# KSC Series Sealed Tact Switch for SMT

#### Features/Benefits

- Positive tactile feeling
- J or G terminations
- Various heights
- IP67

#### **Typical Applications**

- Automotive
- Medical instruments
- Industrial electronics
- Network infrastructure and IT
- Elevator



#### **Specification**

FUNCTION: Momentary action

CONTACT ARRANGEMENT: 1 make contact = SPST, N.O.

TERMINALS: J bend & Gullwing type for SMT

SEALING: IP67 except KSC5 (IP50)

### **Liability Limitation**

This datasheet does not provide enough information for applications that require a certain level of quality or safety such as automotive, medical systems, or safety equipement. Please contact customer service for the contractual specification package.

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.
- Lead free reflow soldering process in accordance with IEC 61760-1.

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*	0.1 mA

DIELECTRIC STRENGTH (50 Hz, 1 min.): ≥ 250 Vrms

CONTACT RESISTANCE: ≤ 100mΩ

INSULATION RESISTANCE (100 V):  $\geq$  10M  $\Omega$ 

BOUNCE TIME: ≤ 1 ms

 $^{\star}$  Ultra low current with 10  $\mu\text{A}$  - 1 VDC version are available upon request for KSC2 and KSC4

#### **Packaging**

Tape and Reel (see series for quantity information)

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

#### **KSC Product Range**

KSC1	KSC2	KSC3	KSC4	KSC5	KSC6	KSC7	KSC8	KSC9	KSC10
Without actuator	Soft actuator	Hard actuator	Soft actuator	Hard actuator	Hard actuator	Soft actuator	Hard actuator	Hard actuator	Soft actuator
H = 2.5 mm	H = 3.5 mm	H = 3.5 mm	H = 5.2 mm	H = 5.6 mm	H = 7.7 mm	H = 4.3 mm	H = 4.9 mm	H = 7.7 mm compatible with button	H = 4.9 mm
IP67	IP67	IP67	IP67	IP50	IP67	IP67	IP67	IP67	IP67



















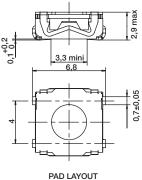


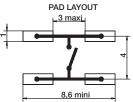
Note: KSC Series is subject to variants. Please contact customer service for other options.

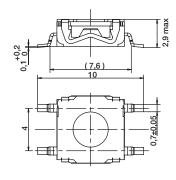


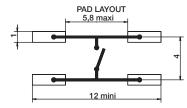
B-69

G GULLWING

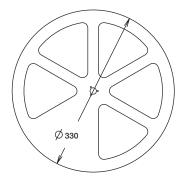


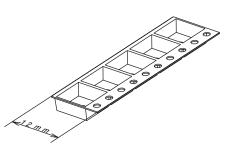




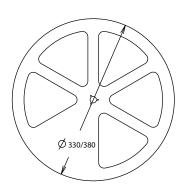


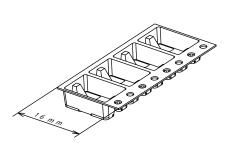
12 MM





16 MM





12 mm	Pieces	16 mm	Pieces	Reel Diameter
KSC1J	2,000	KSC1G	2,000	330 mm
KSC2J	2,000	KSC2G	2,000	330 mm
KSC3J	2,000	KSC3G	2,000	330 mm
		KSC4J & G	1,000	330 mm
		KSC5J & G	1,000	330 mm
		KSC6J & G	950	380 mm
		KSC7J & G	1,000	330 mm
		KSC8J & G	1,000	330 mm
		KSC9J & G	950	380 mm
		KSC10J & G	1,000	330 mm

First Angle

Dimensions are shown: mm Specifications and dimensions subject to change





#### Features/Benefits

- New soft sound
- Extended cage
- IP67
- Long life
- J terminations
- Tape & reel

#### Typical Applications

- Trunk opening system
- Automatic gear shift paddle
- Steering wheel
- Window lifter
- Seat adjustment module



Type	Force (N)	Life (cycles)	Travel (mm)
KSCXA 35J LFS	3.5 +/-1	1.000,000	0.7+/-0.2
KSCXA 40J LFS	4.0 +/-1	1.000,000	0.7+/-0.2
KSCXA 55J LFS	5.5 +/-1.6	1,000,000	0.7+/-0.2
KSCXA 68J LFS	6.8 +/- 1.7	500,000	0.7+/-0.2
KSCXA 96J LFS	9.6 +/- 2.4	150,000	0.7+/-0.2

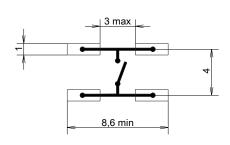
POWER: 0.002 VA min. / 1VA Max. VOLTAGE: 2V min. / 24V Max. CURRENT: 1mA min. / 42mA Max.

