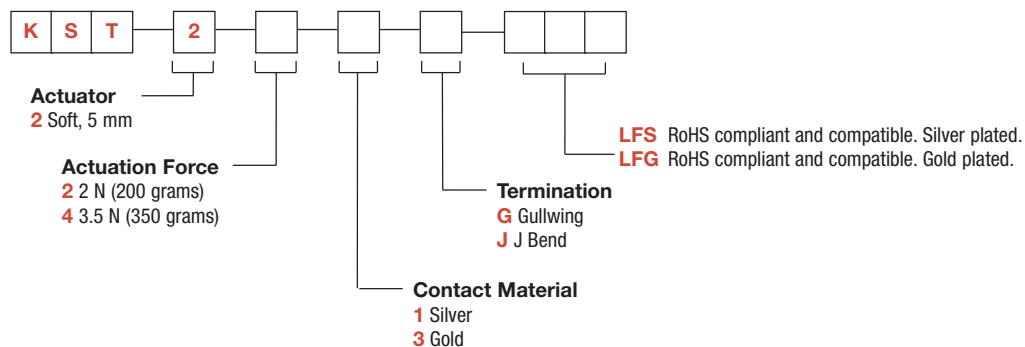
NOTE: Specifications listed above are for switches with standard options.
For information on specific and custom switches, consult Customer Service Center.

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.

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.

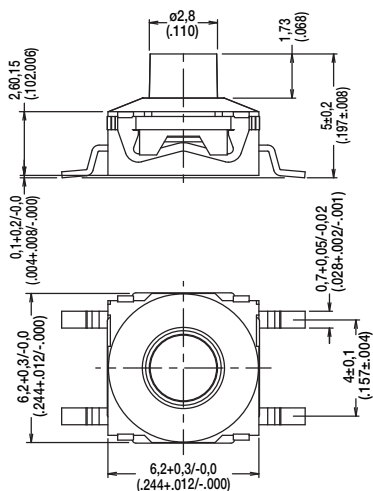


KST Series Long Travel Tact Switch for SMT

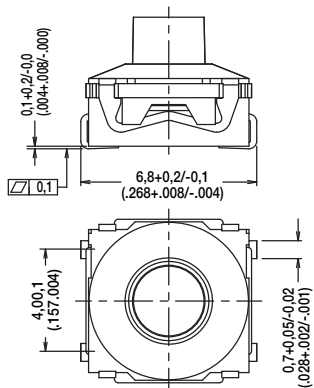
B

Tactile Switches

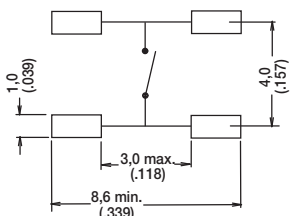
KST



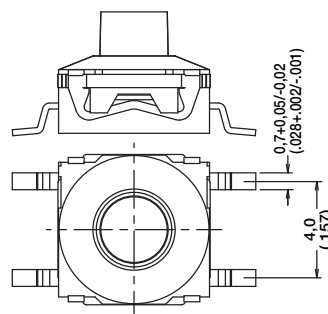
J J BEND



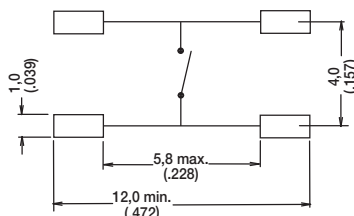
PAD LAYOUT



G GULLWING

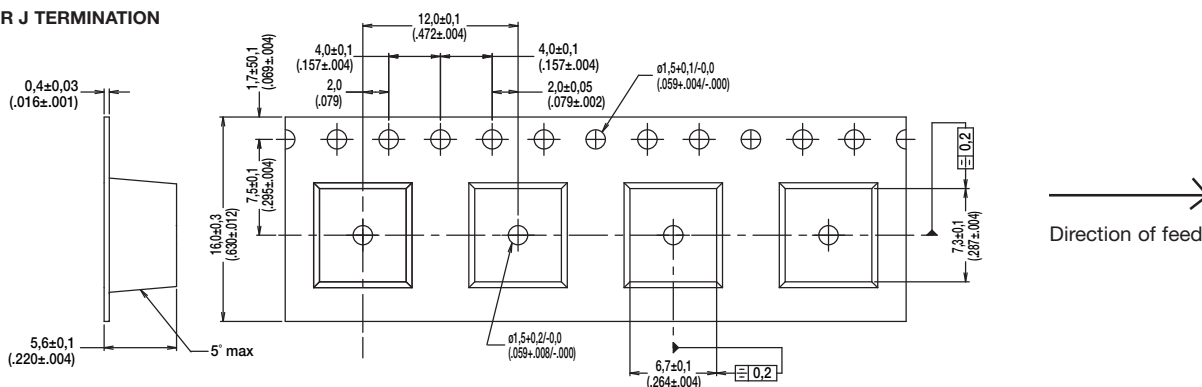


PAD LAYOUT

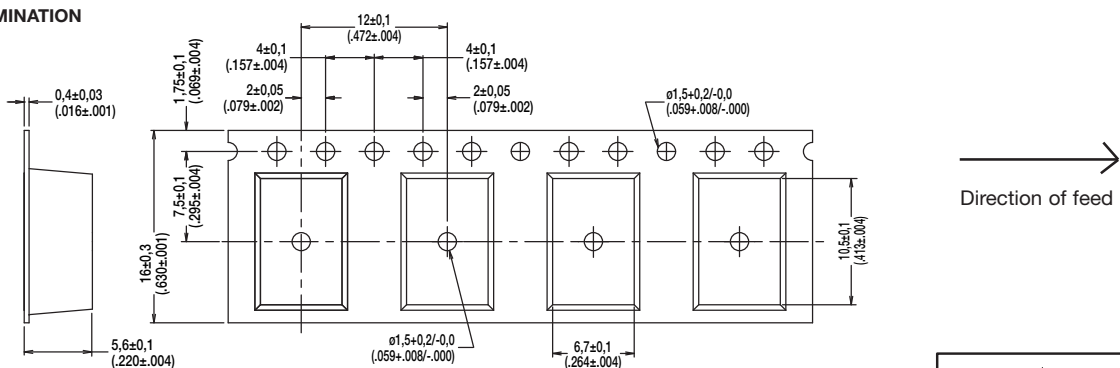


TAPE & REEL

FOR J TERMINATION



FOR G TERMINATION



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



K5AT Lighted SMT Tact Switch

Features

- High bright LED's
- Gold plated dome contact offering superior contact reliability in time
- Excellent ergonomics: sharp tactile feel and audible click
- Reduced space usage on board "2 in 1"
- 40 N overload
- Tape and reel
- RoHS compliant and compatible

Typical Applications

- Application requiring illumination
- Server, storage
- Network infrastructure
- Telecom
- Medical



B

Tactile Switches

Specification

FUNCTION: momentary action
CONTACT ARRANGEMENT: Normally Open
TERMINALS: SMT with positioning pegs as an option

Mechanical

Type	Operating force FA ¹ Newtons (grams)	Operating life (operations)	Travel (total travel) mm(mm)
K5AT WH 43GP	4.0 (400)	100,000	0,5 (0.8)

¹ Tolerances of operating force FA is ± 25%.

Packaging

180 or 900 pieces per reel
Reel dim. 180mm or 380mm

Electrical

POWER MIN/MAX: 0.02VA / 1.0VA
VOLTAGE MIN/MAX: 20mVdc – 32 Vdc
CURRENT MIN/MAX: 0.1mA – 100mA
CONTACT RESISTANCE: <100m Ω
INSULATION RESISTANCE: >1G Ω initial, >10M Ω after damp heat
BOUNCE TIME: <10ms

Environmental

OPERATING TEMPERATURE: -40°C to 125°C
STORAGE TEMPERATURE: -55°C to 125°C
RELATIVE HUMIDITY: 90 to 96% according to NF EN 60068-2-30
PROTECTION: dust protection and flux tight (IP 40)
OVERLOAD: 40N min

Process

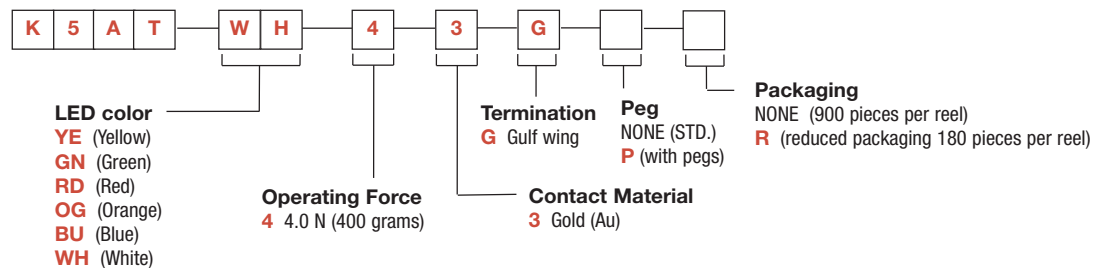
SOLDERING: Compatible with the lead free soldering profile.
No washing

Materials

LEAD FREE
CONTACTS: Au over Ni
SOLDERING: Au over Ni
HOUSING: Thermoplastic UL94 VO
LED: type P-LCC-2

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.

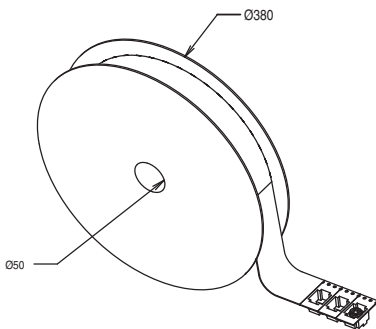
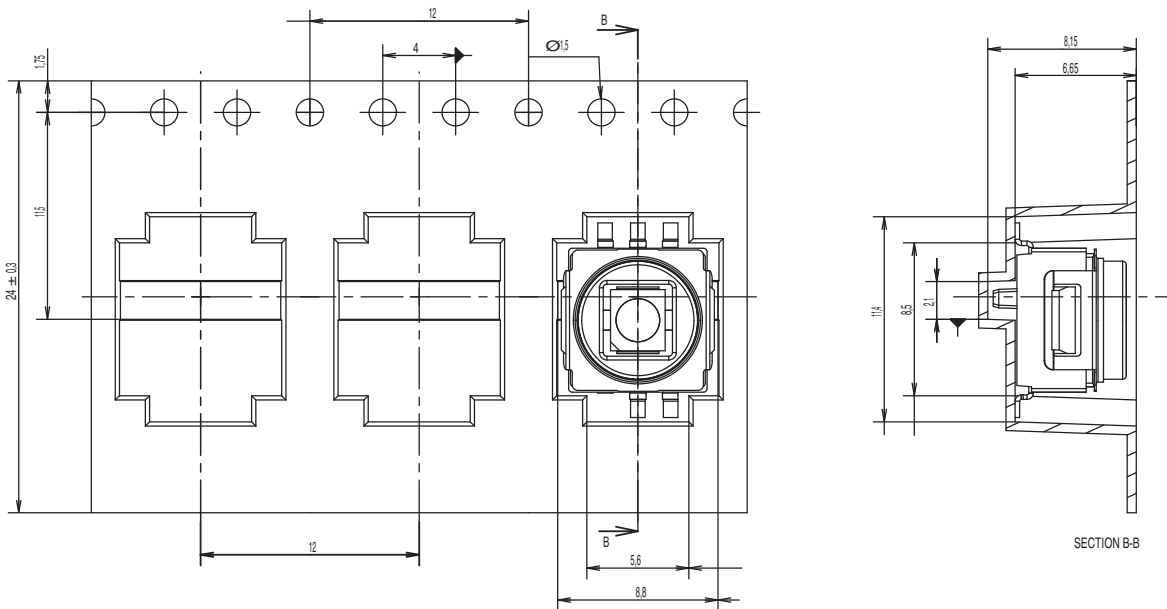
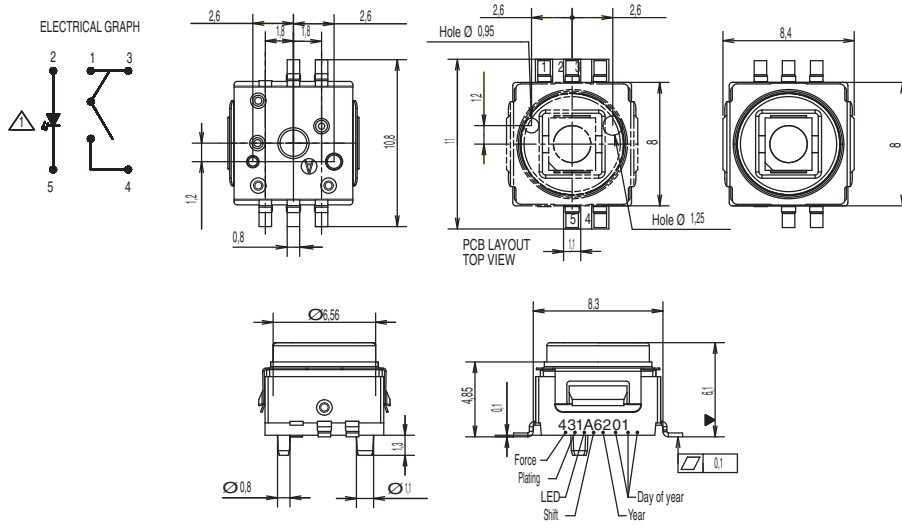


K5AT Lighted SMT Tact Switch

K5AT

Tactile Switches

B



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



K5V Right Angle Lighted SMT Tact Switch

Features

- Gold plated dome contact SPST/SPDT
- Excellent ergonomics
- High bright leds
- Reduced space usage on board
- 40 N overload
- Tape and reel
- RoHS compliant and compatible

Typical Applications

- When backlighting and switch are required to be a "2 in 1" component
- The dome contact secures a superior contact reliability in time
- The ergonomics of K5V provides a long travel, a sharp tactile feel and an audible click
- Server, storage, automotive, network infrastructure, medical



B

Tactile Switches

Specification

FUNCTION: momentary action

CONTACT ARRANGEMENT: Normally Open + Normally Closed

TERMINALS: SMT with positioning pegs

Mechanical

Type	Operating force FA ¹ Newtons (grams)	Operating life (operations)	Travel (total travel) mm(mm)
K5V4CL43G	4.0 (400)	25,000	1.2 (2.4)

¹ Tolerances of operating force FA is ± 25%.

