

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

## Packaging

Delivered in boxes of 500 pieces.

## Electrical

MAXIMUM POWER: 1 VA     Silver     Gold  
 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.):  $\geq 300$  Vrms  
 CONTACT RESISTANCE:  $\leq 100$ 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.

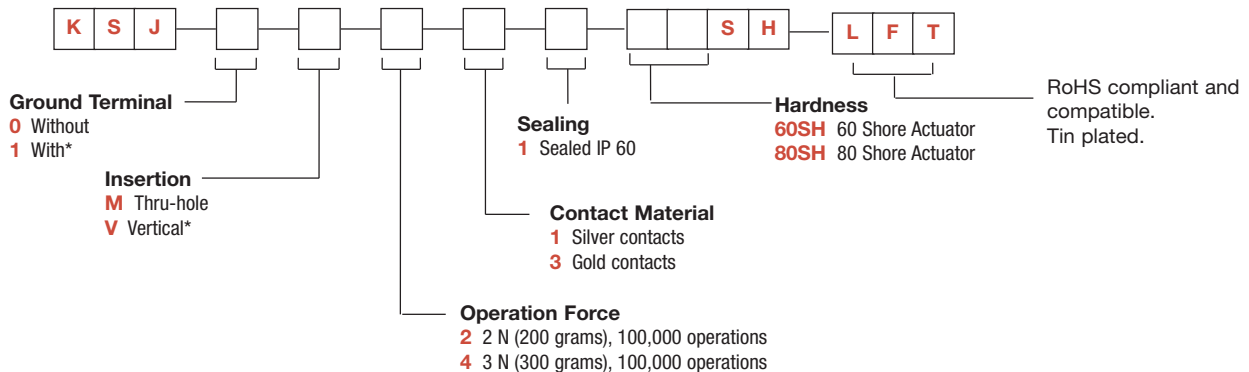
\* Please contact your C&K representative for any question regarding the product intergration.

## 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.**



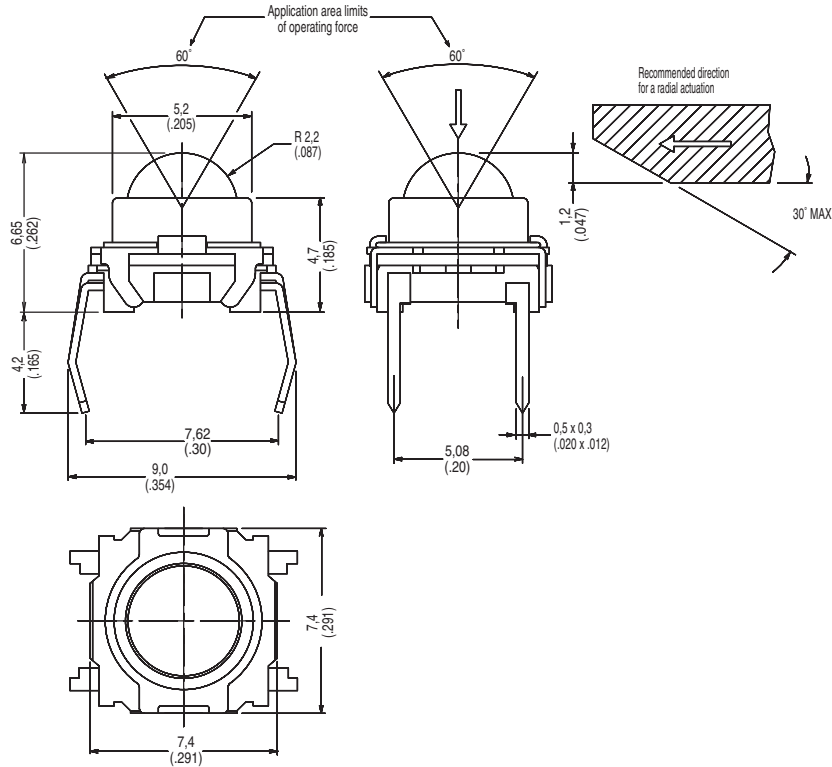
\*Note: "1" ground terminal option not available with "V" version.  
 The bracket for the "V" version plays this role.



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

# KSJ Series Spherical Actuator Tact Switches

**KSJ**



**KSJ0M211**

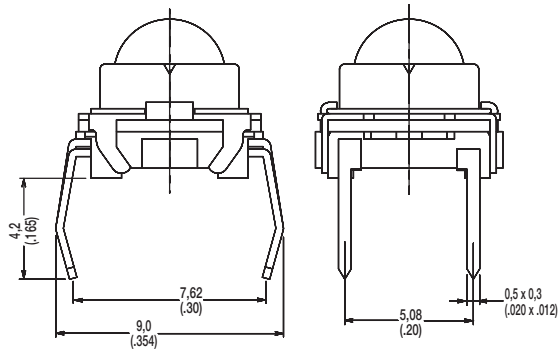


**B**

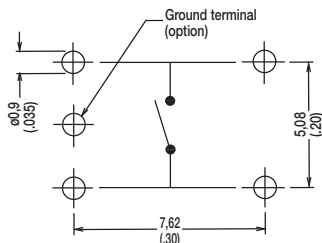
**Tactile Switches**

## INSERTION

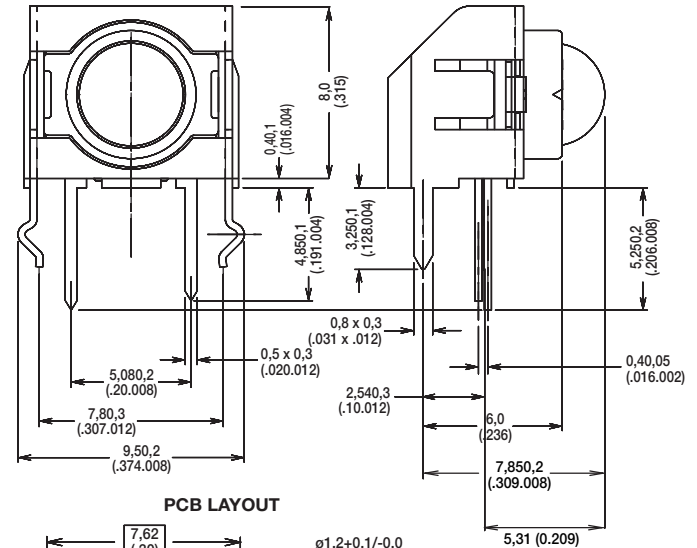
**M THRU-HOLE**



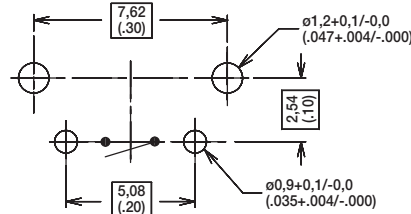
**PCB LAYOUT**



**V VERTICAL**



**PCB LAYOUT**



First Angle  
Projection



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