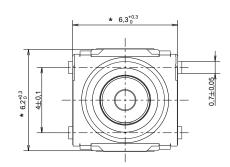
OPERATING TEMPERATURE: -40°C / +95°C

CONTACT RESISTANCE: 0.1 ohm

# Ø4,73±0,1 Ø3±0,1 Ø3±0,1 Ø3±0,1 Ø3±0,1 Ø3±0,1

#### **PCB LAYOUT**





#### **Packaging**

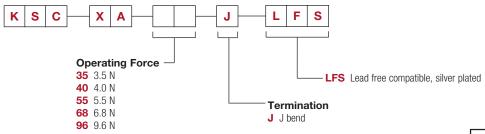
In reels of 1,400 pieces.

Dimensions of reels according to EIA RS481 or IEC 2863. External diameter 380 mm ± 2 mm.

#### **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: mm Specifications and dimensions subject to change



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#### Features/Benefits

- Long travel
- Soft sound
- IP40
- J & G terminations
- Tape & reel

# Typical Applications

- Automotive interior
- Front panel
- Instrumentation



**Long Travel Tact Switch** 



**KSC-SLT Series** 

#### **Specification**

**FUNCTION: Momentary** 

CONTACT ARRANGEMENT: 1 make contact = SPST, N.O.

TERMINALS: J bend & Gullwing type for SMT

#### Mechanical

MAXIMUM APPLIED FORCE: 40N

\* VALID ONE TIME. MAXIMUM ALLOWED TRAVEL TO AVOID OVERLOAD ISSUES IS 1.70MM.

Type	Force (N)	Life (cycles)	Travel (mm)
KSC SLT 221J LFS	2.4 +/- 0.7	200,000	1.35 +/-0.25
KSC SLT 221G LFS	2.4 +/- 0.7	200,000	1.35 +/-0.25
KSC SLT 223J LFG	2.4 +/- 0.7	200,000	1.35 +/-0.25
KSC SLT 223G LFG	2.4 +/- 0.7	200,000	1.35 +/-0.25
KSC SLT 241J LFS	3.5 +/- 0.9	200,000	1.35 +/-0.25
KSC SLT 241G LFS	3.5 +/- 0.9	200,000	1.35 +/-0.25
KSC SLT 243J LFG	3.5 +/- 0.9	200,000	1.35 +/-0.25
KSC SLT 243J LFG	3.5 +/- 0.9	200,000	1.35 +/-0.25

Electrical	Silver	Gold
SWITCHING POWER MAX.:	1.0 VA	0.2 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:  $\geq 250 \text{ Vrms}$  CONTACT RESISTANCE:  $< 100 \text{m}\Omega$ 

INSULATION RESISTANCE: Initial measurement:  $\geq 1G\Omega$ 

After damp heat:  $\geq 10 M\Omega$  BOUNCE TIME: < 5 ms

#### **Environmental**

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

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STORAGE TEMPERATURE:  $-40^{\circ}$ C to  $+85^{\circ}$ C (Silver)  $-40^{\circ}$ C to  $+125^{\circ}$ C (Gold)

#### **Process**

Compatible with the lead free reflow soldering process.

#### **Packaging**

In reels of 1,000 pieces.

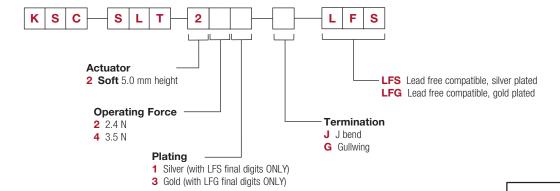
Dimensions of reels according to EIA RS481 or IEC 2863.

External diameter 330 mm ± 2 mm.

