

# KSC2 Series

Sealed Tactile Switch for SMT 6.2 x 6.2 mm,  
with 3.5mm Height Soft Actuator



## Description

The KSC2 series of sealed tactile switches for SMT are IP67 rated, 3.5mm high momentary action tactile switches, featuring a soft actuator. The switches are available with a variety of operating forces and in a range of electrical lifespans, depending on model. The KSC2 series are designed to give users a positive adaptable tactile feeling, perfect for consumer-facing applications.

## Features & Benefits

- Electrical Height for easier integration due to more precise tolerances
- Soft actuator 3.5mm high
- IP67
- Compatible with lead free reflow soldering process of SMT devices
- Low halogen, RoHS and REACH compliant

## Applications

- Industrial electronics
- Consumer products
- Transportation
- Medical

## Specifications

<b>Function</b>	Momentary action
<b>Contact Arrangement</b>	1 make contact = SPST, N.O.
<b>Terminals</b>	J bend & Gullwing type for SMT
<b>Sealing</b>	IP67

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

## Electrical Characteristics

<b>Dielectric Strength (50 Hz, 1 min.)</b>	$\geq 250$ Vrms	
<b>Contact Resistance</b>	$\leq 100$ m $\Omega$	
<b>Insulation Resistance (100 V)</b>	$\geq 1000$ M $\Omega$	
<b>Bounce Time</b>	$\leq 1$ ms	
	<b>Silver</b>	<b>Gold</b>
<b>Maximum Power</b>	1 VA	0.2 VA
<b>Maximum Voltage</b>	32 VDC	32 VDC
<b>Minimum Voltage</b>	20 mV	20 mV
<b>Maximum Current</b>	50 mA	10 mA
<b>Minimum Current</b>	1 mA <sup>1</sup>	0.1 mA

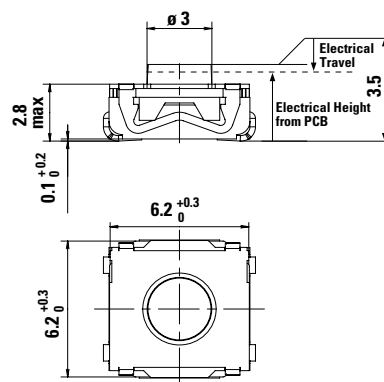
**Note:**

1. Ultra low current with 10  $\mu$ A - 1 VDC version is available upon request

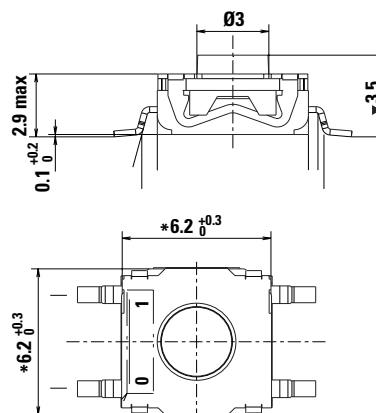
## Environmental Characteristics

	<b>Silver</b>	<b>Gold</b>
<b>Operating Temperature</b>	-40°C to 85°C	-40°C to 125°C
<b>Storage Temperature</b>	-55°C to 85°C	-55°C to 125°C

## Dimensions (mm) J Termination



## Dimensions (mm) G Termination



# KSC2 Series

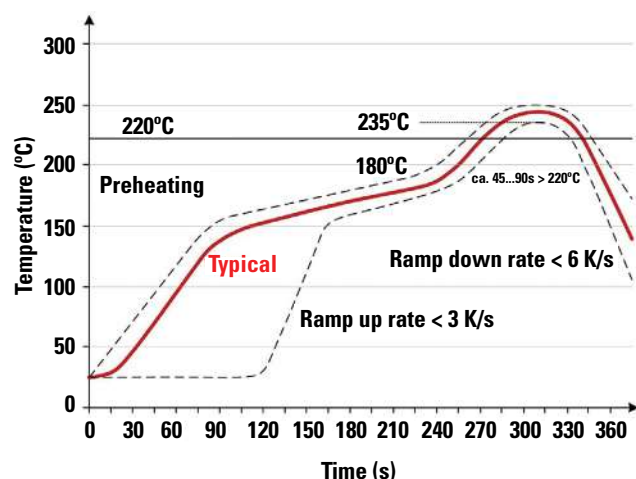
Sealed Tactile Switch for SMT 6.2 x 6.2 mm,  
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## Mechanical Characteristics

Part #	Operating Force Fa (Newtons)	Operating Life (operations)	G Terminations	J Terminations	
			Electrical Travel (mm)	Electrical Travel for information only (mm)	Electrical Height from PCB (mm)
KSC201	1.6 ± 0.6	5,000,000	0.3 ± 0.2	0.3	3.35 ± 0.2
KSC221	2 ± 0.5	500,000	0.35+0.25/-0.15	0.25	3.25 ± 0.2
KSC222	2 ± 0.5	1,000,000	0.35+0.25/-0.15	0.35	3.25 ± 0.2
KSC241	3.5 ± 0.9	300,000	0.5 ± 0.2	0.5	3 ± 0.2
KSC241 SP DELTA	3.55 ± 0.9	300,000	0.5 ± 0.2	0.4	3.1 ± 0.2
KSC251	5.55 ± 1.45	300,000	0.5 ± 0.2	0.5	2.95 ± 0.2
KSC251 SP DELTA	6.2 ± 1.55	100,000	0.6 ± 0.2	0.55	2.95 ± 0.2