Packaging

330 pieces per reel

Reel ø 360mm

Electrical

POWER MIN/MAX: 0.02VA / 1.0VA

VOLTAGE MIN/MAX: 20mVdc – 32 Vdc

CURRENT MIN/MAX: 0.1mA – 100mA

CONTACT RESISTANCE: <150m Ω

INSULATION RESISTANCE: >1G Ω initial, >10M Ω after damp heat

BOUNCE TIME: <5ms

Environmental

OPERATING TEMPERATURE: -40°C to 85°C

STORAGE TEMPERATURE: -50°C to 85°C

RELATIVE HUMIDITY: 90 to 96% according to NF EN 60068-2-30

PROTECTION: dust protection and flux tight

OVERLOAD: 40N min

Process

SOLDERING: Compatible with the lead free soldering profile.
No washing

Materials

LEAD FREE

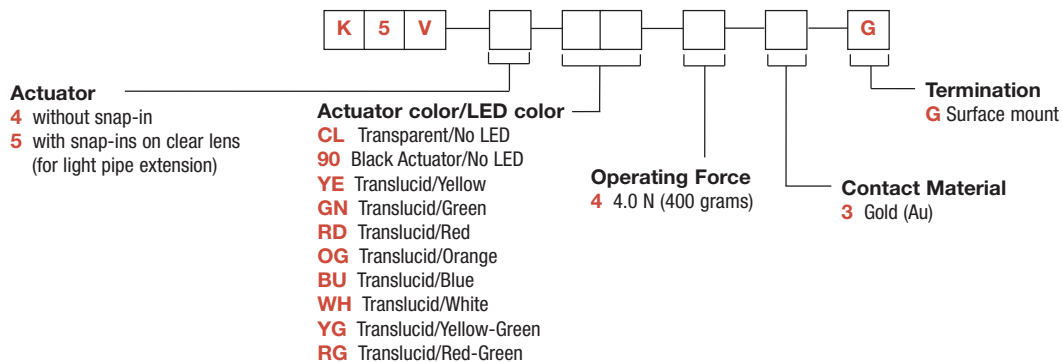
CONTACTS: Au over Ni

SOLDERING: Au over Ni

HOUSING: Thermoplastic UL94 HB

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.



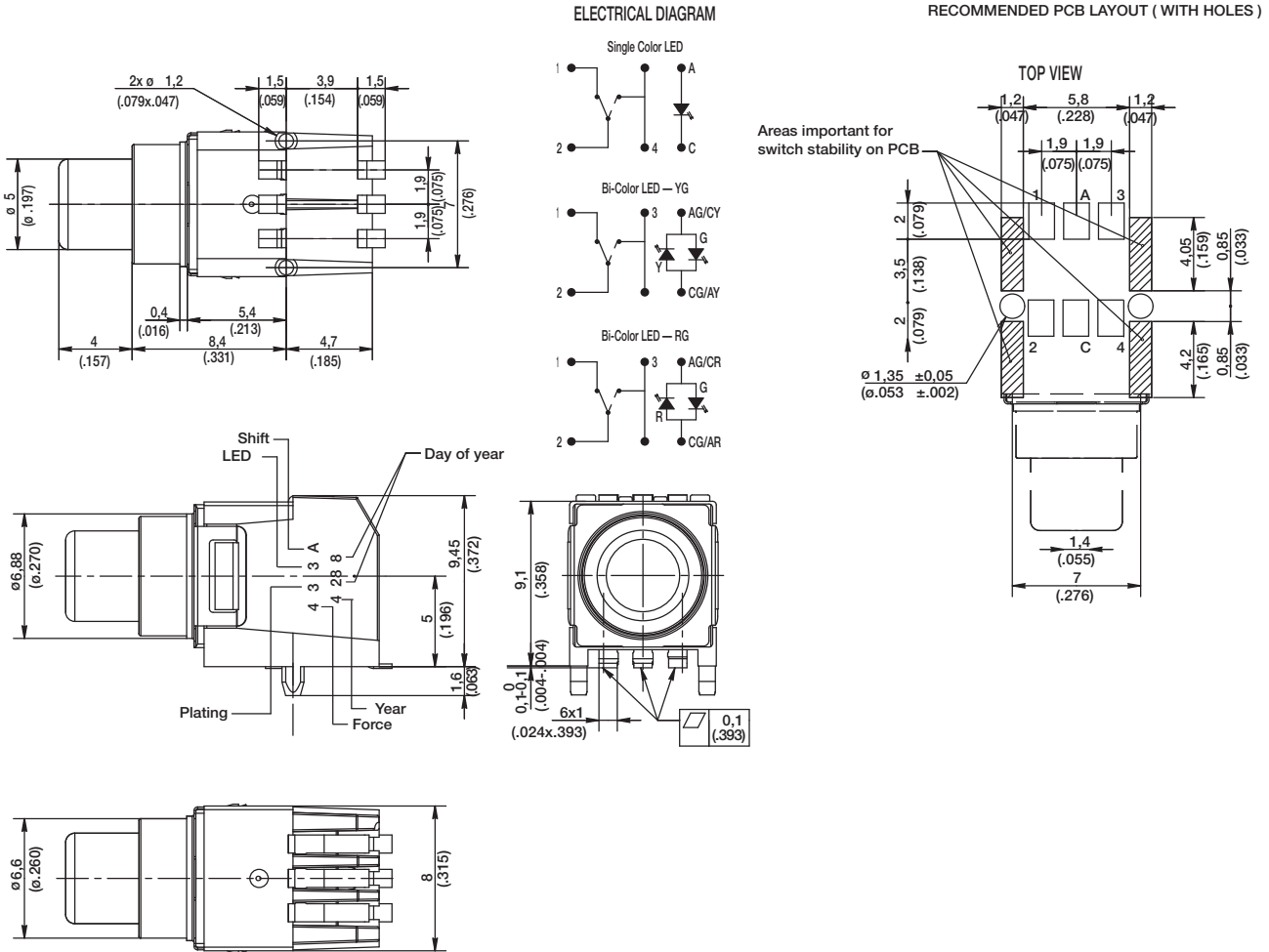
Dimensions are shown: Inch (mm)
Specifications and dimensions subject to change

K5V Right Angle Lighted SMT Tact Switch

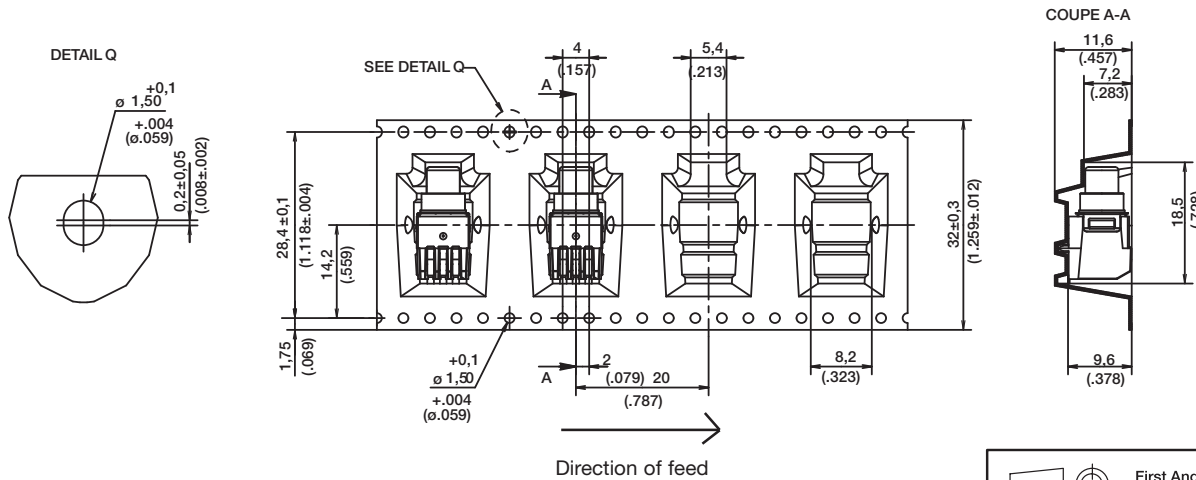
K5V SMT

B

Tactile Switches



TAPE & REEL



First Angle Projection

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



www.ck-components.com

K5V Right Angle Lighted THT Tact Switch

Features

- Gold plated dome contact SPST/SPDT
- Excellent ergonomics
- High bright LEDs
- Reduced space usage on board
- 40 N overload
- RoHS compliant and compatible

Typical Applications

- When backlighting and switch are required to be a "2 in 1" component
- The dome contact secures a superior contact reliability in time
- The ergonomics of K5V provides a long travel, a sharp tactile feel and an audible click
- Server, storage, automotive, network infrastructure, medical



Tactile Switches

Specification

FUNCTION: momentary action
 CONTACT ARRANGEMENT: Normally Open + Normally Closed
 TERMINALS: Through hole terminals with positioning pegs.
 Terminals keying in option

Mechanical

Type	Operating force FA ¹ Newtons (grams)	Operating life (operations)	Travel (total travel) mm(mm)
K5V1CL43T	4.0 (400)	25,000	1.2 (2.4)

¹Tolerances of operating force FA is ± 25%.

Packaging

60 pieces per tray
 300 pieces per box

Electrical

POWER MIN/MAX: 0.02VA / 1.0VA
 VOLTAGE MIN/MAX: 20mVdc – 32 Vdc
 CURRENT MIN/MAX: 0.1mA – 100mA
 CONTACT RESISTANCE: <150m Ω
 INSULATION RESISTANCE: >1G Ω initial, >10M Ω after damp heat
 BOUNCE TIME: <5ms

Environmental

OPERATING TEMPERATURE: -40°C to 85°C
 STORAGE TEMPERATURE: -50°C to 85°C
 RELATIVE HUMIDITY: 90 to 96% according to NF EN 60068-2-30
 PROTECTION: dust protection and flux tight
 OVERLOAD: 40N min

Process

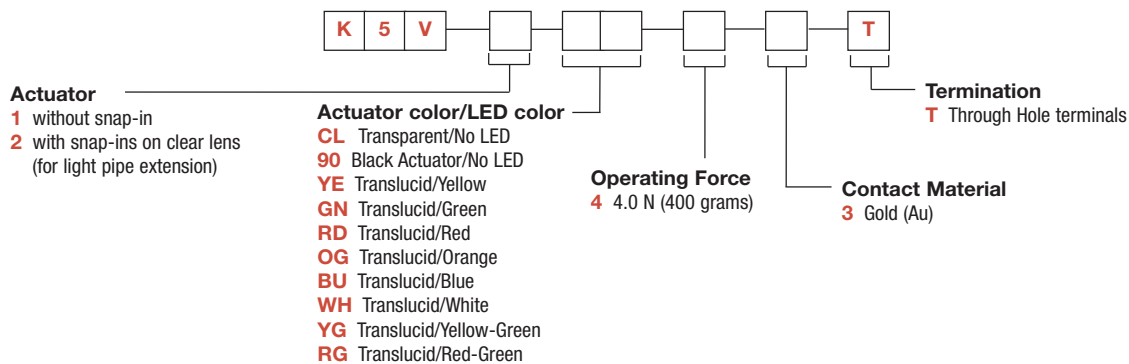
SOLDERING: Compatible with the lead free soldering profile.

Materials

LEAD FREE
 CONTACTS: Au over Ni
 SOLDERING: Au over Ni
 HOUSING: Thermoplastic UL94 HB

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.



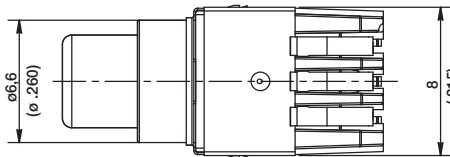
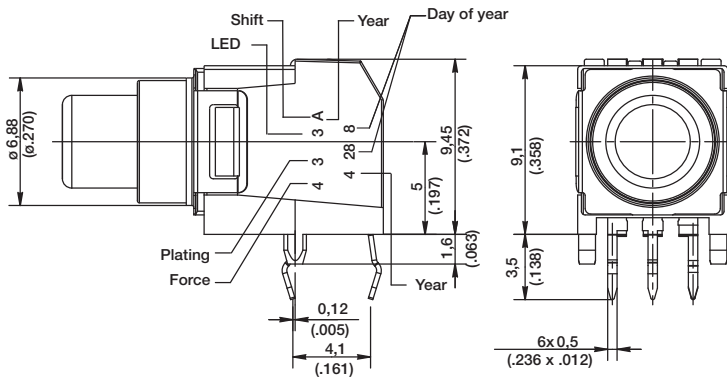
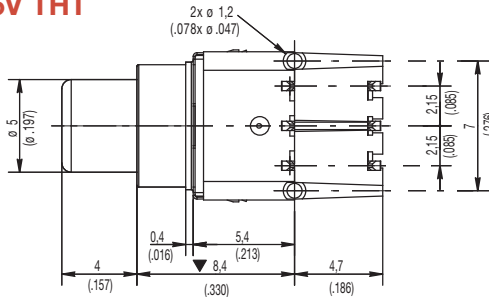
Dimensions are shown: Inch (mm)
 Specifications and dimensions subject to change

