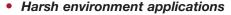
Key Switches

K12S Series High Performance SMT Key Switches (Cold White)







- Compatible with SMT lead free soldering process
- Illuminated
- Excellent tactile feel
- High reliability / long life
- Detect versions available
- RoHS compliant

Typical Applications

- Automotive
- Joysticks
- Off-road transportation
- Motorcycles
- Industrial
- Medical

Construction:

FUNCTION: Momentary
CONTACT ARRANGEMENT: SPST
CONTACT TYPE: NO or NC

TERMINALS: SMT

Mechanical

TOTAL TRAVEL: 1,5 mm

OPERATING FORCE: 3N; 5N; 6N; 9N; 12N

SEALING: IP40 or IP67 *

Packaging

Reels of 900 pieces (diameter 550mm) Reels of 300 pieces (diameter 360mm

Electrical

SWITCHING POWER MIN./MAX.: $0.02 \, \text{mW}/3 \, \text{W}$ DC SWITCHING VOLTAGE MIN./MAX.: $2 \, \text{V} / 30 \, \text{V}$ DC SWITCHING CURRENT MIN./MAX.: $10 \, \text{mA} / 100 \, \text{mA}$ DC

DIELECTRIC STRENGTH: > 300 V RMS

OPERATING LIFE: $> 10^6$ operations (detect version) / $2x10^5$ operations

(versions with tactile effect)

CONTACT RESISTANCE: Initial $< 100 m\Omega$ - After test $< 250 m\Omega$

INSULATION RESISTANCE: >109 Ω

BOUNCE TIME: < 10 ms

Environmental

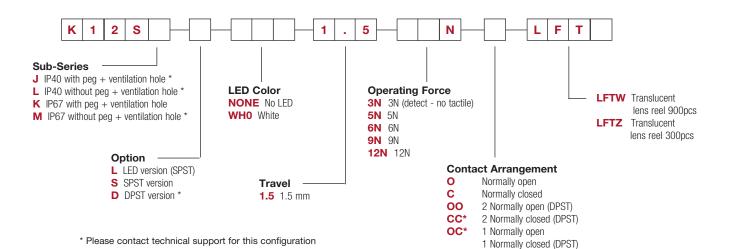
OPERATING TEMPERATURE: -40°C to 85°C STORAGE TEMPERATURE: -40°C to 95°C RoHS compliant and Halogen free

Process

SOLDERABILITY: Lead free soldering compatible

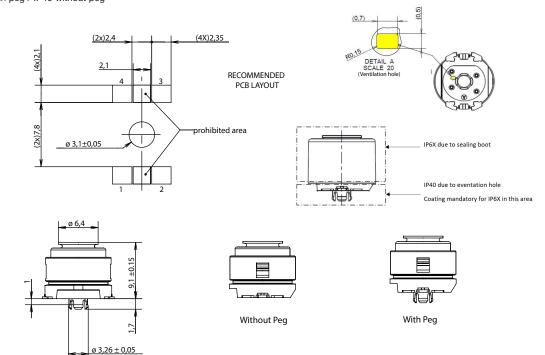
How To Order

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.

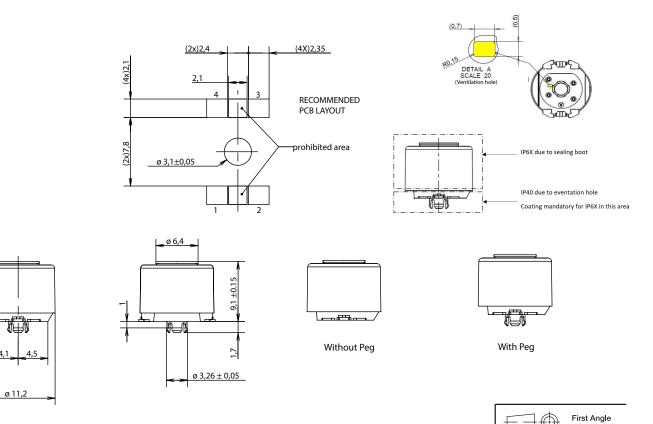




^{*} High sealing grade (IP67): Only after customer coating operation



K12SK / K12SM IP67 with peg / IP67 without peg





Dimensions are shown: mm Specifications and dimensions subject to change

Projection

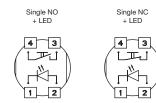






OPTION

L LED version



LED COLOR

OPTION CODE	LED COLOR
WH0	White

TRAVEL

1.5 1.5 mm

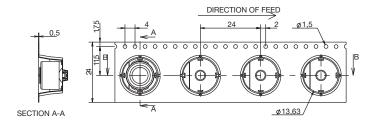
OPERATING FORCE

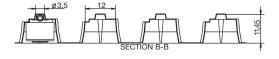
OPTION CODE	OPERATING FORCE
3N	3N (detect - no tactile)
5N	5N
6N	6N
9N	9N
12N	12N

