# KSC-ST Series Sound Tunable Tact Switch

#### Features/Benefits

- Various haptic responses
- Range of 2 sound intensity
- J or G terminations
- Tape & reel
- IP 67

#### Typical Applications

- Automotive
- Industrial electronics
- Keyboards
- Medical equipment





### **Specification**

FUNCTION: momentary action

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

TERMINALS: J bend & Gullwing type for SMT

### Mechanical

Туре	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.

Note for ST2 versions: This actuator contains carbon particles and therefore is electrically conductive. Please consult factory for list of compatible materials to be used while designing button on top of the switch.

Other versions in terms of force, termination length and corrosion protection are 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 (50 Hz, 1 min.): 250 V CONTACT RESISTANCE: < 100 m $\Omega$ 

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

BOUNCE TIME: < 1 ms

\*Ultra low current available at 1µA upon request

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.

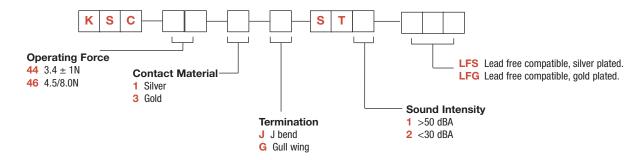
Dimensions of reels according to EIA RS481 or IEC 60286-3. External diameter 330 mm ± 2 mm.

**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.





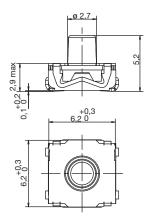
Dimensions are shown: mm (inches) Specifications and dimensions subject to change

Бĺ

В

**Tactile Switches** 

### ACTUATOR

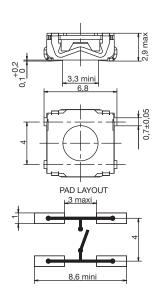


## CONTACT MATERIAL

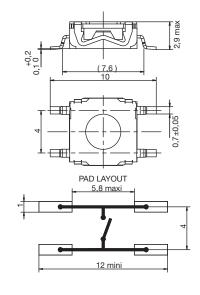
OPTION CODE	MATERIAL
1	SILVER
3	GOLD

### **TERMINATION**

### J J BEND



### G GULLWING



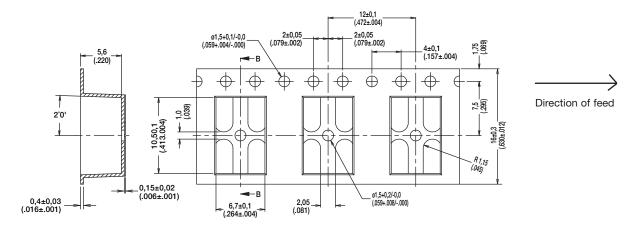
Dimensions are shown: mm (inches)
Specifications and dimensions subject to change

### **SOUND INTENSITY**

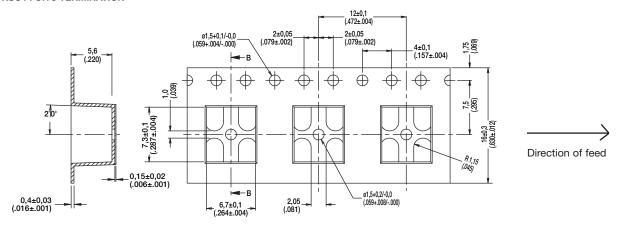
OPTION CODE	SOUND INTENSITY
ST1	>50 dBA
ST2	<30 dBA

### TAPE & REEL

### FOR KSC4 FOR G TERMINATION



### FOR KSC4 FOR J TERMINATION





First Angle Projection

Dimensions are shown: mm (inches)



Specifications and dimensions subject to change