K5V Right Angle Lighted THT Tact Switch

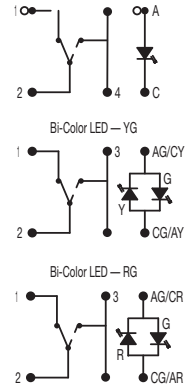
K5V THT

B

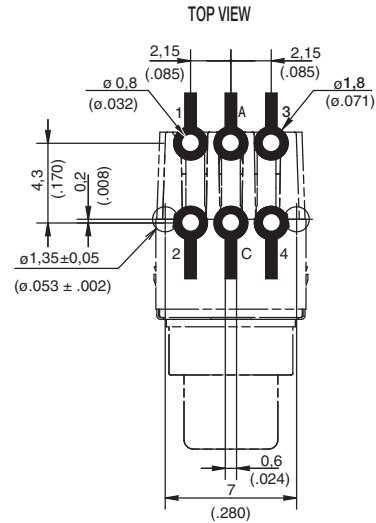
Tactile Switches



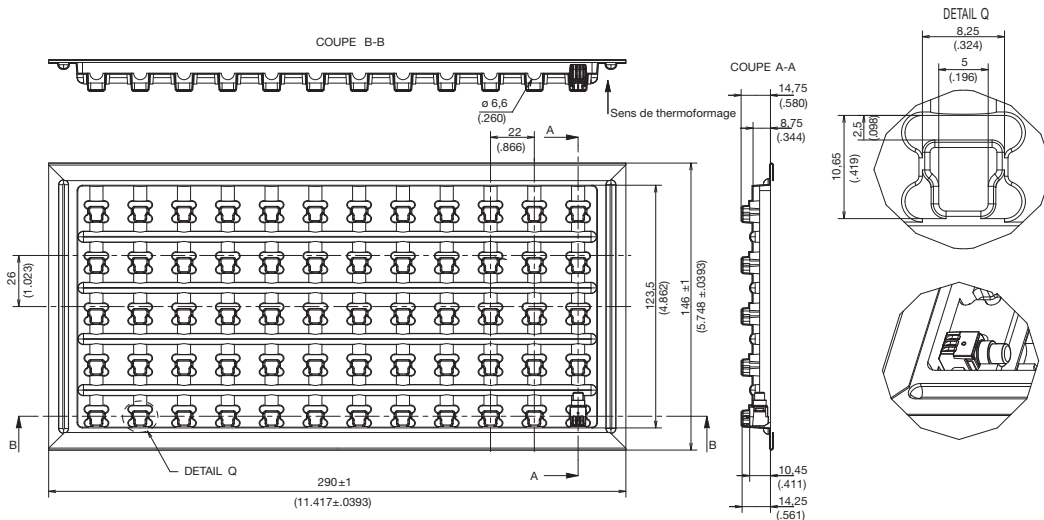
ELECTRICAL DIAGRAM



RECOMMENDED PCB LAYOUT (WITH HOLES)



TRAY



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

www.ck-components.com

K5V Panel Mount Lighted Tact Switch

Features

- Gold plated dome contact SPST/SPDT
- Excellent ergonomics
- High bright leds
- Reduced space usage on panel
- 40 N overload
- RoHS compliant

Typical Applications

- When backlighting and switch are required to be a "2 in 1" component
- The dome contact secures a superior contact reliability in time
- The ergonomics of K5V provides a long travel, a sharp tactile feel and an audible click
- Server, storage, automotive, network infrastructure, medical



B

Tactile Switches

Specification

FUNCTION: momentary action
CONTACT ARRANGEMENT: Normally Open + Normally Closed
BACKLIGHTING: high bright LED, independent terminals
TERMINALS: Solder terminals with wire holes 1.3 x 0.6mm

Mechanical

Type	Operating force FA ¹ Newtons (grams)	Operating life (operations)	Travel (total travel) mm(mm)
K5V1CL43P	4.0 (400)	25,000	1.2 (2.4)

¹ Tolerances of operating force FA is ± 25%.

Packaging

60 pieces per tray
300 pieces per box

Electrical

POWER MIN/MAX: 0.02VA / 1.0VA
VOLTAGE MIN/MAX: 20mVdc – 32 Vdc
CURRENT MIN/MAX: 0.1mA – 100mA
CONTACT RESISTANCE: <150m Ω
INSULATION RESISTANCE: >1GΩ initial, >10M Ωafter damp heat
BOUNCE TIME: <5ms

Environmental

OPERATING TEMPERATURE: -40°C to 85°C
STORAGE TEMPERATURE: -50°C to 85°C
RELATIVE HUMIDITY: 90 to 96% according to NF EN 60068-2-30
PROTECTION: dust protection and flux tight
OVERLOAD: 40N min

Process

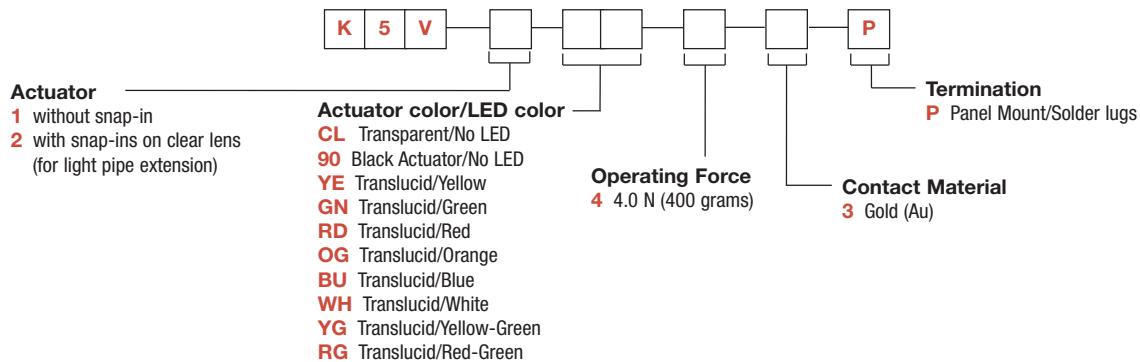
SOLDERING: Low wattage soldering iron (25-50 watts max).
Solder time 3 seconds max. No washing.

Materials

LEAD FREE
CONTACTS: Au over Ni
SOLDERING: Au over Ni
HOUSING: Thermoplastic UL94 HB

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.

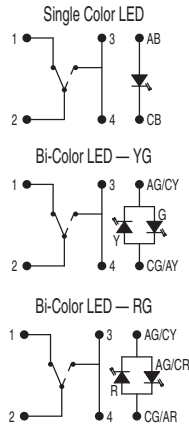


Dimensions are shown: Inch (mm)
Specifications and dimensions subject to change

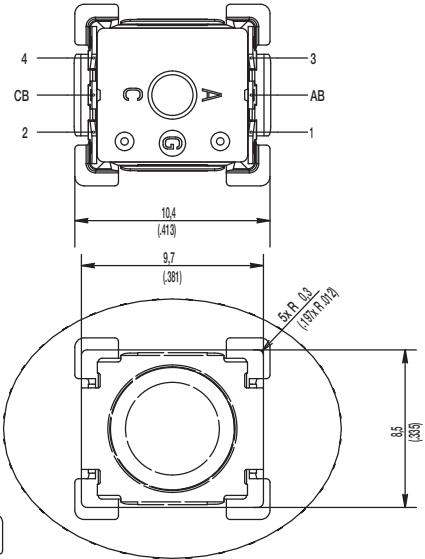
K5V Panel Mount Lighted Tact Switch

K5V PM

ELECTRICAL DIAGRAM



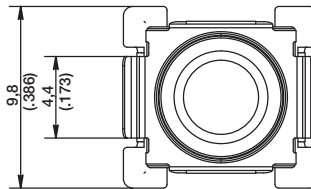
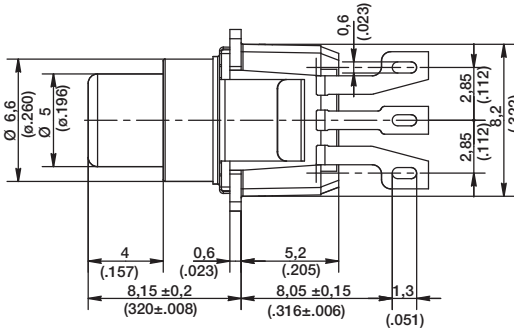
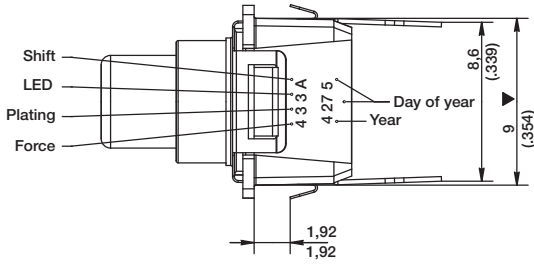
TERMINAL REFERENCES



B

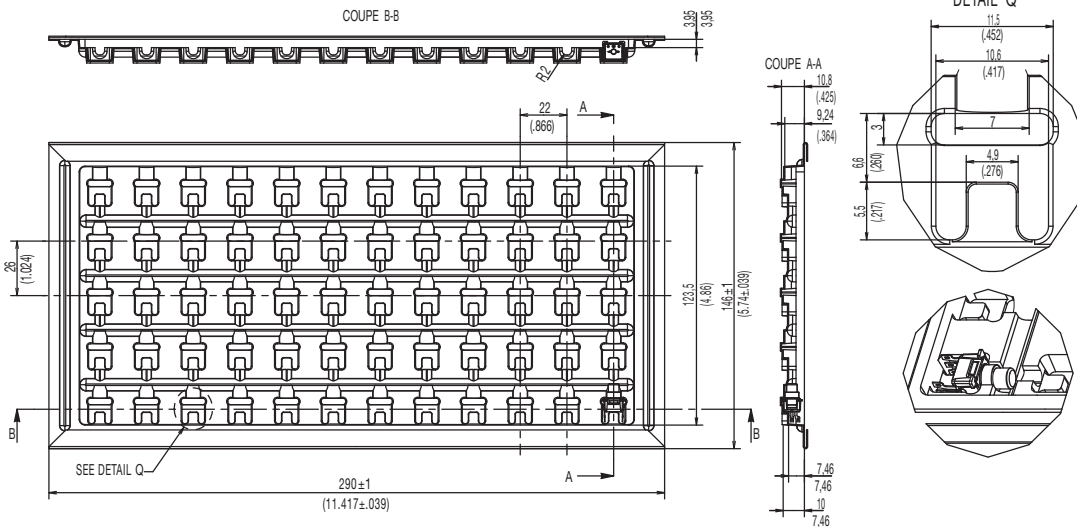
Tactile Switches

PRODUCT IDENTIFICATION AND DATE CODES



TRAY

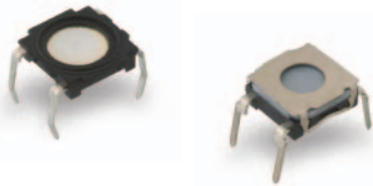
SUITABLE FOR PANEL THICKNESS OF 1.8MM MAX



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

www.ck-components.com

KSB & KSF Series Low-profile Tact Switch



Features/Benefits

- Low profile
- Protected against flux
- KSB without top sealing
- KSF with top sealing
- RoHS compliant and compatible

Typical Applications

- Low profile keyboards
- Instrumentation
- Industrial control
- Medical
- Military

Specification

CONTACT ARRANGEMENT: SPST, N.O.
DOUBLE OVERMOLDING ON TERMINAL
SEALING: IP40 (KSB) AND IP60
TERMINALS: PC pins

Mechanical

Type	Actuation force Newtons	Operating life (operations)
KSB0M110	1.2 - 2.0	100,000
KSB0M410	2.25 - 3.75	500,000
KSF0M211	1.0 - 2.0	100,000
KSF0M311	1.4 - 2.4	500,000
KSF0M411	2.25 - 3.75	100,000
KSF0M511	4.2 - 6.25	100,000
KSF0M911	2.3 - 3.9	500,000

NOTE: Specifications listed above are for switches with standard options.
For information on specific and custom switches, consult Customer Service Center.

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.

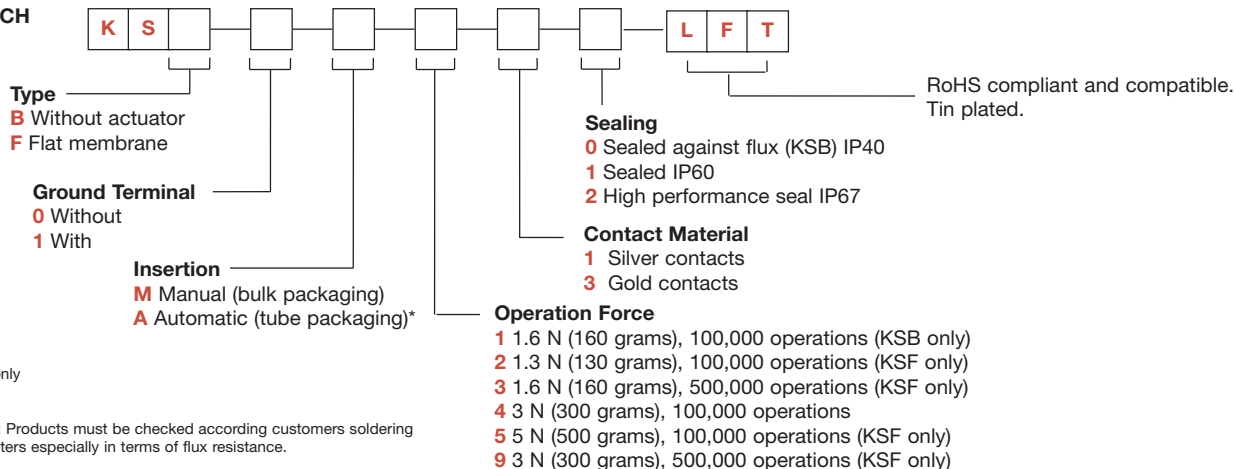
How To Order

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.

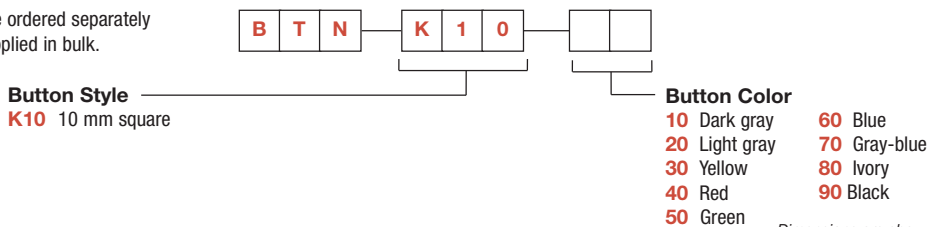
However, please note that all the combinations of these options are not feasible.

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

SWITCH



BUTTON for KSF Button must be ordered separately and will be supplied in bulk.



