

K5V Illuminated Tact Switch

C&K Patented
No - US 11/363815



Features

- Gold plated dome contact SPST/SPDT
- Excellent ergonomics
- High bright leds
- Reduced space usage on board
- 40 N overload
- Tape and reel
- RoHS compliant and compatible

Typical Applications

- When backlighting and switch are required to be a "2 in 1" component
- The dome contact secures a superior contact reliability in time
- The ergonomics of K5V provides a long travel, a sharp tactile feel and an audible click
- Server, storage, automotive, network infrastructure, medical

Specification

FUNCTION: momentary action

CONTACT ARRANGEMENT: Normally Open + Normally Closed

TERMINALS:

THT: Through hole terminals with positioning pegs

SMT: Surface mount terminals with positioning pegs

PM: Panel mount solder terminals with wire hole

Mechanical

Version	Operating force FA ¹ Newtons (grams)	Operating life (operations)	Travel (total travel) mm(mm)
THT, SMT, PM	4.0 (400)	25,000	1.2 (2.4)

¹ Tolerances of operating force FA is $\pm 25\%$.

Packaging

THT: 60 pieces per tray; 1800 pieces per box

SMT: 330 pieces per reel (reel ϕ 360mm); 1320 pieces per box

PM: 60 pieces per tray; 2100 pieces per box

Electrical

POWER MIN/MAX: 0.02VA / 1.0VA

VOLTAGE MIN/MAX: 20mVdc – 32 Vdc

CURRENT MIN/MAX: 0.1mA – 100mA

CONTACT RESISTANCE: <150m Ω

INSULATION RESISTANCE: >1G Ω initial, >10M Ω after damp heat

BOUNCE TIME: <5ms

Environmental

OPERATING TEMPERATURE: -40°C to 85°C

STORAGE TEMPERATURE: -50°C to 85°C

RELATIVE HUMIDITY: 90 to 96% according to NF EN 60068-2-30

PROTECTION: dust protection and flux tight

OVERLOAD: 40N min

Process

SMT	Soldering: Compatible with the lead free soldering profile No washing
THT	Soldering: Compatible with the lead free soldering profile No washing
PM	Soldering: Low wattage soldering iron (25-50 watts max). Solder time 3 seconds max. No washing

Materials

LEAD FREE

CONTACTS: Au over Ni

SOLDERING: Au over Ni

HOUSING: Thermoplastic UL94 V0

B

B

Tactile Switches

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.

Tactile Switches **B**



Actuator

- 1** without snap-in, clear (THT and PM version only)
- 2** with snap-ins, clear for light pipe extension (THT and PM version only)
- 4** without snap-in, light grey (SMT version only)
- 5** with snap-ins, light grey for light pipe extension (SMT version only)

Actuator color/LED color

- BA** Translucid/Blue-Amber
- GN** Translucid/Green
- BU** Translucid/Blue
- RG** Translucid/Red-Green
- WX** Translucid/White
- YG** Translucid/Yellow-Green
- CL** Transparent/No LED
- 90** Black Actuator/No LED

Operating Force

- 4** 4.0 N (400 grams)

Contact Material

- 3** Gold (Au)

Termination

- G** Surface mount
- P** Panel mount
- T** Through-hole 3.5mm
- S** Through-hole 2.1mm

Option

- NONE** General version (260°C)
- H** High temperature version with robust design (270°C) *

Option

- NONE** No option
- P3** Terminal 3 is cut
- P4** Terminal 4 is cut
- P13** Terminal 1 & 3 is cut
- P14** Terminal 1 & 4 is cut

** When high temperature version with robust design is requested, K5V1 and K5V2 THT version are the right options*



Option

- 4** High temperature SMT PIP (270°C)

Actuator color/LED color

- BA** Translucid/Blue-Amber
- GN** Translucid/Green
- BU** Translucid/Blue
- RG** Translucid/Red-Green
- WX** Translucid/White
- YG** Translucid/Yellow-Green
- CL** Transparent/No LED
- 90** Black Actuator/No LED

Operating Force

- 4** 4.0 N (400 grams)

Contact Material

- 3** Gold (Au)