#### **How To Order**

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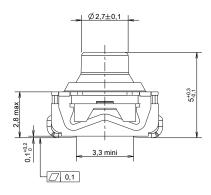


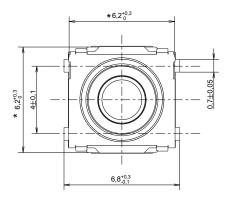


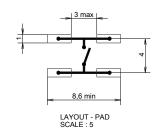
Dimensions are shown: mm

First Angle

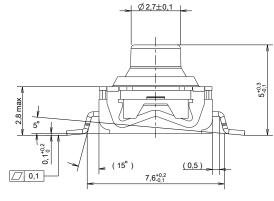
# J J Bend

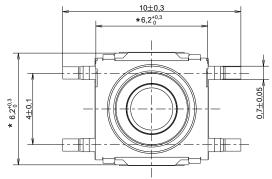


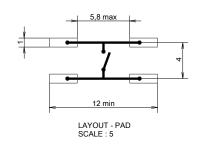




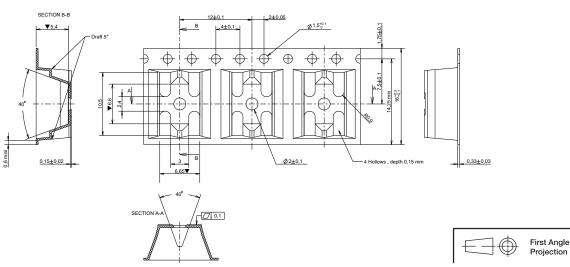
# **G** Gullwing







# **TAPE & REEL**



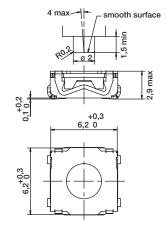


Dimensions are shown: mm Specifications and dimensions subject to change

#### KSC1 without actuator 2,5 mm high



Туре	Operating force FA (Newtons)	Operating life (operations)	Travel (mm)
KSC121	1.8 ± 0.65	200,000	0.3 ± 0.15
KSC141	$3 \pm 0.75$	200,000	0.3 ± 0.15
KSC151	5.5 ± 1.4	100,000	0.35 ± 0.15



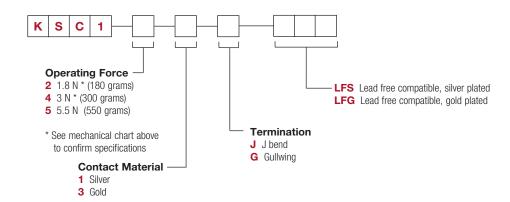
#### **Packaging**

Switches delivered on continuous tape & reels of 2,000 pieces Dimensions according to EIA RS-481/ IEC 60286-3 standard External diameter 330 ± 2 mm

#### **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.



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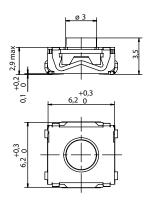
Dimensions are shown: mm Specifications and dimensions subject to change



#### KSC2 soft actuator 3,5 mm high



Туре	Operating force FA (Newtons)	Operating life (operations)	Travel (mm)
KSC201	1.6 ± 0.6	5,000,000	0.3 ± 0.2
KSC221	2 ± 0.5	500,000	0.35 + 0.25/- 0.15
KSC222	2 ± 0.5	1,000,000	0.35 + 0.25/- 0.15
KSC241	$3.5 \pm 0.9$	300,000	$0.5 \pm 0.2$
KSC251	5.55 ± 1.45	300,000	$0.5 \pm 0.2$
KSC241 SPD	$3.55 \pm 0.9$	300,000	0.5 ± 0.2
KSC251 SPD	6.2 ± 1.55	100,000	$0.6 \pm 0.2$



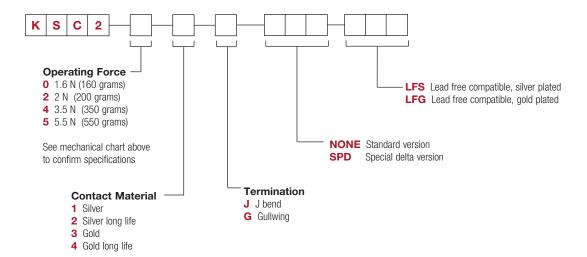
#### **Packaging**

Switches delivered on continuous tape & reels of 2,000 pieces Dimensions according to EIA RS-481/ IEC 60286-3 standard External diameter 330 ± 2 mm

#### **How To Order**

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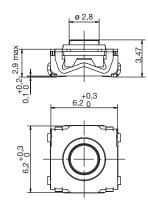




#### KSC3 hard actuator 3,5 mm high



Type	Operating force FA (Newtons)	Operating life (operations)	Travel (mm)
KSC321	2 ± 0.4	300,000	0.2 + 0.3/- 0
KSC341	$3 \pm 0.75$	300,000	0.2 + 0.3/- 0
KSC351	5 ± 1	100,000	0.25 + 0.3/- 0