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



KSB & KSF Series Low-profile Tact Switch



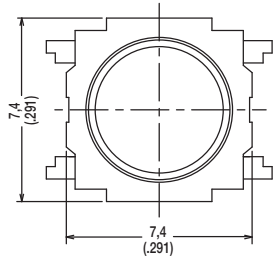
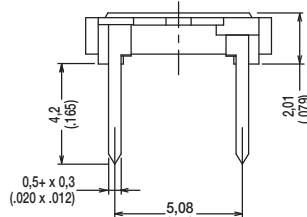
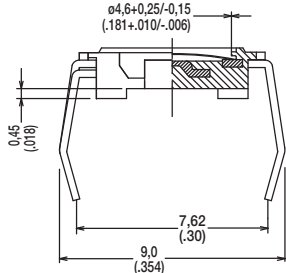
B

Tactile Switches

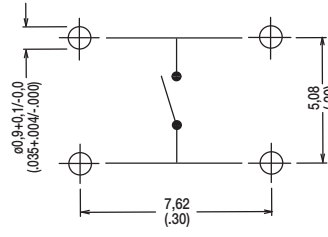
KSB



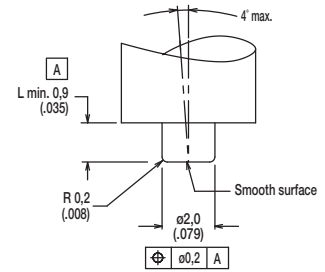
KSB0M110



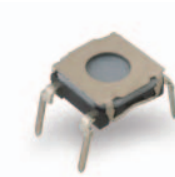
PCB LAYOUT



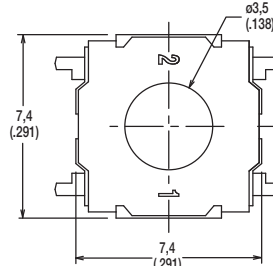
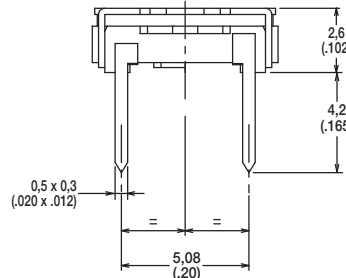
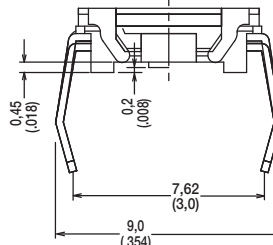
RECOMMENDED SHAPE OF ACTUATOR



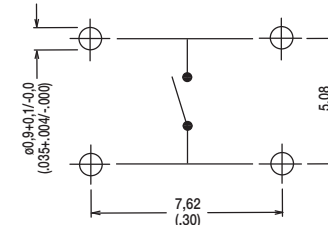
KSF



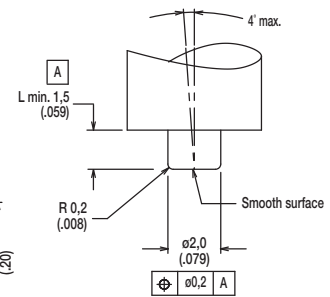
KSF0M111



PCB LAYOUT

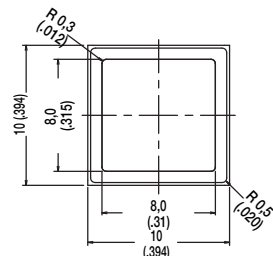
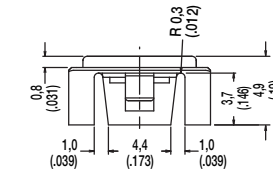
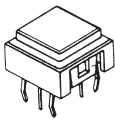


RECOMMENDED SHAPE OF ACTUATOR



BUTTON

K10 BUTTON FOR KSF ONLY Button must be ordered separately and will be supplied in bulk.



First Angle
Projection

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



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).

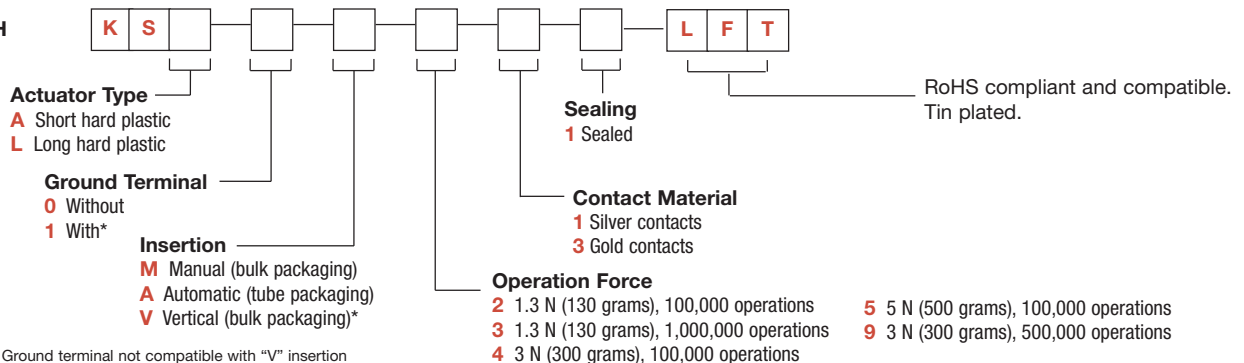
How To Order

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.

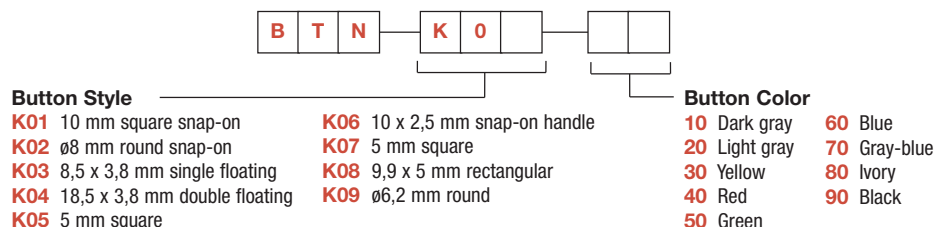
For any part number different from those listed above, please consult your local representative.

SWITCH



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

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: Inch (mm)
Specifications and dimensions subject to change

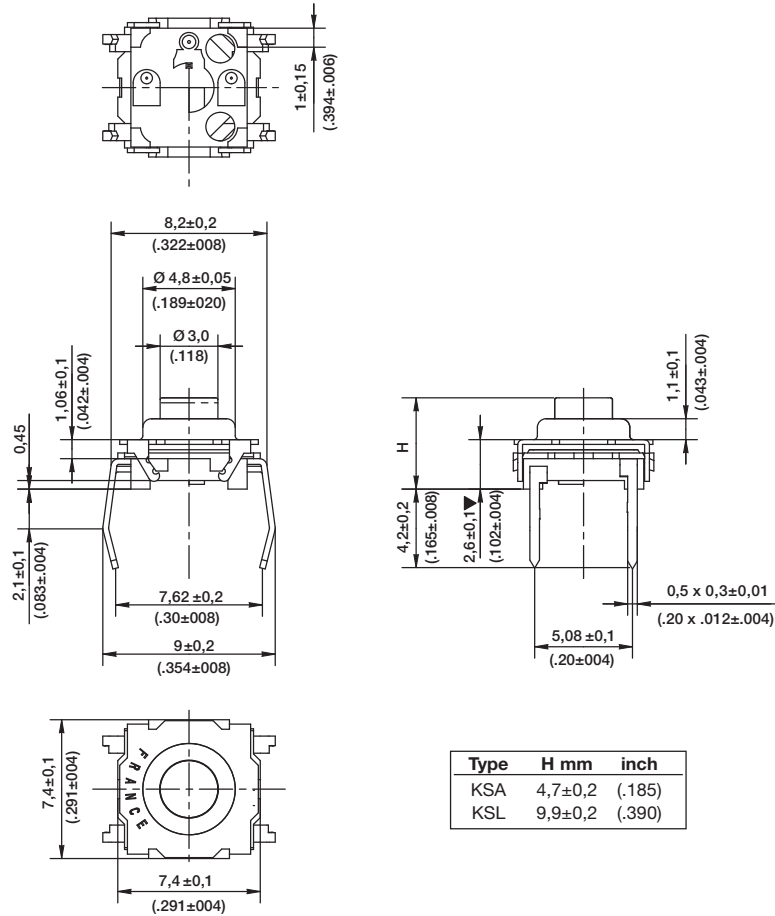
KSA & KSL Series Sealed Tact Switch

ACTUATOR TYPE

KSA & KSL

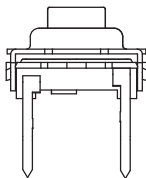
B

Tactile Switches

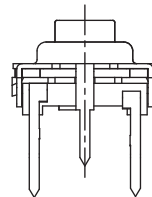


GROUND TERMINAL

0 WITHOUT



1* WITH



*Not compatible with "V" insertion



First Angle
Projection

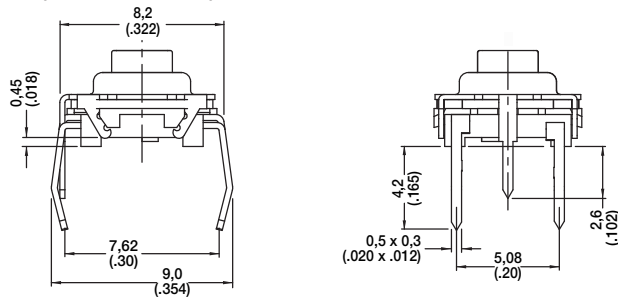
Dimensions are shown: Inch (mm)
Specifications and dimensions subject to change



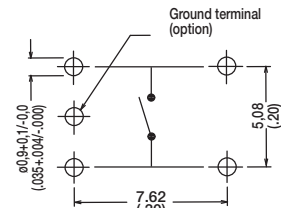
KSA & KSL Series Sealed Tact Switch

INSERTION

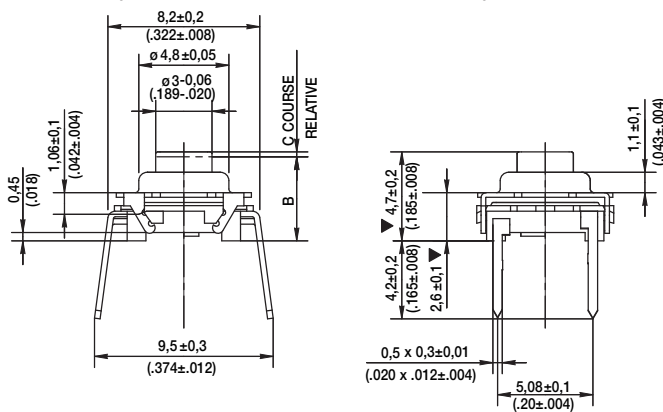
M MANUAL (BULK PACKAGING)



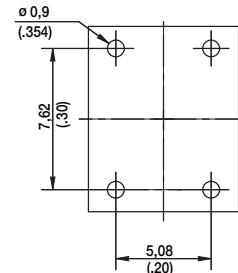
PCB LAYOUT



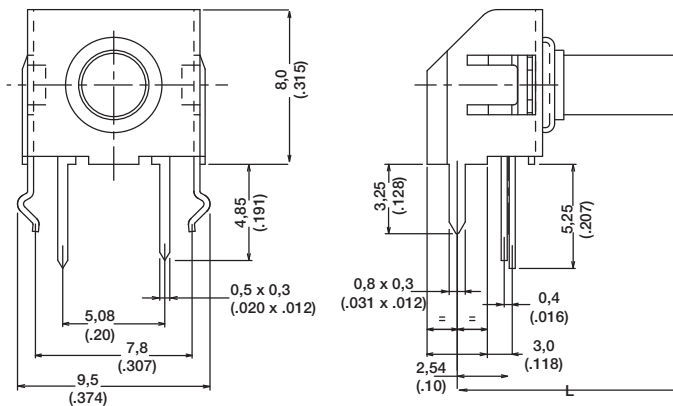
A AUTOMATIC (TUBE PACKAGING, 65 PIECES PER TUBE)



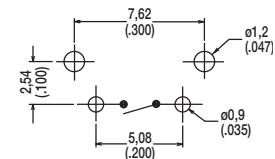
PCB LAYOUT



V VERTICAL



PCB LAYOUT



DIMENSION L

Type	L mm	inch
KSAOV	5,8	.228
KSLOV	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: Inch (mm)
Specifications and dimensions subject to change



KSA & KSL Series Sealed Tact Switch

CONTACT MATERIAL



OPTION CODE	CONTACT MATERIAL
1	Silver contacts
3	Gold contacts

B

Tactile Switches

SEALING



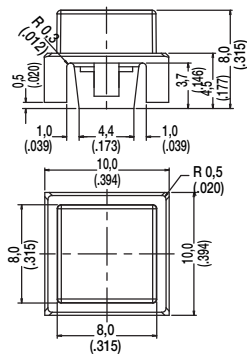
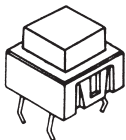
OPTION CODE	SEALING
1	Totally sealed - sealed IP64

BUTTONS

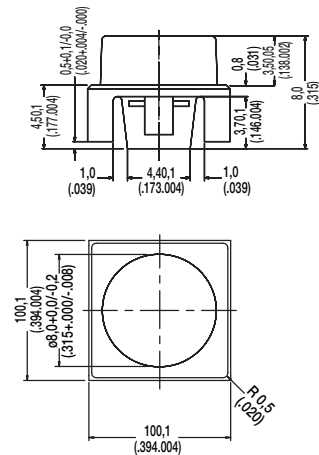
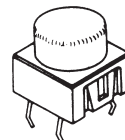
Buttons must be ordered separately and will be supplied in bulk.