Termination

- S** 2.1mm
- V** 2.5mm
- W** 3.0mm
- X** 3.5mm

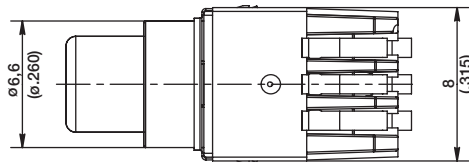
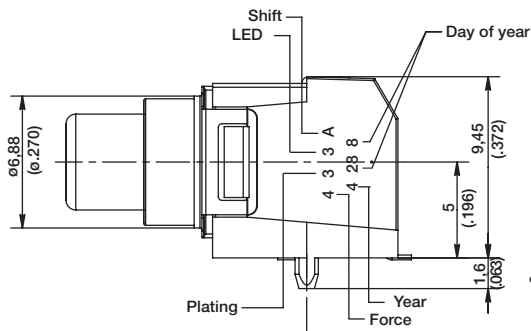
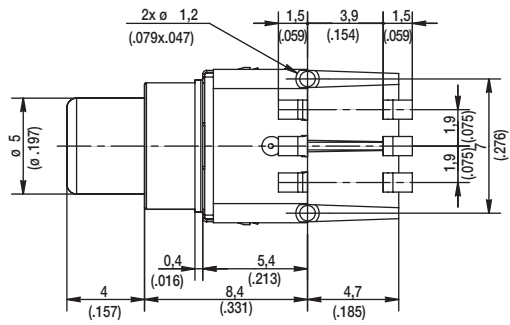
Option

- NONE** No option
- P3** Terminal 3 is cut
- P4** Terminal 4 is cut

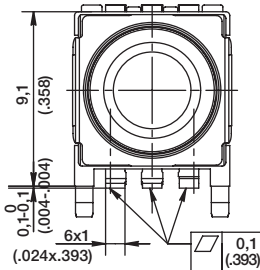
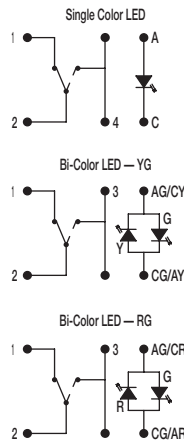
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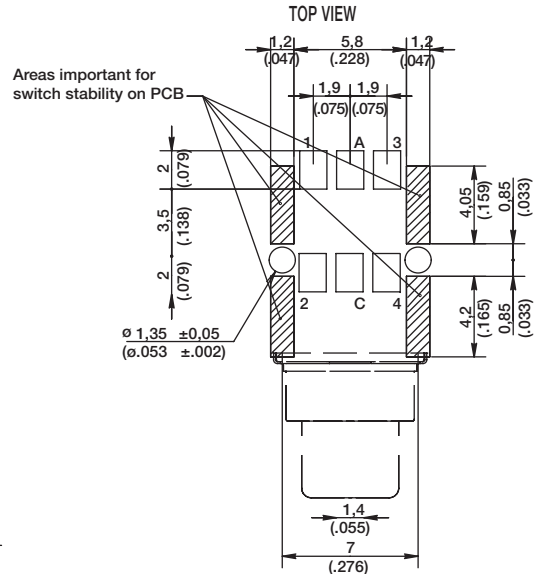
K5V SMT



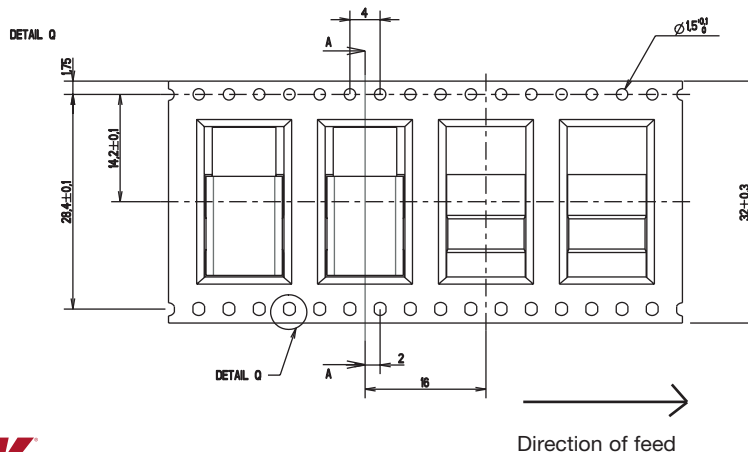
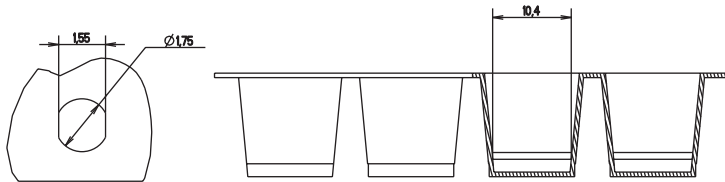
ELECTRICAL DIAGRAM



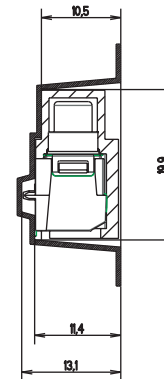
RECOMMENDED PCB LAYOUT (WITH HOLES)