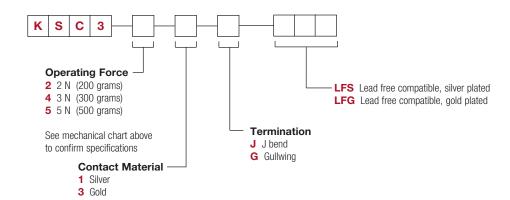
#### **Packaging**

Switches delivered on continuous tape & reels of 2,000 pieces Dimensions according to EIA RS-481/ IEC 60286-3 standard External diameter 330  $\pm~2\,$  mm

#### **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: mm Specifications and dimensions subject to change

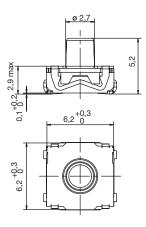


#### KSC4 soft actuator 5,2 mm high





Туре	Operating force FA (Newtons)	Operating life (operations)	Travel (mm)
KSC401 50SH	1.45 ± 0.55	5,000,000	0.5 ± 0.25
KSC411 70SH	1.4 ± 0.35	1,000,000	$0.35 \pm 0.20$
KSC421 70SH	1.7 ± 0.45	300,000	$0.5 \pm 0.25$
KSC422 70SH	1.7 ± 0.45	1,000,000	$0.5 \pm 0.25$
KSC441 70SH	4 ± 1	300,000	$0.75 \pm 0.25$
KSC442 70SH	4 ± 1	1,000,000	$0.75 \pm 0.25$
KSC451 70SH	4.25 ± 0.75	300,000	$0.8 \pm 0.2$
KSC441 SPD	$3.5 \pm 0.9$	300,000	$0.7 \pm 0.2$
KSC441 ST1	3.4 ± 1	300,000	$0.7 \pm 0.25$
KSC441 ST2	3.4 ± 1	300,000	$0.35 \pm 0.20$
KSC461 ST1	6.25 ± 1.75	100,000	1 ± 0.3
KSC461 ST2	6.25 ± 1.75	300,000	$0.5 \pm 0.2$



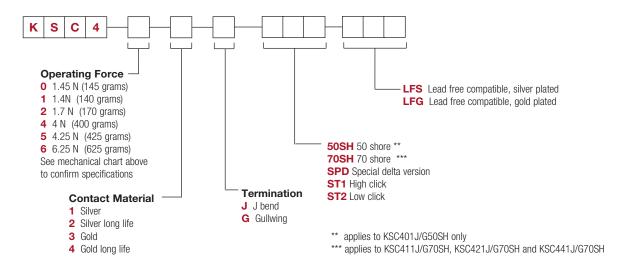
#### **Packaging**

Switches delivered on continuous tape & reels of 1,000 pieces Dimensions according to EIA RS-481/ IEC 60286-3 standard External diameter 330  $\pm~2\,$  mm

#### **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.







Ю



# **KSC-DCT Series Dual Circuit Technology Tact Switch**

#### Features/Benefits

- SPDT NC-NO function
- Silicone actuator
- J or G terminations
- Tape & reel
- IP67

## Typical Applications

- Automotive
- Medical equipment
- Industrial electronics



Туре	Force (N)	Operating Life (operations)	Travel (mm)
KSC441J DCT 70SH LFS	4.75 +/-1.25	300,000	0.85+0.35/-0.25
KSC441G DCT 70SH LFS	4.75 +/-1.25	300,000	0.85+0.35/-0.25

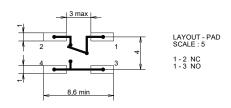
#### **Packaging**

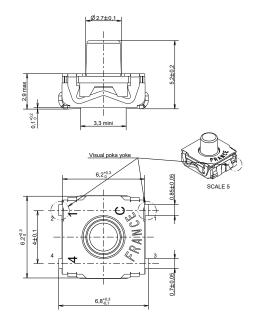
In reels of 1,000 pieces.

Dimensions of reels according to EIA RS481 or IEC 2863.