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: Inch (mm)
Specifications and dimensions subject to change

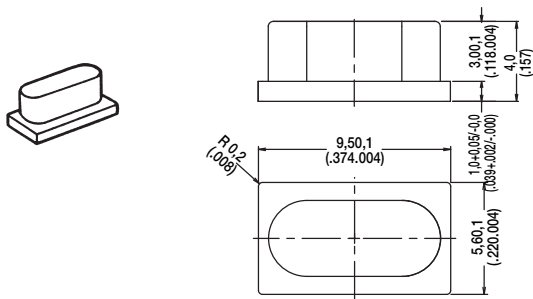


KSA & KSL Series Sealed Tact Switch

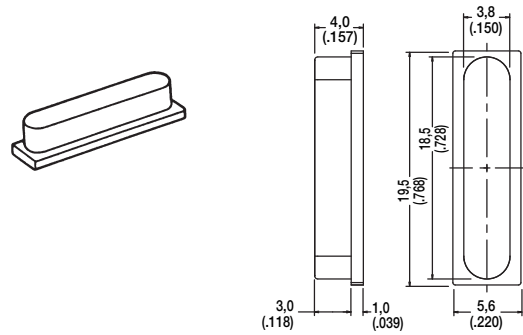


Tactile Switches

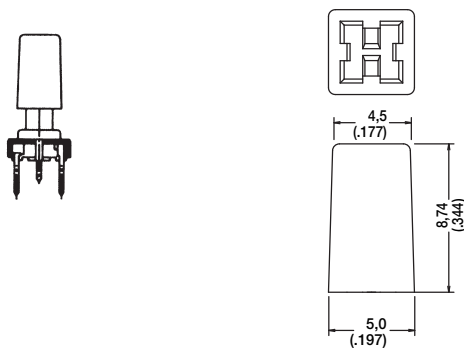
K03



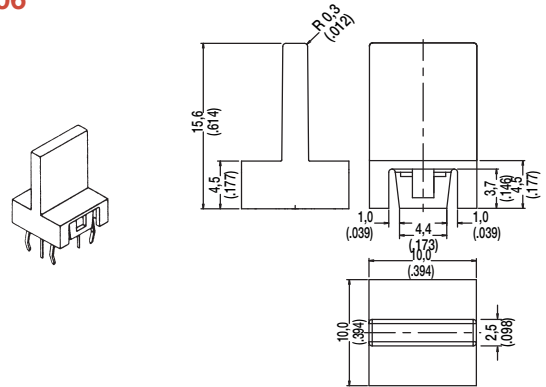
K04



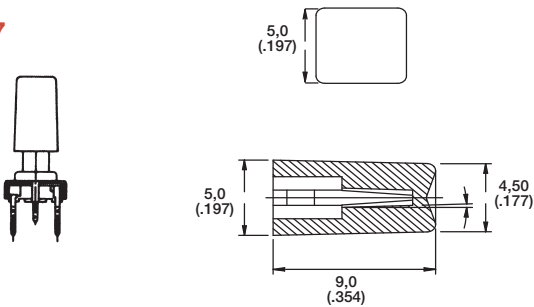
K05



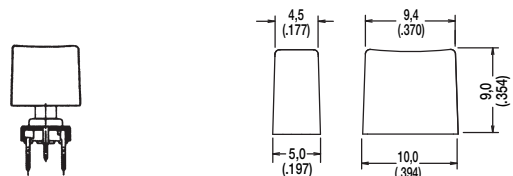
K06



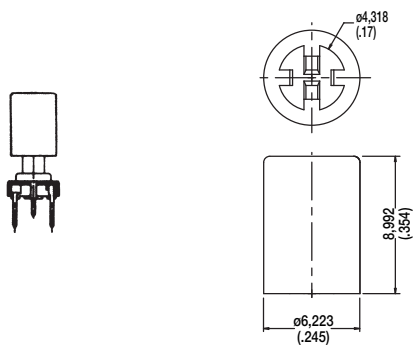
K07



K08



K09



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



KSA & KSL MKII Series High Performance Sealed Tact Switch

Features/Benefits

- Highest tact switch sealing performance
- Improved sealing through a modification of the crimping technique and to a double overmolding of the terminal
- Totally sealed
- Up to 1M operations
- RoHS compliant and compatible

Typical Applications

- Automotive
- Industrial
- Telecommunication networks
- Household appliances
- Heating control systems



Specification

CONTACT ARRANGEMENT: SPST, N.O.
 TERMINALS: PC pins
 SEALING: IP67
 Double overmold on terminals

Mechanical

Type	Actuation force N (grams)	Operating life (operations)	Travel to make
KSA0M212	1,0 - 1,65	100,000	0,5 ± 0,15
KSA0M312	1,0 - 1,65	1,000,000	0,5 ± 0,15
KSA0M412	2,75 - 3,75	100,000	0,6 ± 0,25
KSA0M512	3,75 - 6,25	100,000	0,7 ± 0,25

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)

NOTE: Specifications listed above are for switches with standard options.
 For information on specific and custom switches, consult Customer Service Center.

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

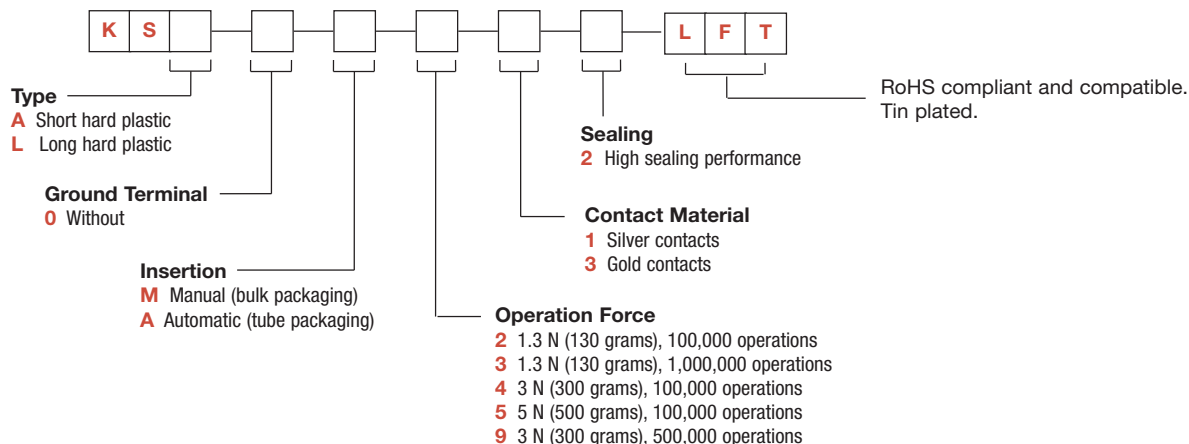
Wave soldering compatible with lead free soldering profile.

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.

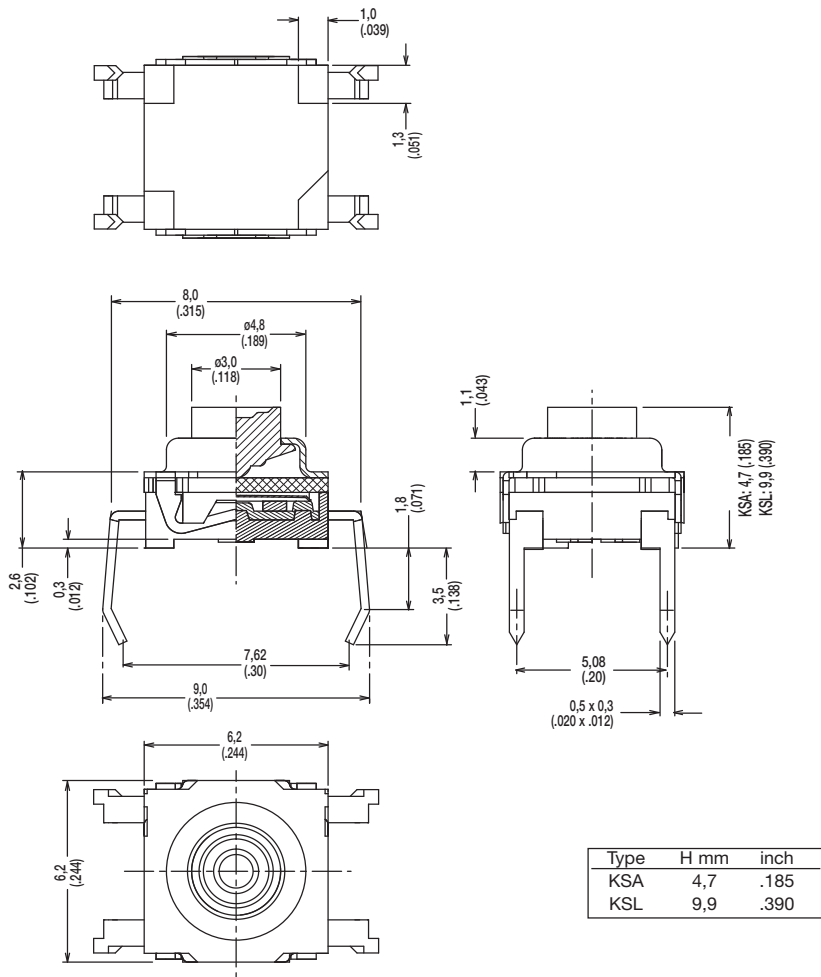


Dimensions are shown: Inch (mm)
 Specifications and dimensions subject to change

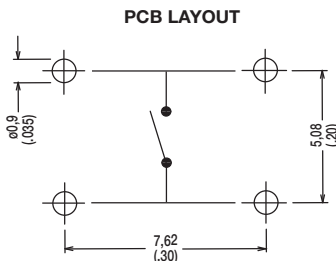
KSA & KSL MKII Series High Performance Sealed Tact Switch

TYPE

KSA & KSL MANUAL (BULK PACKAGING) DRAWING SHOWN

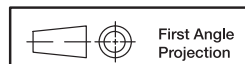


KSA0M112



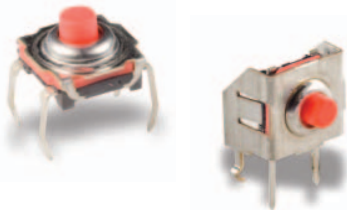
B

Tactile Switches



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

KSI Series Sealed Tact Switches



Features/Benefits

- Long and soft actuator
- Distinctive tactile feel
- 1.1 & 3 N actuation force
- Ground terminal optional
- RoHS compliant and compatible

Typical Applications

- Automotive
- Automation
- Door entry systems
- Remote controls

Tactile Switches

Specification

FUNCTION: Momentary action
 CONTACT ARRANGEMENT: 1 make contact = SPST, N.O.
 DISTANCE BETWEEN BUTTON CENTERS (min.): 7.62 (0.300)
 TERMINALS: PC pins

Mechanical

Type	Actuation force N	Operating life (operations)	Travel to make
KSI0M411	2.25 - 4.0	100,000	1,1 ± 0,2
KSI0V211	1.5 - 2.5	100,000	0,7 ± 0,2
KSI0V411	2.25 - 4.0	100,000	1,1 ± 0,2

Durometer for silicone actuator is 50 shore

Packaging

Delivered in boxes of 500 pieces (M version) or 250 pieces (V version).

NOTE: Specifications listed above are for switches with standard options.
 For information on specific and custom switches, consult Customer Service Center.

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 (50 Hz, 1 min.):	300 Vrms	
CONTACT RESISTANCE: < 50 mΩ		
INSULATION RESISTANCE (100V): > 10 ¹¹ 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

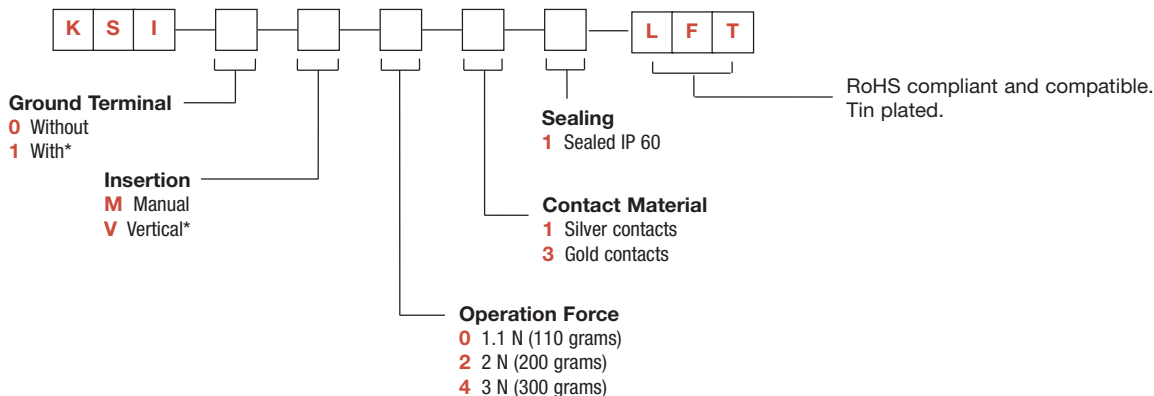
Wave soldering, compatible with lead free soldering profile.

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 in the table above, please consult your local representative.



