

# KSJ Series

## Sealed Spherical Actuator Tactile Switches 7.4 x 7.4 mm



### Specifications

<b>Function</b>	Momentary Action
<b>Contact Arrangement</b>	1 make contact = SPST, N.O.
<b>Distance Between Button Centers (min.)</b>	7.62 (0.300)
<b>Terminals</b>	PC pins
<b>Sealing</b>	IP60
<b>Packaging</b>	Delivered in boxes of 250 pieces

### Electrical Characteristics

	Silver	Gold
<b>Maximum Power</b>	1 VA	0.2 VA
<b>Min. / Max. Voltage</b>	20 mV - 32 VDC	
<b>Min. / Max. Current</b>	1 - 50 mA	1 - 10 mA
<b>Dielectric Strength</b>	(50 Hz, 1 min.): $\geq 250$ Vrms	
<b>Contact Resistance</b>	$\leq 100$ m $\Omega$	
<b>Insulation Resistance</b>	(100 V): $\geq 10^9$ ohms	
<b>Bounce Time</b>	$\leq 1$ ms	

### Environmental Characteristics

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

### Process

<b>Soldering</b>	Wave soldering compatible with lead free soldering profile.
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**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 integration.

### 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  $\pm 30^\circ$  with regard to vertical.

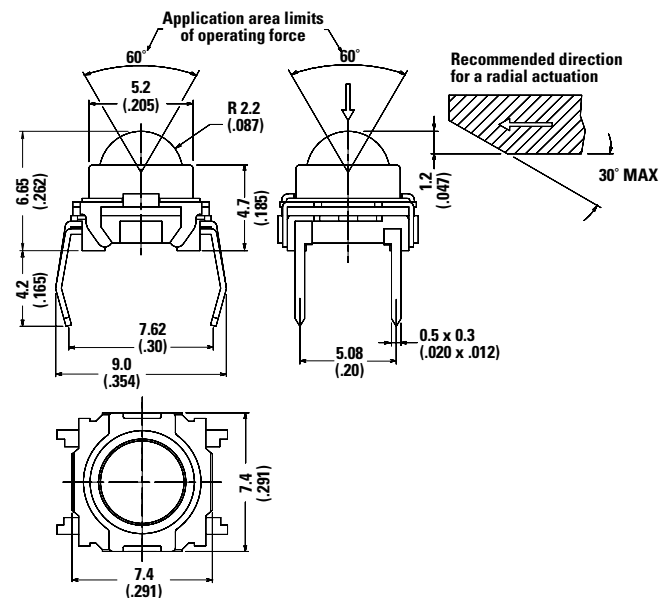
### Features & Benefits

- Spherical actuator allows actuation force off center  $\pm 30^\circ$  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)



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### Mechanical Characteristics

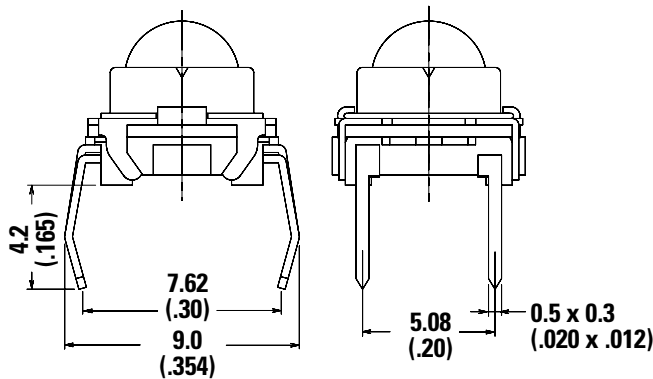
Part #	Actuation Force N (grams)	Operating Life (operations) axial	Operating Life (operations) radial	Travel to make (mm)
KSJ0M21160SH	2 ± 0.5	100,000	30,000	0.6 ± 0.3
KSJ0M41180SH	3.0 ± 0.8	100,000	30,000	0.55 ± 0.25
KSJ0M21180SH	2 ± 0.5	100,000	30,000	0.35 ± 0.2
KSJ0M91180SH	3.9 ± 0.8	100,000	30,000	0.7 ± 0.25