CONTACT ARRANGEMENT

- 0 Normally open (SPST and LED versions)
- C Normally closed (SPST and LED versions)

TAPE AND REEL







Dimensions are shown: mm Specifications and dimensions subject to change



High Performance SMT Key Switches







Features/Benefits

- Harsh environment applications IP67
- Compatible with SMT lead free soldering process
- Illuminated
- Excellent tactile feel
- High reliability / long life
- DPST and detect versions available
- RoHS compliant

Typical Applications

- Automotive
- **Joysticks**
- Off-road transportation
- **Motorcycles**
- Industrial
- Medical

Construction:

FUNCTION: Momentary

CONTACT ARRANGEMENT: SPST or DPST

CONTACT TYPE: NO or NC

TERMINALS: SMT

Mechanical

TOTAL TRAVEL: 1,5 mm

OPERATING FORCE: 3N; 5N; 6N; 9N 4/8 N; 6/12 N; 12 N

SEALING: IP40 or IP67

Packaging

Reels of 900 pieces

Electrical

SWITCHING POWER MIN./MAX.: 0.02mW/3 W DC SWITCHING VOLTAGE MIN./MAX.: 2 V / 30 V DC SWITCHING CURRENT MIN./MAX.: 10 mA /100 mA DC

DIELECTRIC STRENGTH: > 300 V RMS

OPERATING LIFE: > 10⁶ operations (detect version) / 2x10⁵ operations

(versions with tactile effect)

CONTACT RESISTANCE: Initial < $100m\Omega$ - After test < $250m\Omega$

INSULATION RESISTANCE: >10° Ω

BOUNCE TIME: < 10 ms

Environmental

OPERATING TEMPERATURE: -40°C to 85°C. STORAGE TEMPERATURE: -40°C to 95°C. RoHS compliant and Halogen free.

Process

SOLDERABILITY: Lead free soldering compatible.

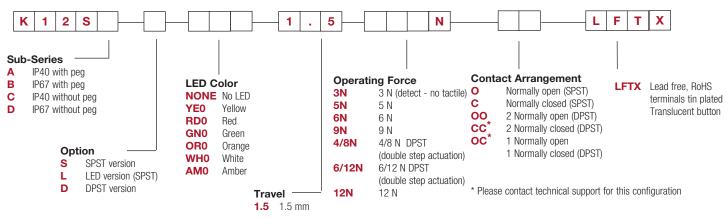
How To Order

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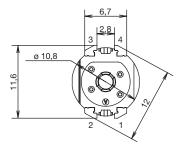


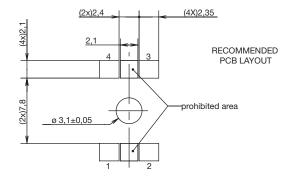


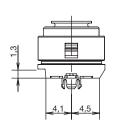


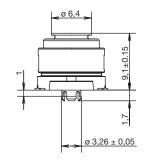
K12S Series High Performance SMT Key Switches

K12SA/K12SC IP40 with peg / IP40 without peg







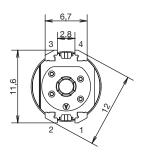


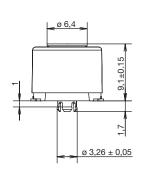


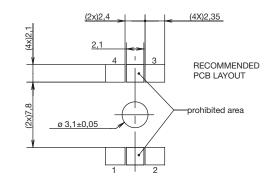


Without Peg

K12SB / K12SD IP67 with peg / IP67 without peg











Without Peg

With Peg



First Angle Projection

Dimensions are shown: mm Specifications and dimensions subject to change



30 Jun 22



OPTION







1 2









D DPST version



Double NC

LED COLOR

OPTION CODE	LED COLOR
	No LED
YE0	Yellow
RD0	Red
GN0	Green
OR0	Orange
WH0	White
AM0	Amber

TRAVEL

1.5 1.5 mm

OPERATING FORCE

OPTION CODE	OPERATING FORCE
3N	3N (detect - no tactile)
5N	5N
6N	6N
9N	9N
4/8N	4/8N (double step actuation)
6/12N	6/12N (double step actuation)

CONTACT ARRANGEMENT

Normally open (SPST and LED versions)

Normally closed (SPST and LED versions)

2 Normally open (DPST version)

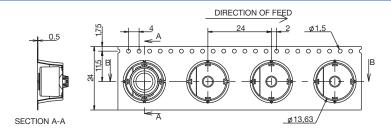
CC* OC*

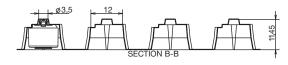
2 Normally closed (DPST version)

1 Normally open/ 1 Normally closed (DPST)

* Please contact technical support for this configuration

TAPE AND REEL







Dimensions are shown: mm Specifications and dimensions subject to change