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



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

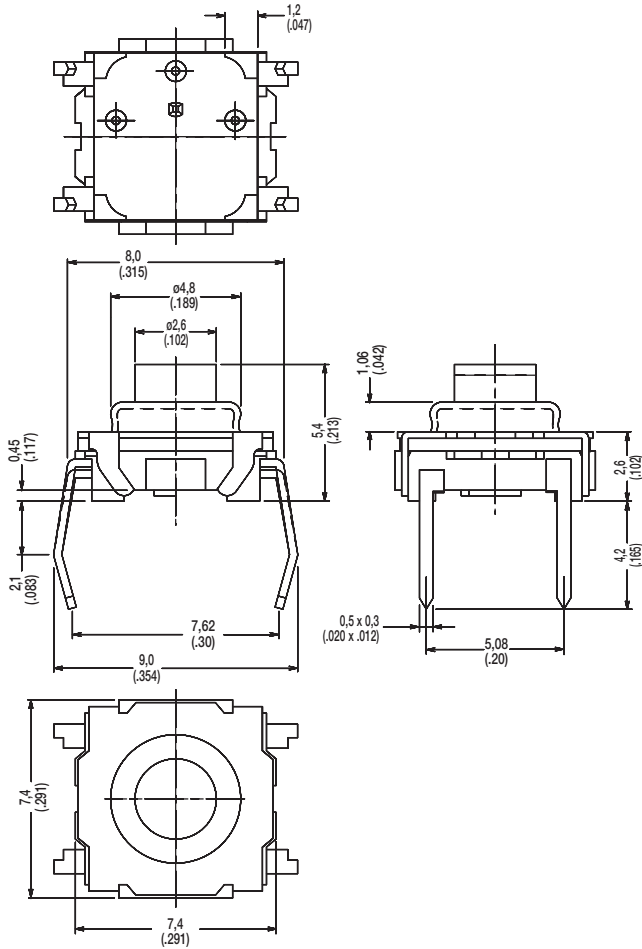
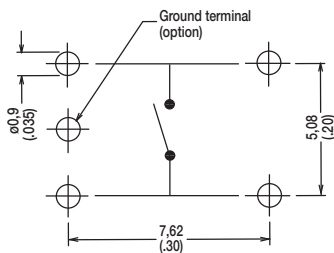
KSI Series Sealed Tact Switches

KSI

M MANUAL



PCB LAYOUT



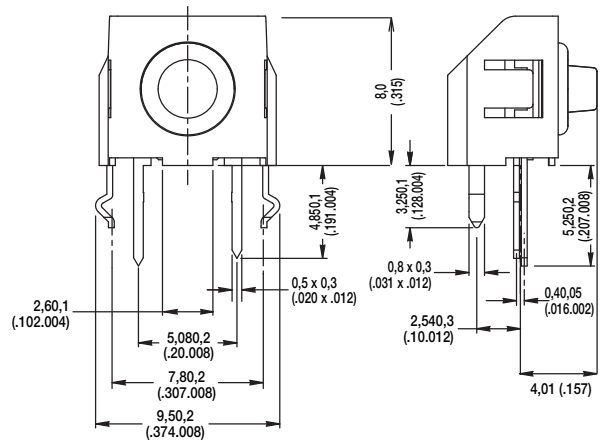
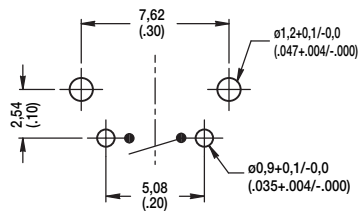
B

Tactile Switches

V VERTICAL



PCB LAYOUT



First Angle
Projection

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



KSJ Series Spherical Actuator Tact Switches

Features/Benefits

- Spherical actuator allows actuation force off center $\pm 30^\circ$ with regard to vertical
- Total travel 1.2 mm
- Sealed against flux
- RoHS compliant and compatible

Typical Applications

- Automotive
- Cranes, off road, railway
- Factory automation
- Security systems



Tactile Switches

B

Specification

FUNCTION: Momentary action
 CONTACT ARRANGEMENT: 1 make contact = SPST, N.O.
 DISTANCE BETWEEN BUTTON CENTERS (min.): 7.62 (0.300)
 TERMINALS: PC pins
 SEALING: IP60

Mechanical

Type	Actuation force N (grams)	Operating life (operations) axial	Operating life (operations) radial	Travel to make
KSJ0M21160SH	1,5 - 2,5	100,000	30,000	0,7 \pm 0,25
KSJ0M41180SH	2,25 - 3,75	100,000	30,000	0,55 \pm 0,25
KSJ0M21180SH	1,5 -2,5	100,000	30,000	0,35 \pm 0,2
KSJ0M91180SH	3,1 -4,7	100,000	30,000	0,7 \pm 0,25

Environmental

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

Packaging

Delivered in boxes of 500 pieces.

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	50 mA
MINIMUM CURRENT:	1 mA	1 mA
DIELECTRIC STRENGTH (50 Hz, 1 min.): ≥ 300 Vrms		
CONTACT RESISTANCE: ≤ 100 mOhms		
INSULATION RESISTANCE (100V): $> 10^9$ ohms		
BOUNCE TIME: < 1 ms		

Process

Wave soldering, compatible with lead free soldering profile.

NOTE: Specifications listed above are for switches with standard options. For information on specific and custom switches, consult Customer Service Center.

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.

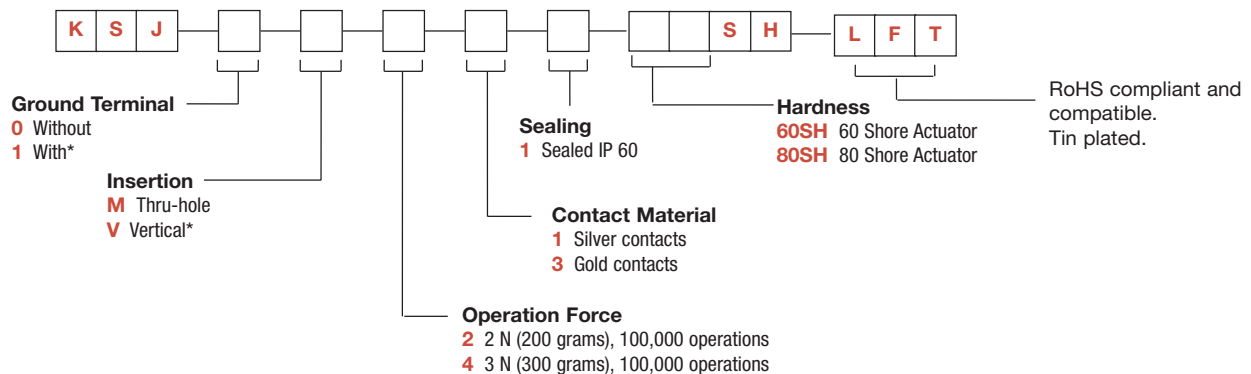
* Please contact your C&K representative for any question regarding the product intergration.

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 in the table above, please consult your local representative.



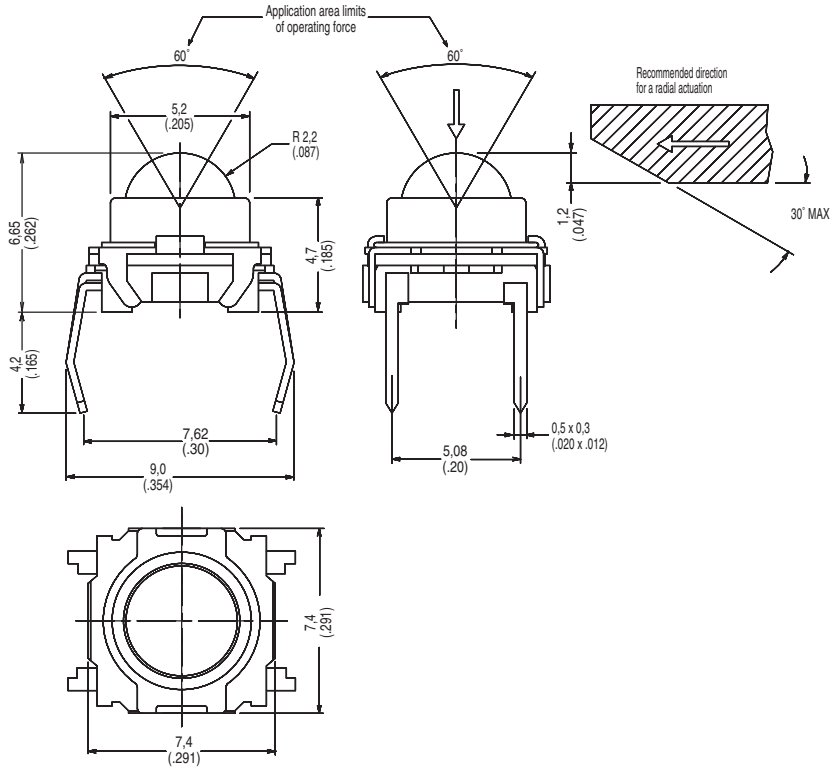
*Note: "1" ground terminal option not available with "V" version. The bracket for the "V" version plays this role.



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

KSJ Series Spherical Actuator Tact Switches

KSJ



KSJ0M211

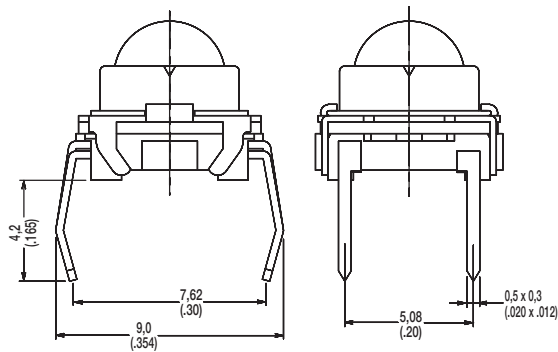


B

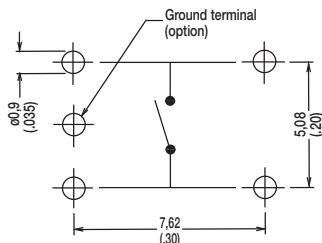
Tactile Switches

INSERTION

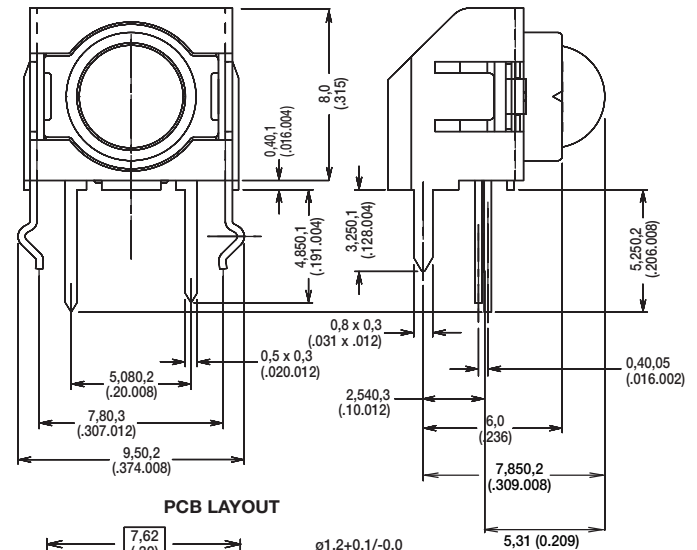
M THRU-HOLE



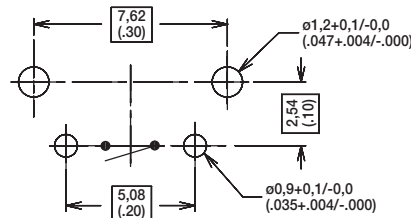
PCB LAYOUT



V VERTICAL



PCB LAYOUT

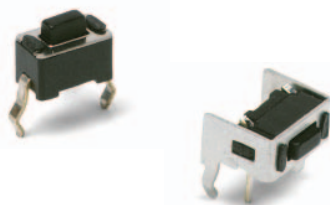


First Angle
Projection

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



PTS635 Series 3,5 mm Tact Switches



Features/Benefits

- Compact size 6 x 3.5 mm
- Variety of switch heights
- Choice of actuation force
- RoHS compliant and compatible

Typical Applications

- Consumer products
- Instrumentation
- Computer products
- Industrial

Specification

FUNCTION: Momentary action
CONTACT ARRANGEMENT: SPST, N.O.
TERMINALS: PC pins

Mechanical

ACTUATION FORCE: PTS635L models: 130 grams.
PTS635H models: 200 grams.
LIFE EXPECTANCY: 20,000 operations.

Electrical

CONTACT RATING: 50 mA @ 12 V DC.
DIELECTRIC STRENGTH: 250 V AC min.
CONTACT RESISTANCE: 100 mΩ max. initial.
INSULATION RESISTANCE: 10¹¹Ω min.

Environmental

OPERATING TEMPERATURE: -40°C to 60°C

NOTE: Specifications listed above are for switches with standard options.
For information on specific and custom switches, consult Customer Service Center.

Process

SOLDERING: Preheating to 100°C for 45 sec. max. Keep flux flush with top surface of PCB; do not apply to component side of PCB and area where terminals are located. Soldering to 255°C for 5 sec. max. Clean by brushing on solder surface. Do not clean switch with solvents.

Materials

BASE: 6/6 nylon or glass filled polyester (PBT) (UL 94V-0).
ACTUATOR: 6/6 nylon or polyacetal (UL 94HB).
COVER PLATE: PTS635S and PTS635V models: Tin plated stainless steel
DOME CONTACTS: Phosphor bronze, silver clad.
STATIONARY CONTACTS: Brass, silver plated.
TERMINALS: Brass, silver plated. Insert molded.

Packaging

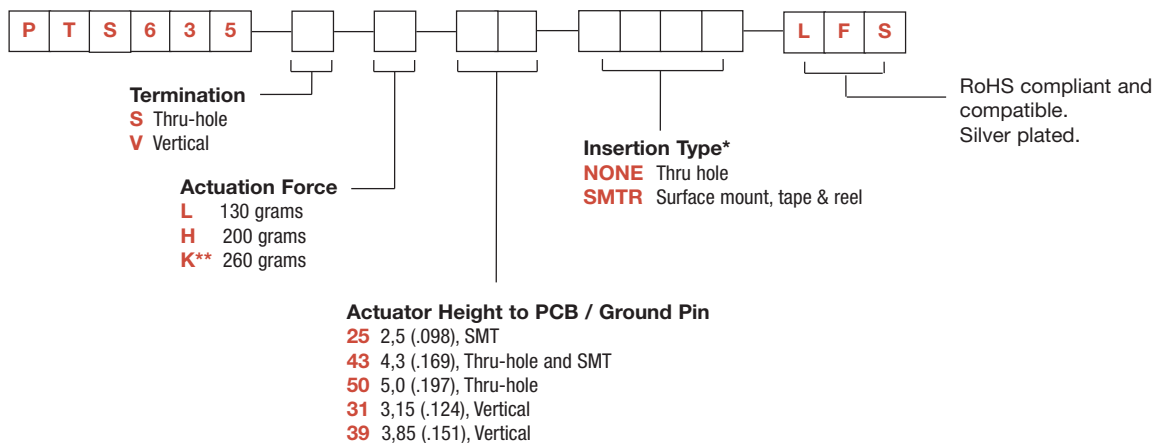
Bulk packaging.

Tape & reel for:

PTS635Sx43SMTR, 1700 pcs per reel
PTS635Sx25SMTR, 3000 pcs per reel

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.