**Notes:**

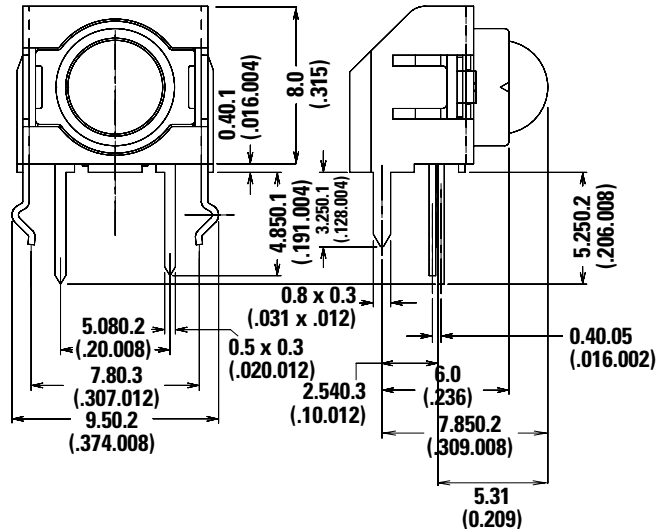
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### Insertion

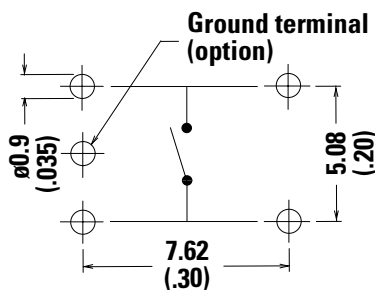
**M Thru-hole**



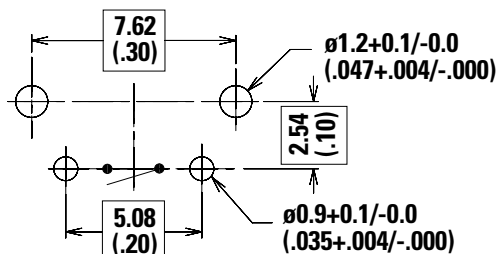
**V Vertical**



**PCB Layout**



**PCB Layout**



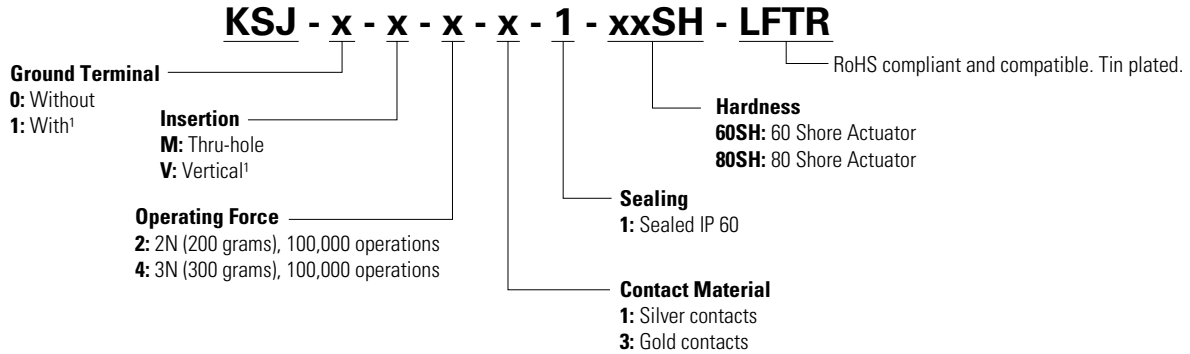
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### Ordering Number

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.



#### Notes

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

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