

KSS Series

Sub-Miniature Side Actuated Tactile Switch for
SMT 7.0 x 4.4 mm with 1.7 mm Height Actuator



Specifications

Function	Momentary action
Contact Arrangement	N.O.
Terminals	Gullwing IP40 sealed
Overload	20N
Packaging	Tape and reels of 3,000 pieces External diameter 330mm ± 2mm

Electrical Characteristics

	Silver	Gold
Maximum Power	1 VA	0.2 VA
Max. Voltage	32VDC	
Min. / Max. Current	1 - 50 mA	1 - 10 mA
Dielectric Strength	≥ 250 VDC	
Contact Resistance	< 100 mΩ	
Insulation Resistance	(100 VDC): ≥ 10 ⁹ Ω	
Bounce Time	< 3 ms	

Environmental Characteristics

Operating Temperature	-40°C to 85°C	-40°C to 125°C
Storage Temperature	-55°C to 85°C	-55°C to 125°C

Description

The KSS series subminiature SMT side actuated switch features a large flat top, has a low profile of 1.7 mm and can withstand high shear forces, making it ideal for products that are exposed to harsh environmental conditions, including health diagnostics, industrial electronics and consumer devices such as cell phones.

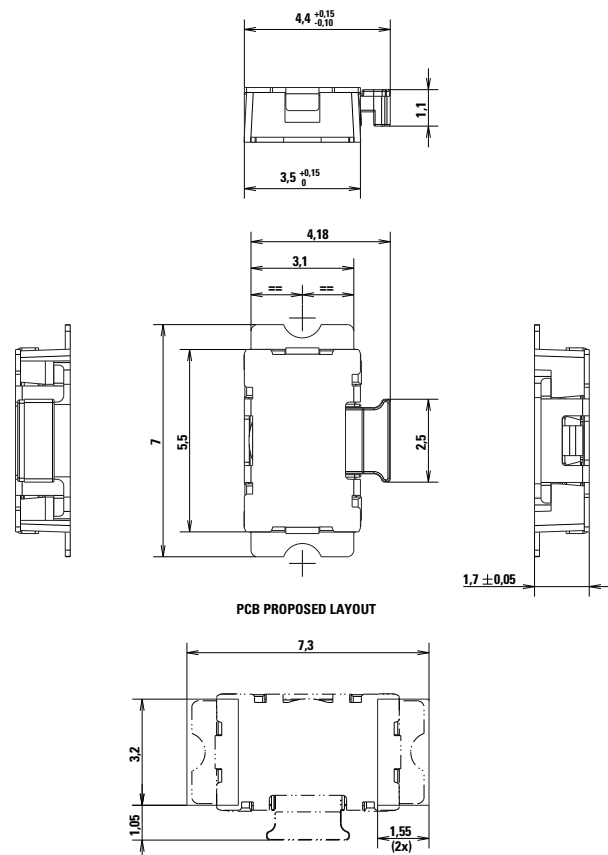
Features & Benefits

- Low profile of 1.7 mm
- Excellent tactile feel
- High shear force
- Range of actuation forces
- Large flat top
- RoHS compliant and compatible

Applications

- Cellular phone
- Industrial electronics
- Health diagnostic electronics

Dimensions (mm)



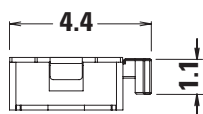
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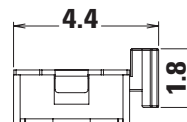


Actuator (mm)

2 - Standard, 1.1 (0.043)



3 - Large, 1.8 (0.070)