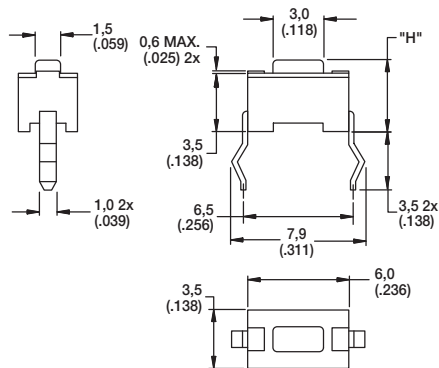
* SM and SMTR only available with PTS635 43 and 25 actuator options.

** Only for the PTS635Sx25SMTR.

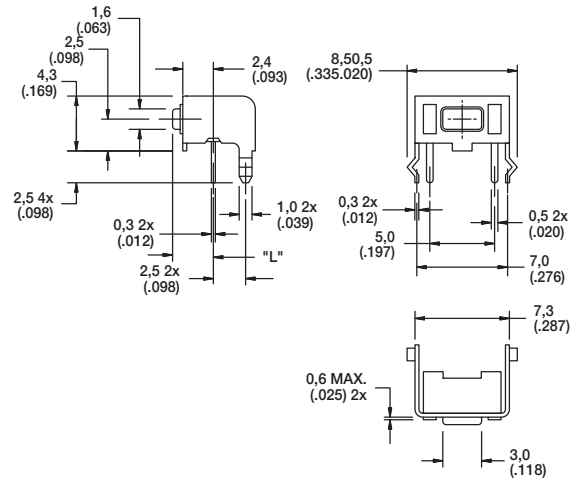
PTS635 Series 3,5 mm Tact Switches

SERIES

PTS635



PTS635S Model

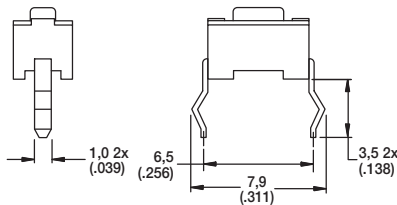


B

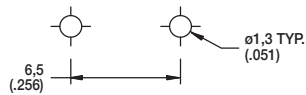
Tactile Switches

TERMINATION

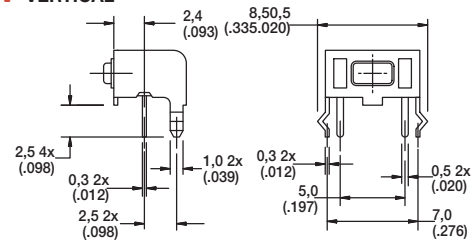
S THRU-HOLE



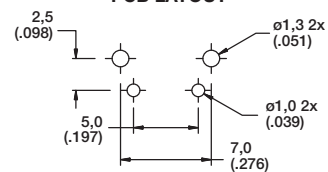
PCB LAYOUT



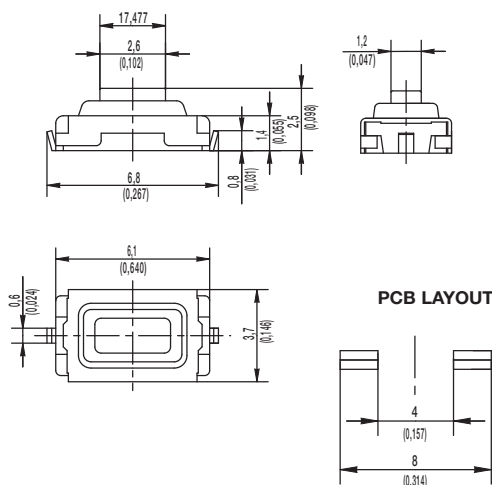
V VERTICAL



PCB LAYOUT

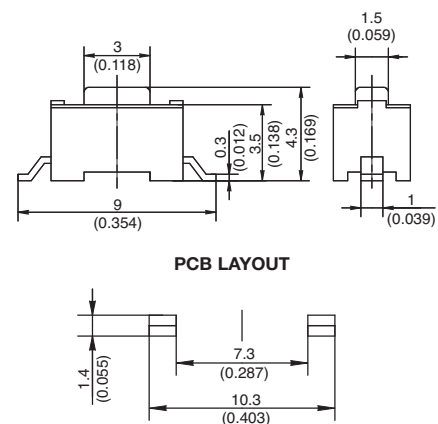


SMT 25



PCB LAYOUT

SMT 43



PCB LAYOUT



First Angle
Projection

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

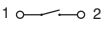
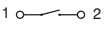
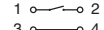
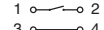


PTS635 Series 3,5 mm Tact Switches

ACTUATION FORCE

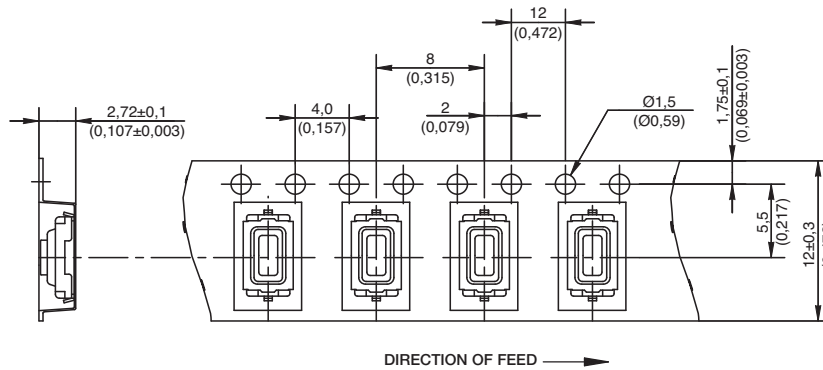
OPTION CODE	FORCE
L	130 grams
H	200 grams

ACTUATOR HEIGHT

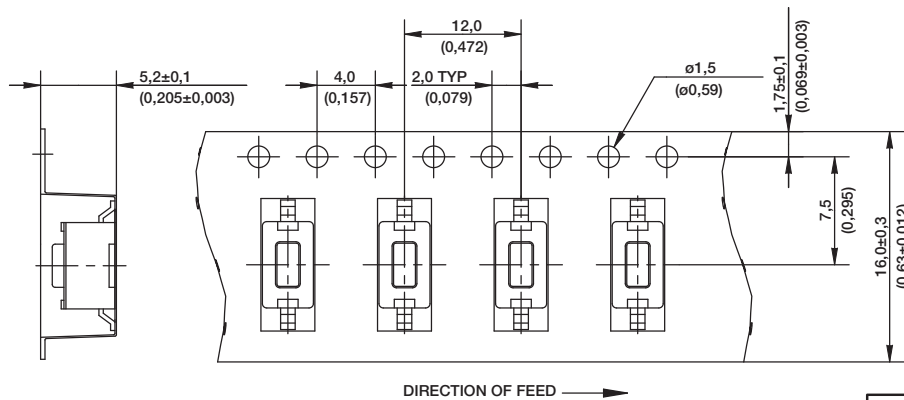
OPTION CODE	HEIGHT "H" or LENGTH "L"	TERMINATION	SCHEMATIC
43	4,3 (.169)	Thru-hole	1  2
50	5,0 (.197)	Thru-hole	1  2
31	3,15 (.124)	Vertical	1  2
39	3,85 (.151)	Vertical	3  4

INSERTION TYPE

SMT 25



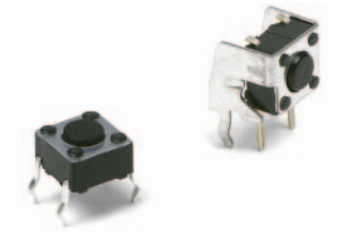
SMT 43



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



PTS645 Series 6 mm Tact Switches



Features/Benefits

- Compact size 6 x 6 mm
- Variety of actuator lengths
- Choice of actuation force
- RoHS compliant and compatible

Typical Applications

- Consumer products
- Instrumentation
- Computer products
- Industrial

Specification

FUNCTION: Momentary action
CONTACT ARRANGEMENT: SPST, N.O.
TERMINALS: PC pins

Mechanical

ACTUATION FORCE: PTS645 models: 130 grams, 160 grams,
200 grams, 260 grams
LIFE EXPECTANCY: 50,000 operations.

Electrical

CONTACT RATING: 50 mA @ 12 V DC.
DIELECTRIC STRENGTH: 250 V AC min.
CONTACT RESISTANCE: 100 mΩ max. initial.
INSULATION RESISTANCE: 10¹¹ Ω min.

Environmental

OPERATING TEMPERATURE: -20°C to 60°C

NOTE: Specifications listed above are for switches with standard options.
For information on specific and custom switches, consult Customer Service Center.

Process

SOLDERING: Preheating to 100°C for 45 sec. max. Keep flux flush with top surface of PCB; do not apply to component side of PCB and area where terminals are located. Soldering to 255°C for 5 sec. max. Clean by brushing on solder surface. Do not clean switch with solvents.

Materials

BASE: 6/6 nylon or glass filled polyester (PBT).
ACTUATOR: 6/6 nylon or polyacetal.
COVER PLATE: PTS645S: Polyester or stainless steel.
PTS645T and PTS645V: Tin alloy or stainless steel.
DOME CONTACTS: Phosphor bronze, silver clad.
STATIONARY CONTACTS: Brass, silver plated.
TERMINALS: Brass, silver plated. Insert molded.

Packaging

Bulk packaging.

Tape & reel for the SMT type:

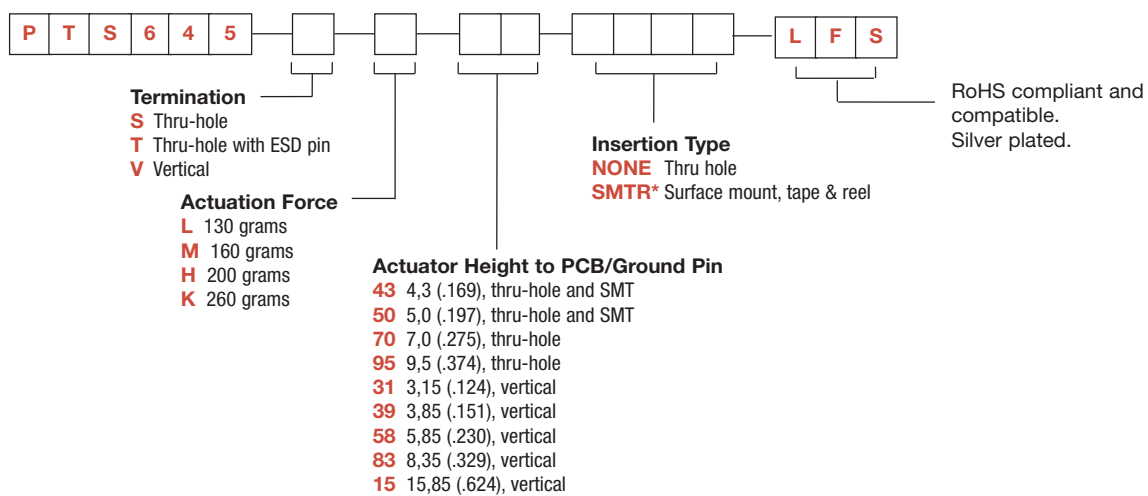
Reel of 1,000 pieces

B

Tactile Switches

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.



*Only the PTS645 in horizontal type without ESD pin is available in SMT type.

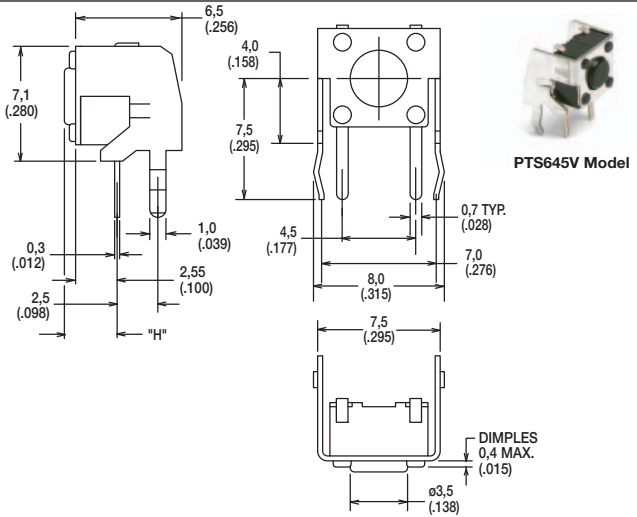
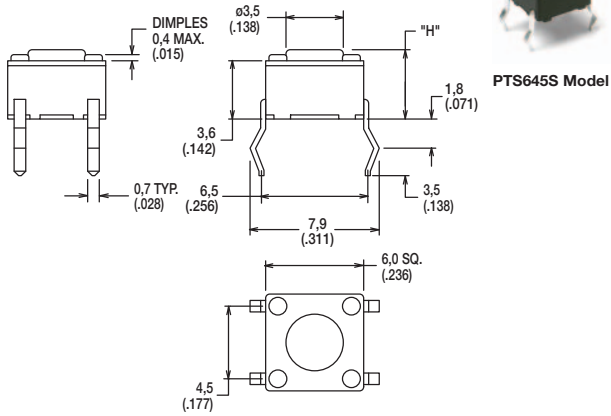