External diameter 330 ± 2 mm

#### **PCB Layout**

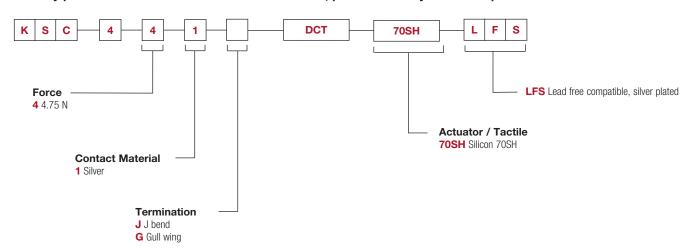




#### **How To Order**

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





First Angle

Dimensions are shown: mm Specifications and dimensions subject to change



# NEW



#### Features/Benefits

- Extended Cage
- Silicone actuator
- J or G terminations
- Tape & reel
- IP67

## **Typical Applications**

- Automotive
- Medical equipment
- Industrial electronics

Туре	Force (N)	Operating Life (operations)	Travel (mm)
KSC421G 70SH LFS PF	1.8+/-0.45	300,000	0.5+/-0.25
KSC421J 70SH LFS PF	1.8+/-0.45	300,000	0.5+/-0.25
KSC422G 70SH LFS PF	1.8+/-0.45	1,000,000	0.5+/-0.25
KSC422J 70SH LFS PF	1.8+/-0.45	1,000,000	0.5+/-0.25
KSC441G 70SH LFS PF	4 +/- 1	300,000	0.65+/-0.25
KSC441J 70SH LFS PF	4 +/- 1	300,000	0.65+/-0.25
KSC442G 70SH LFS PF	4 +/- 1	1,000,000	0.65+/-0.25
KSC442J 70SH LFS PF	4 +/- 1	1,000,000	0.65+/-0.25
KSC461G 70SH LFS PF	6.25+/- 1.75	300,000	0.75+/-0.25
KSC461J 70SH LFS PF	6.25+/- 1.75	300,000	0.75+/-0.25
KSC471G 70SH LFS PF	4 +/- 1	300,000	0.65+/-0.25
KSC471J 70SH LFS PF	4 +/- 1	300,000	0.65+/-0.25

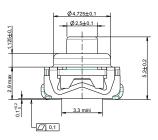
Max. potting height: 2.9 mm

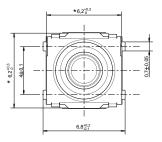
#### **Packaging**

In reels of 1,000 pieces.

Dimensions of reels according to EIA RS481 or IEC 2863.

External diameter 330 ± 2 mm

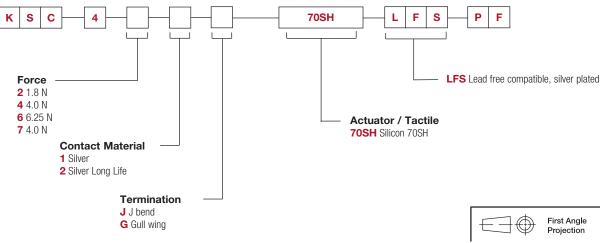




#### **How To Order**

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





Dimensions are shown: mm Specifications and dimensions subject to change

H



# KSC-OF Series Overload Friendly Tact Switch



#### Features/Benefits

- Extended cage for mechanical stop
- Silicone actuator
- J termination
- Tape & reel
- IP67

## Typical Applications

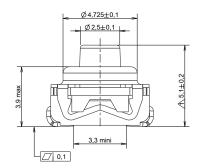
- Industrial electronics
- Consumer
- Medical equipment
- Automotive interior

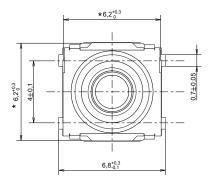
Туре	Force (N)	Life	Travel (mm)
KSC421J 70SH LFS OF	1.65+/-0.45	300,000	0.5+/-0.25
KSC441J 70SH LFS OF	4.0+/-1.0	300,000	0.65+0.3/-0.2

- Life time is 300,000 cycles at 20N actuation force
- The extended cage can be used as mechanical stop for the activation button
- Overload value reaches 200N (one time)

#### **Packaging**

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

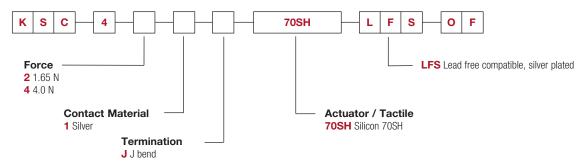




# **How To Order**

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.