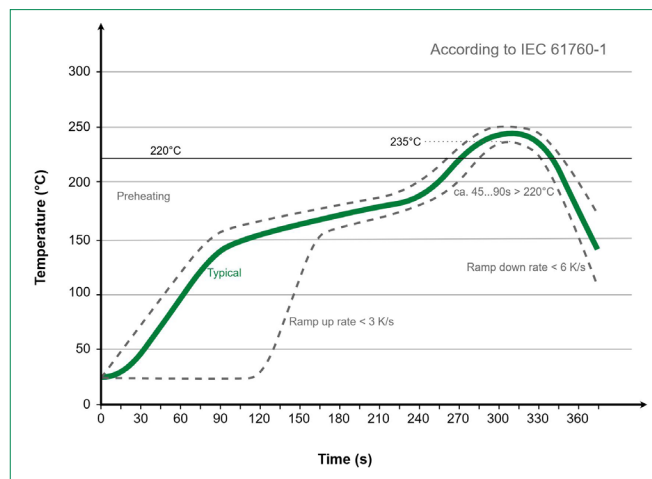


Mechanical Characteristics

Part #	Operating Force Newtons (gf)	Operating Life (operations)	Travel (mm)	Tactile Feeling (Min %)
KSS221G	2 (200) ± 0.5	100,000	0.3 ± 0.15	25%
KSS231G	2.5 (250) ± 0.5		0.3 ± 0.10	30%
KSS241G	4 (400) ± 1		0.3 ± 0.15	25%
KSS321G	2 (200) ± 0.5	250,000		25%
KSS331G	2.5 (250) ± 0.7		0.3 ± 0.15	25%
KSS341G	4 (400) ± 1			25%

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

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:

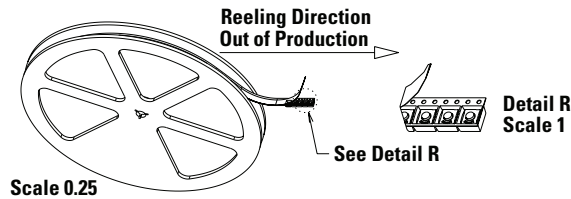
- Lead free reflow soldering process in accordance with IEC 61760-1
- Terminals being silver or gold plated over a nickel barrier, the use of slightly activated flux is suitable.
- Lead free soldering process in accordance with the definition on the left.

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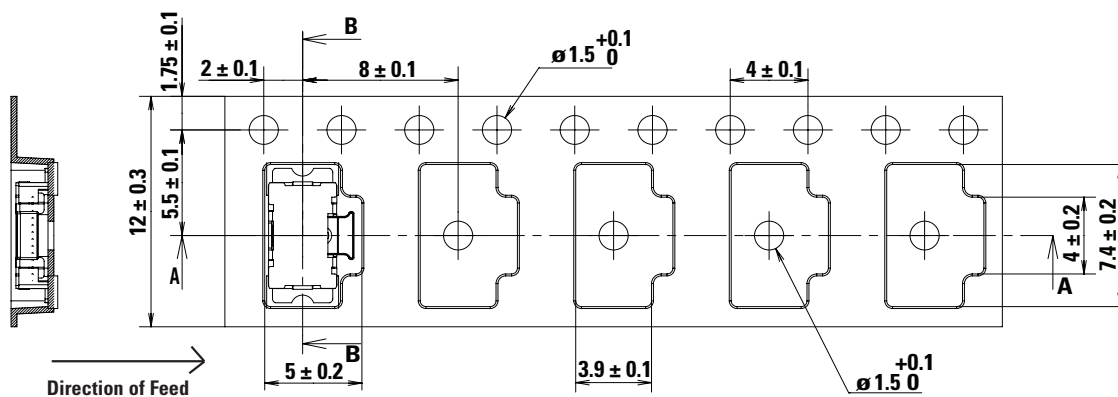
Tape & Reel



Packaging Details

Type	Tape & reel
Number of Parts in Packaging	3,000
Other Information	Tape and reel per EIA 481
Transport Conditions	According to specification NF H00-060

Tape & Reel (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.

KSS - x - x - x - G - x

Actuator

- 2: Standard, 1.1 (0.043)
- 3: Large, 1.8 (0.070)

Operating Force

- 2: 2.0N (200 gf)
- 3: 2.5N (250 gf)
- 4: 4.0N (400 gf)

- LFS: RoHS compliant and compatible, Silver plated
- LFG: RoHS compliant and compatible, Gold plated

Termination

- G: Gull wing, SPST

Contact Material

- 1: Silver
- 3: Gold

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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