## Soldering Profile

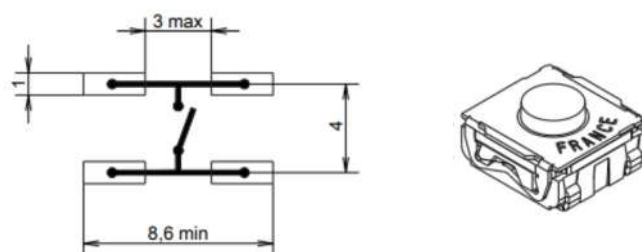


Note: Up to 2 reflow cycles in accordance with the above temperature profile

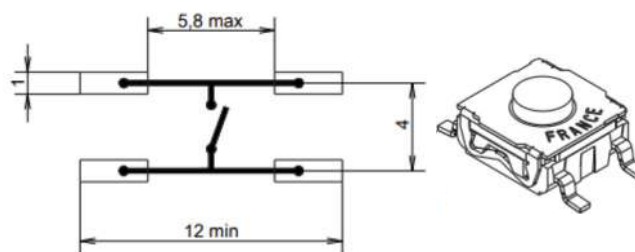
Soldering process: Depending on the application, this component is suited to the following methods:

- Terminals being silver or gold plated over a nickel barrier, the use of slightly activated flux is suitable.
- Lead free soldering process in accordance with the definition on the left.

## J Terminations (mm)



## G Terminations (mm)

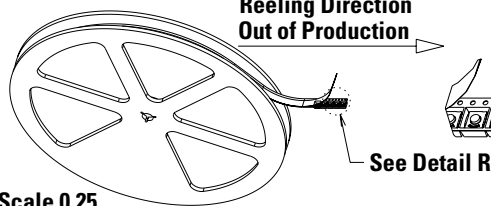


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**Tape & Reel**

Reeling Direction  
Out of Production



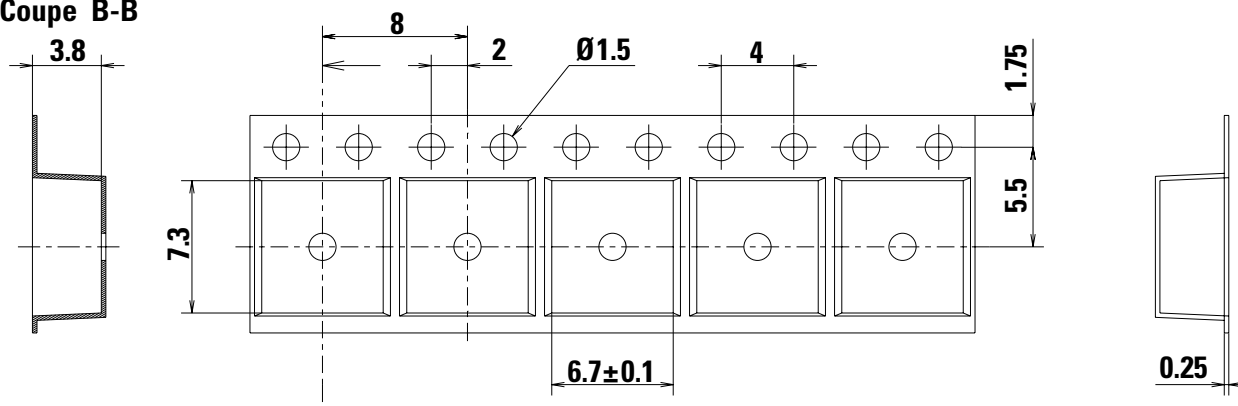
Scale 0.25

Detail R  
Scale 1

See Detail R

**Packaging Details**

Type	Tape & reel
Number of Parts in Packaging	2,000
Other Information	Tape and reel per EIA 481
Transport Conditions	According to specification NF H00-060

**Packaging (mm)****Coupe B-B****Ordering Number**

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. However, please note that not all combinations of these options are feasible. For any part number different from those listed below, please consult your local representative.

**KSC2 - xx - x - x - x - x****Operating Force**

**0:** 1.6 N (160 grams)  
**2:** 2 N (200 grams)  
**4:** 3.5 N (350 grams)  
**5:** 5.5 N (550 grams)

**Contact Material**

**1:** Silver  
**2:** Silver long life  
**3:** Gold  
**4:** Gold long life

**LFS:** Lead free compatible, silver plated

**LFG:** Lead free compatible, gold plated

**Tactile Ratio**

**NONE:** Standard version

**SP DELTA:** Special delta version = higher tactile ratio

**Termination**

**J:** J Bend

**G:** Gullwing

**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 equipment. Please contact customer service for the contractual specification package.

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