В



# **KSC-TE Series Tireless Endurance Tact Switch**

# **Typical Applications**

- Elevator
- Game controllers
- Industrial applications

# Features/Benefits New combination of dome/support



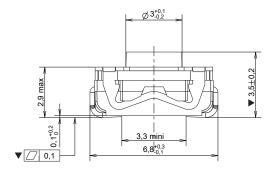
- J terminations
- Tape & reel
- IP67

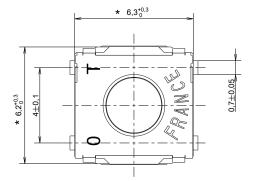
Туре	Force (N)	Life	Travel (mm)
KSC2 TE 01J LFS	1.60+/-0.6	10,000,000	0.3+/-0.2

Life time at 10 million actuations under electrical load (24 V, 1.3 mA)

#### **Packaging**

In reels of 2,000 pieces Dimensions of reels according to EIA RS481 or IEC 2863 External diameter 330  $\pm~2~\text{mm}$ 

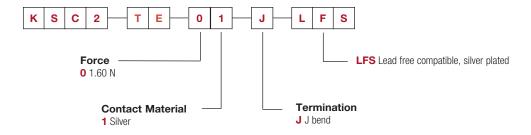




#### **How To Order**

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.





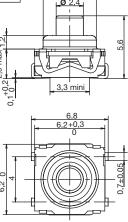
#### KSC5 hard actuator 5,6 mm high



	Operating force	Operating force	Travel to	Travel to		
	axial FA	lateral FL	make	make	Life expectancy	Life expectancy
Type	N (grams)	N (grams) ±30%	axial (mm)	lateral (mm)	cycles, axial	cycles, lateral
KSC521	$2 \pm 0.5$	1.2 - 2.6	$0.25 \pm 0.15$	$0.5 \pm 0.25$	100,000	10,000
KSC541	3 ± 0.75	1.8 - 3.8	0.25 ± 0.15	0.5 ± 0.25	100,000	10,000

#### **Packaging**

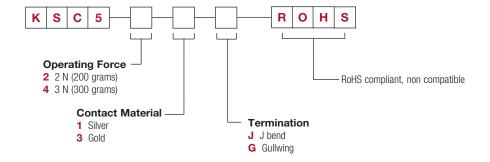
Switches delivered on continuous tape & reels of 1,000 pieces, dimensions according to EIA RS-481/ IEC 60286-3 standard External diameter 330 ± 2 mm



#### **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.



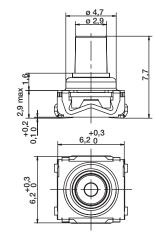




## KSC6 hard actuator 7,7 mm high



Туре	Operating force FA (Newtons)	Operating life (operations)	Travel (mm)
KSC621	1.7 ± 0.5	300,000	$0.4 \pm 0.2$
KSC631	$2.55 \pm 0.65$	300,000	$0.4 \pm 0.2$
KSC641	$3.4 \pm 0.85$	300,000	$0.4 \pm 0.2$



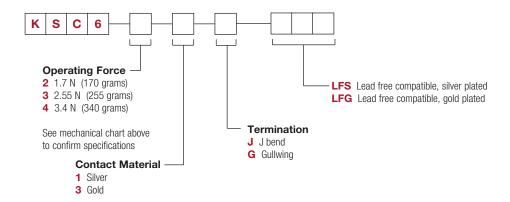
#### **Packaging**

Switches delivered on continuous tape & reels of 750 pieces Dimensions according to EIA RS-481/ IEC 60286-3 standard External diameter 380 ± 2 mm

#### **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.





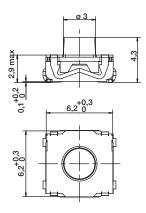
Dimensions are shown: mm



#### KSC7 soft actuator 4,3 mm high



Туре	Operating force FA (Newtons)	Operating life (operations)	Travel (mm)
KSC701	1.6 ± 0.6	5,000,000	0.3 ± 0.2
KSC721	2.25 ± 0.55	300,000	$0.3 \pm 0.15$
KSC741	3.9 ± 1	300,000	0.4 ± 0.2



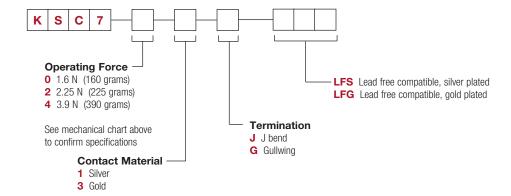
#### **Packaging**

Switches delivered on continuous tape & reels of 1,000 pieces Dimensions according to EIA RS-481/ IEC 60286-3 standard External diameter 330 ± 2 mm

#### **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.





DimensiDiranensionovere strown: mm



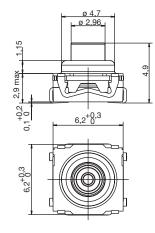
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3