Dimensions are shown: Inch (mm)
Specifications and dimensions subject to change

PTS645 Series 6 mm Tact Switches

SERIES

PTS645

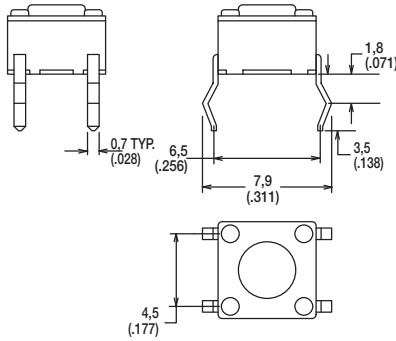


B

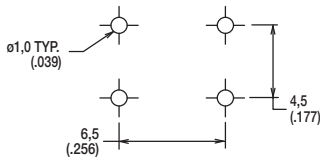
Tactile Switches

TERMINATION

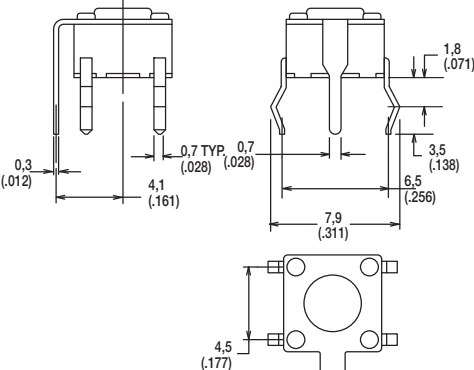
S STRAIGHT



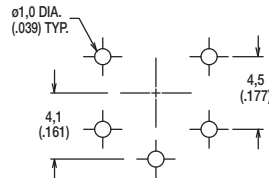
PCB LAYOUT



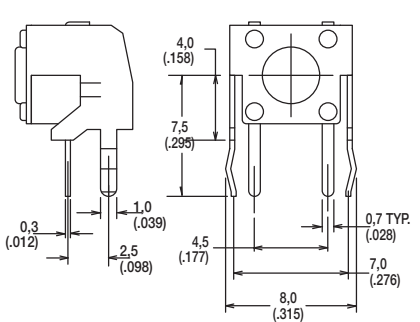
T STRAIGHT WITH EMC PIN



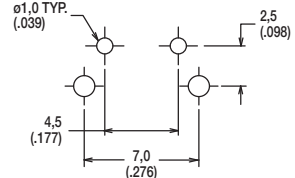
PCB LAYOUT



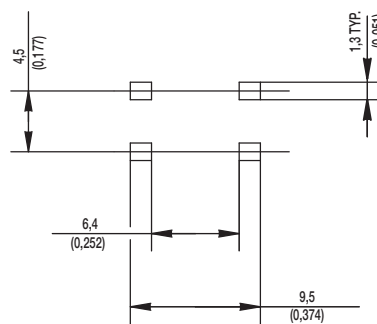
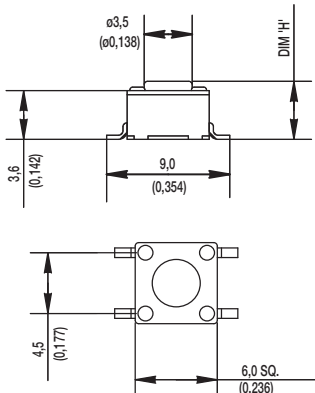
V VERTICAL



PCB LAYOUT



SMT



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



PTS645 Series 6 mm Tact Switches

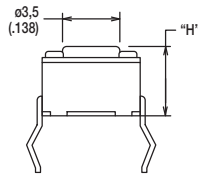
ACTUATION FORCE

OPTION CODE	FORCE
L	130 grams
M	160 grams
H	200 grams
K	260 grams

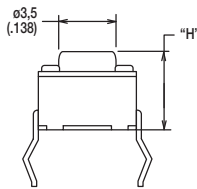
ACTUATOR HEIGHT

OPTION CODE	HEIGHT "H" or LENGTH "L"	TERMINATION	SCHEMATIC	
			Without EMC pin	With EMC pin
43	4,3 (.169)	Thru-hole and SMT		
50	5,0 (.197)	Thru-hole and SMT		
70	7,0 (.275)	Thru-hole		
95	9,5 (.374)	Thru-hole		
31	3,15 (.124)	Vertical		
39	3,85 (.151)	Vertical		
58	5,85 (.230)	Vertical		
83	8,35 (.329)	Vertical		
15	15,85 (.624)	Vertical		

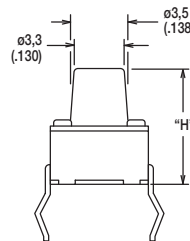
43



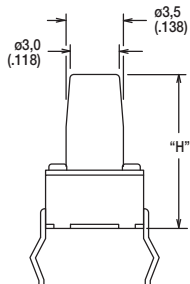
50



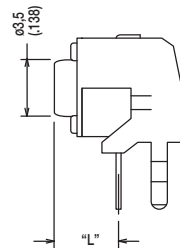
70



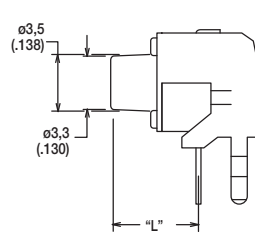
95



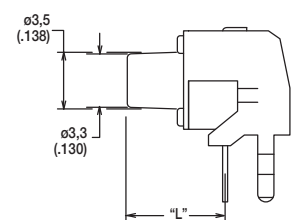
31



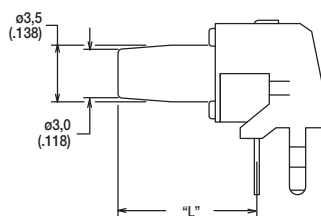
39



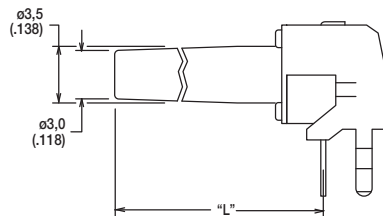
58



83



15

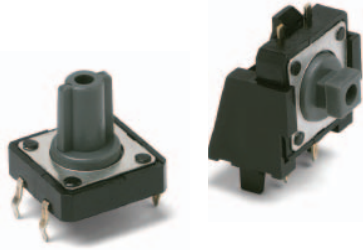


First Angle
Projection

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

C&K

PTS125 Series 12 mm Tact Switches



Features/Benefits

- Stable control feeling
- Thru-hole or vertical actuation
- 160 or 260 grams actuation force
- RoHS compliant and compatible

Typical Applications

- Consumer products
- Instrumentation
- Computer products
- Industrial

Tactile Switches

Specification

FUNCTION: Momentary action
CONTACT ARRANGEMENT: SPST, N.O.
TERMINALS: PC pins

Mechanical

ACTUATION FORCE: PTS125M models: 160 grams.
PTS125 K models: 260 grams.
LIFE EXPECTANCY: 200,000 operations, M option;
100,000 operations, K option.

Electrical

CONTACT RATING: 50 mA @ 12 V DC.0
DIELECTRIC STRENGTH: 250 V AC min.
CONTACT RESISTANCE: 100 mΩ max. initial.
INSULATION RESISTANCE: 10¹¹ Ω min.

NOTE: Specifications listed above are for switches with standard options.
For information on specific and custom switches, consult Customer Service Center.

Environmental

OPERATING TEMPERATURE: -40°C to 60°C

Process

SOLDERING: Preheating to 100°C for 45 sec. max. Keep flux flush with top surface of PCB; do not apply to component side of PCB and area where terminals are located. Soldering to 255°C for 5 sec. max. Clean by brushing on solder surface. Do not clean switch with solvents.

Materials

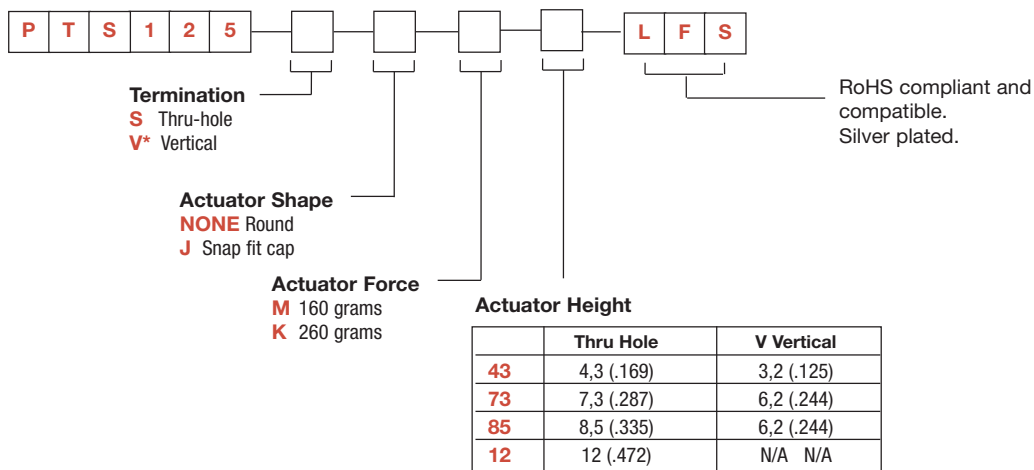
BASE: 6/6 nylon or glass filled polyester (PBT) (UL 94V-0).
ACTUATOR: PBT (UL94V0) or polyacetal (UL 94HB).
COVER PLATE: Tin alloy.
DOME CONTACTS: Phosphor bronze, silver clad.
STATIONARY CONTACTS: Brass, silver plated.
TERMINALS: Brass, silver plated. Insert molded.

Packaging

Tube packaging.

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.



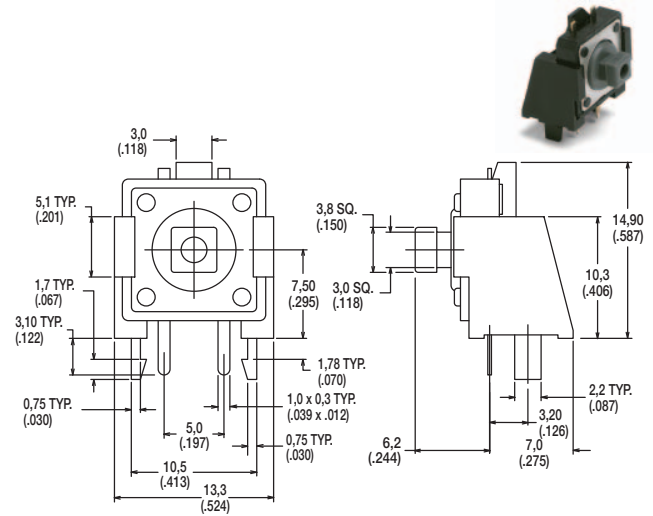
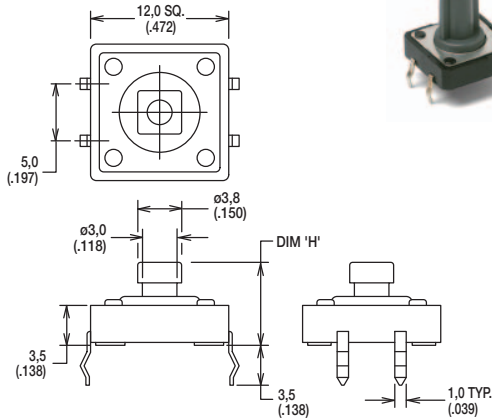
* V option available with J73 actuator only.



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

PTS125 Series 12 mm Tact Switches

SERIES

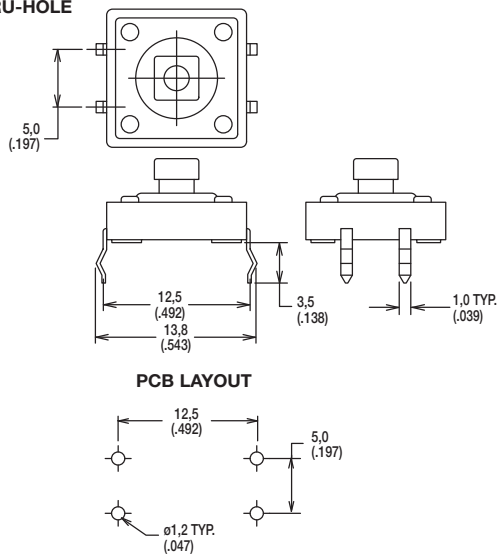


B

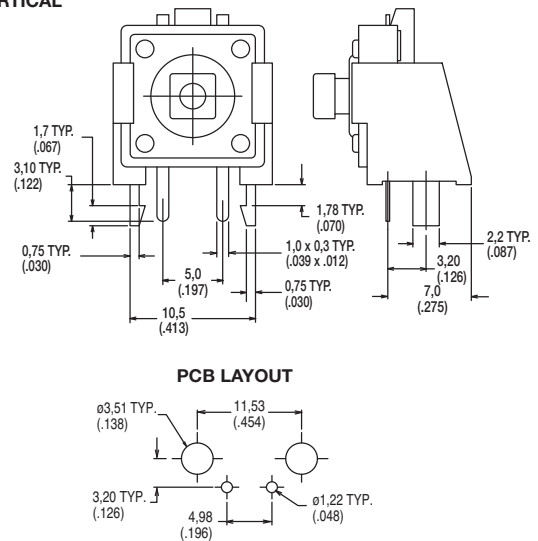
Tactile Switches

TERMINATION

S THRU-HOLE



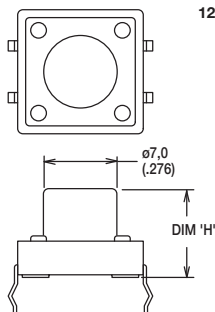
V VERTICAL



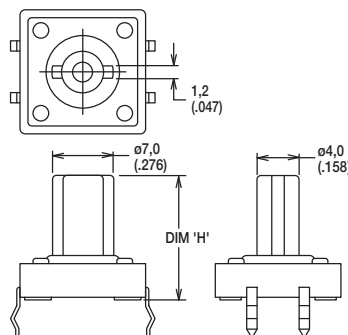
ACTUATOR SHAPE

NONE ROUND

43 and 85 heights only

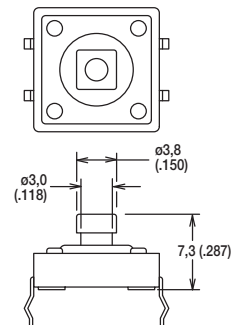


12 height only



J SNAP-FIT CAP

73 height only



First Angle
Projection



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

PTS125 Series 12 mm Tact Switches

ACTUATION FORCE



OPTION CODE	FORCE
M	160 grams
K	260 grams



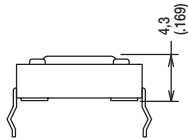
B

Tactile Switches

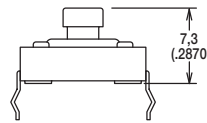
ACTUATOR HEIGHT



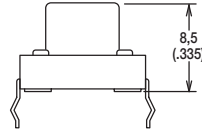
43 4,3 mm



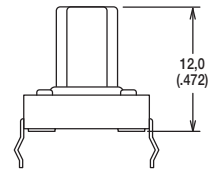
73 7,3 mm SNAP-FIT



85 8,5 mm



12 12 mm



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