# **KSJ Series**

## Sealed Spherical Actuator Tactile Switches 7.4 x 7.4 mm





#### **Specifications**

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		
Packaging	Delivered in boxes of 250 pieces		

### **Electrical Characteristics**

	Silver	Gold	
Maximum Power	1 VA	0.2 VA	
Min. / Max. Voltage	20 mV - 32 VDC		
Min. / Max. Current	1 - 50 mA	1 - 10 mA	
Dielectric Strength	(50 Hz, 1 min.): ≥ 250 Vrms		
Contact Resistance	≤ 100 mΩ		
Insulation Resistance	(100 V): ≥ 10 <sup>9</sup> ohms		
Bounce Time	≤ 1 ms		

### **Environmental Characteristics**

	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**

Soldering	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 representative for any question regarding the product intergration.

## **Description**

The KSJ series spherical actuator tactile switch is designed for mechanisms found in cranes, off-road and railway products, as well as in factory automation and automotive applications. It features compliant side actuation and its spherical actuator allows an actuation force off center  $\pm$  30°, with regard to vertical.

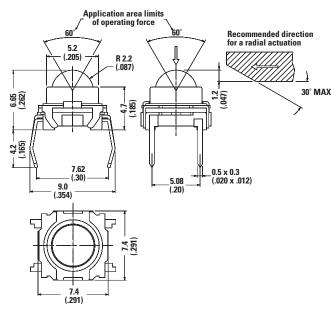
### **Features & Benefits**

- Spherical actuator allows actuation force off center ± 30° with regard to vertical
- RoHS compliant and compatible
- Designed for mechanisms
- Compliant side actuation

### **Applications**

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

### **Dimensions inches (mm)**





# **KSJ Series**

## Sealed Spherical Actuator Tactile Switches 7.4 x 7.4 mm



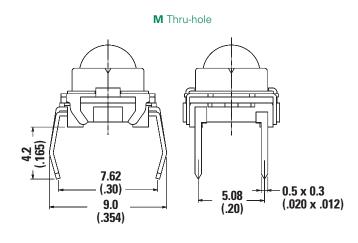
### **Mechanical Characteristics**

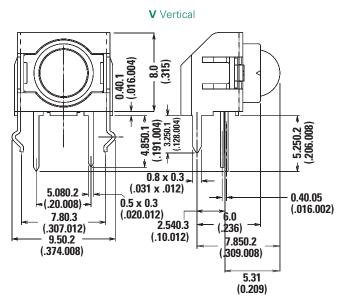
Part #	Actuation Force N	Operating Life (operations) axial	Operating Life (operations) radial	Travel to make (mm)
KSJ0M21160SH	2 ± 0.5	100,000	30,000	$0.6 \pm 0.3$
KSJ0M41180SH	$3.3 \pm 0.8$	100,000	30,000	$0.55 \pm 0.25$
KSJ0M21180SH	2 ± 0.5	100,000	30,000	$0.35 \pm 0.2$
KSJ0M91180SH	$3.9 \pm 0.8$	100,000	30,000	$0.7 \pm 0.25$

#### Notes:

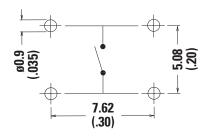
Specifications listed above are for switches with standard options. For information on specific and custom switches, consult Customer Service. This datasheet does not provide enough information for applications which require a certain level of quality or safety such as automotive, medical systems or safety equipment. Please contact your sales representative to get contractual specification package. Please contact your customer service representative for any question regarding the product intergration.

#### Insertion

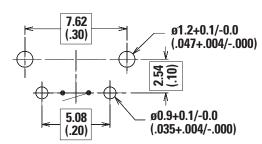




### **PCB** Layout



### **PCB Layout**



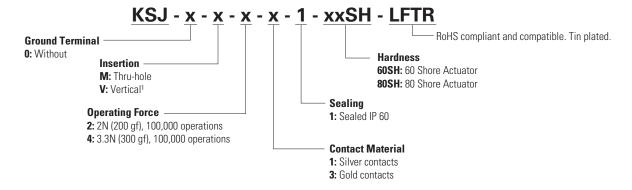
# **KSJ Series**

# Sealed Spherical Actuator Tactile Switches 7.4 x 7.4 mm



### **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 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.



**Disclaimer Notice** - Information furnished is believed to be accurate and reliable. However, users should independently evaluate the suitability of and test each product selected for their own applications. Littelfuse products are not designed for, and may not be used in, all applications. Read complete Disclaimer Notice at <a href="http://www.littelfuse.com/disclaimer-electronics">http://www.littelfuse.com/disclaimer-electronics</a>.