#### KSC8 hard actuator 4,9 mm high



Туре	Operating force FA (Newtons)	Operating life (operations)	Travel (mm)
KSC821	3.15 ± 0.75	300,000	$0.65 \pm 0.2$
KSC821 OL	1.7 ± 0.5	300,000	$0.4 \pm 0.2$
KSC831 OL	$2.55 \pm 0.65$	300,000	$0.4 \pm 0.2$
KSC841 OL	$3.4 \pm 0.85$	300,000	0.4 ± 0.2



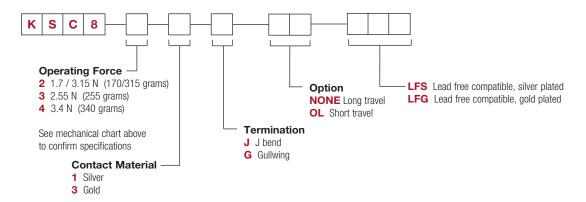
#### **Packaging**

Switches delivered on continuous tape & reels of 1,000 pieces Dimensions according to EIA RS-481/ IEC 60286-3 standard External diameter 330 ± 2 mm

#### **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: mm



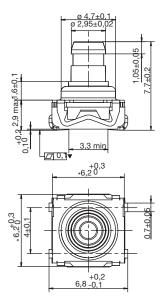




Туре	Operating force FA (Newtons)	Operating life (operations)	Travel (mm)
KSC921	1.7 ± 0.5	300,000	0.4 ± 0.2
KSC931	2.25 ± 0.65	300,000	$0.4 \pm 0.2$
KSC941	$3.4 \pm 0.85$	300,000	0.4 ± 0.2

# **Packaging**

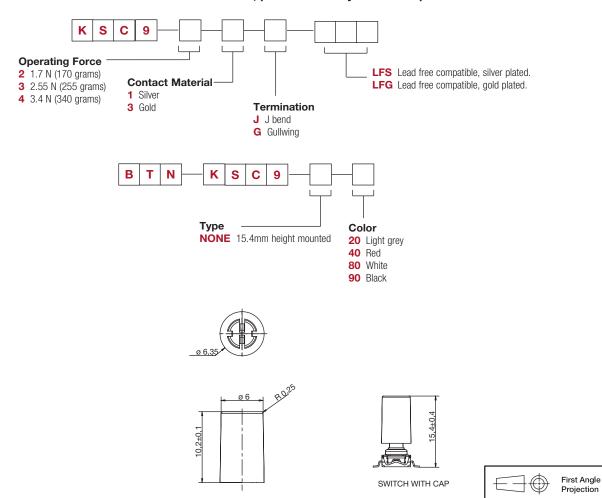
Switches delivered on continuous tape & reels of 750 pieces Dimensions according to EIA RS-481/ IEC 60286-3 standard External diameter  $380 \pm 2 \text{ mm}$ 



#### **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.

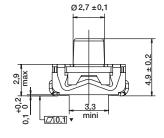


H

## KSC10 soft actuator 4,9 mm high



Туре	Operating force FA (Newtons)	Operating life (operations)	Travel (mm)
KSC1001	1.45 ± 0.55	5,000,000	0.45 ± 0.25



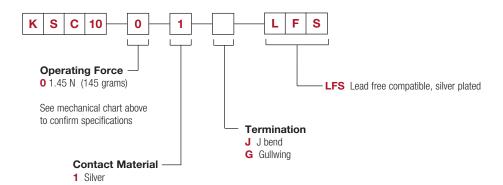
#### **Packaging**

Switches delivered on continuous tape & reels of 1,000 pieces Dimensions according to EIA RS-481/ IEC 60286-3 standard External diameter 330 ± 2 mm

# **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.



Note: KSC10 offered with yellow actuator as standard, hardness 55 Shore

First Angle Projection

Dimensions are shown: mm



# KSC V2 Series Side Actuated Sealed Tact Switch

#### Features/Benefits

- Full SMD side actuated
- Haptic adaptability
- Pin in paste terminations
- Tape & reel
- IP67

#### Typical Applications

- Automotive
- Industrial electronics
- Network equipment
- Telecommunications



### **Specification**

FUNCTION: momentary action

CONTACT ARRANGEMENT: 1 make contact = SPST, N.O. TERMINALS:

- 2 pin in paste signal terminals
- 3 SMD ground terminals

#### Mechanical

Туре	Force (N)	Operating Life (operations)	Travel (mm)
KSC201 V2 LFS	1.6 ± 0.6	1,000,000	$0.3 \pm 0.2$
KSC421 V2 70SH LFS	1.55 ± 0.45	300,000	$0.45 \pm 0.25$
KSC441V2 70SH SP DELTA LFS	3.5 ± 1.0	300,000	0.7 ± 0.2
KSC443V2 70SH SP DELTA LFG	3.5 ± 1.0	300,000	0.7 ± 0.2
KSC421 V2 RT LFS	1.8 ± 0.5	300,000	0.3 ± 0.2
KSC423 V2 RT LFG	1.8 ± 0.5	300,000	0.3 ± 0.2
KSC441 V2 RT LFS	3.4 ± 1.0	300,000	0.35 ± 0.2

NOTE: Other configurations of haptics are available upon

MISUSE OVERLOAD: 40N with back support SHEAR FORCE: 10N without back support

**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 0.1 mA

DIELECTRIC STRENGTH (50 Hz, 1 min.): ≥ 250 Vrms

CONTACT RESISTANCE:  $\leq$  100 m $\Omega$ 

INSULATION RESISTANCE (100 V, initial stage):  $> 10^{9} \Omega$ 

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.
- Lead free reflow soldering process in accordance with IEC 61760-1.

TERMINALS: pin in paste, silver or gold plated

TOP PLATE: tin plated

MSL level: 1

Vacuum pick head mandatory

# **Packaging**

In reels of 800 pieces.

Dimensions of reels according to EIA RS481 or IEC 2863.

External diameter 380 mm ± 2 mm.

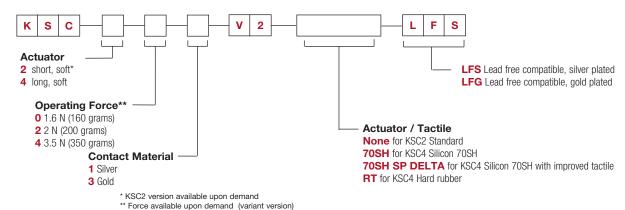
NOTE: This product is designed and manufactured for general electronic devices. For systems where reliability and safety are required, please contact your sales representative to secure product integration and function to secure usage.

#### **How To Order**

demand

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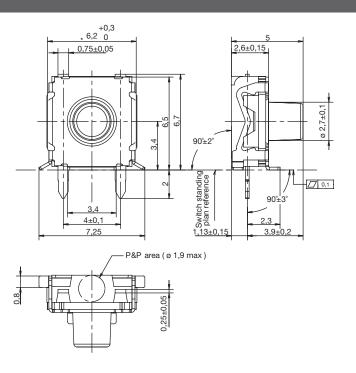


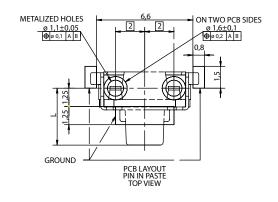
B-90



Dimensions are shown: mm Specifications and dimensions subject to change

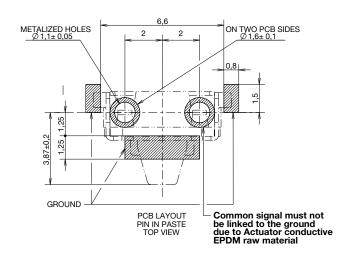
# KSC V2 Series Side Actuated Sealed Tact Switch





Series	L
KSC2	2,3
KSC4	3,9

## IMPORTANT NOTE FOR RT ACTUATOR



This actuator is not compatible with grease even with restricted contact.

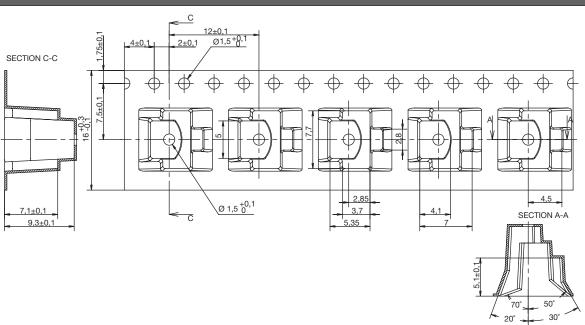
In case of the integration of an actuator or button by the customer, please consult us if use of plasticizer agent for button raw material (risk of chemical migration).

Our actuator contains carbon particles and is electrical conductive. In consequence, customer actuator must be electric insulating raw material.

Due to the cover raw material plating, small tin balls can appear after the reflow soldering process. These small tin balls are located near all cutting areas.







# **INTEGRATION**