TAPE & REEL



COUPE A-A



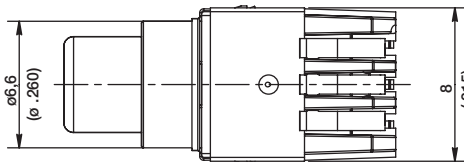
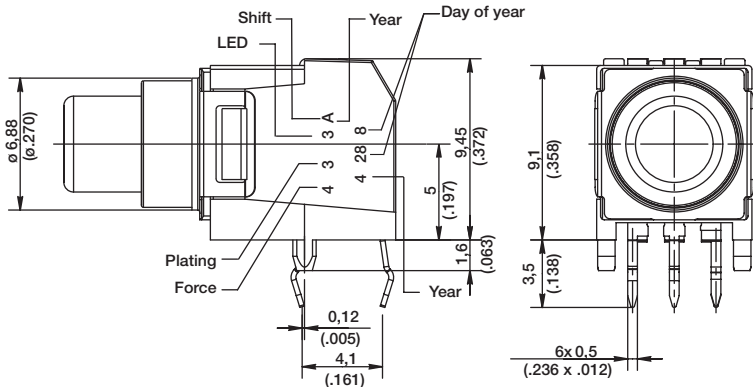
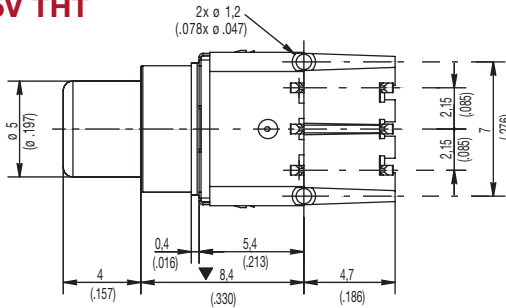
Dimensions are shown: mm
Specifications and dimensions subject to change



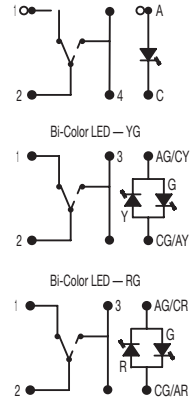
13 May 22

Direction of feed

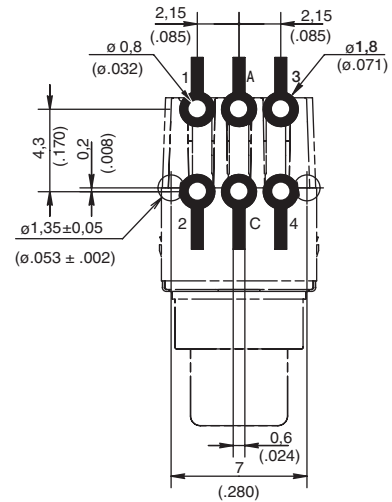
K5V THT



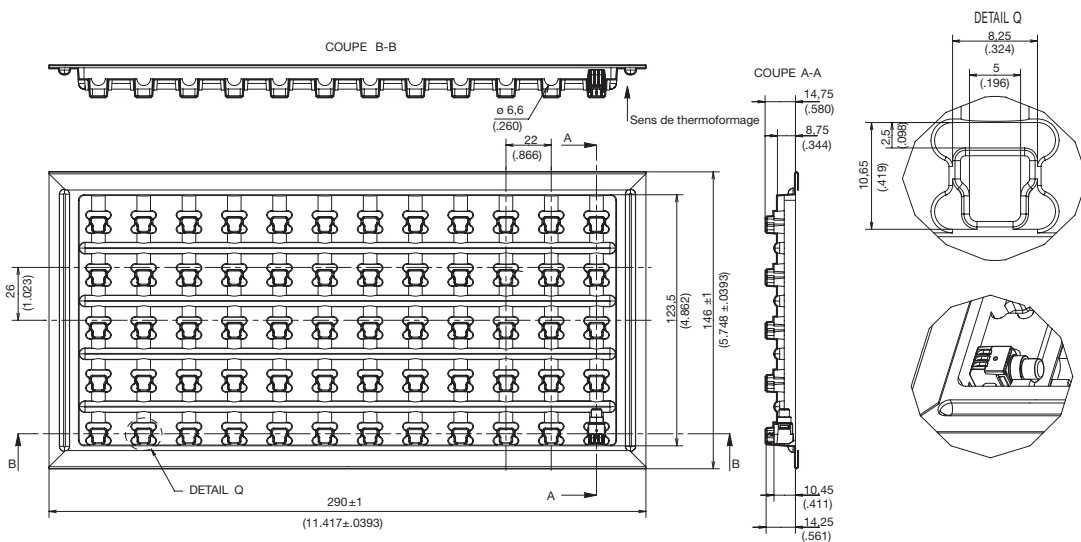
ELECTRICAL DIAGRAM



RECOMMENDED PCB LAYOUT (WITH HOLES) TOP VIEW



TRAY

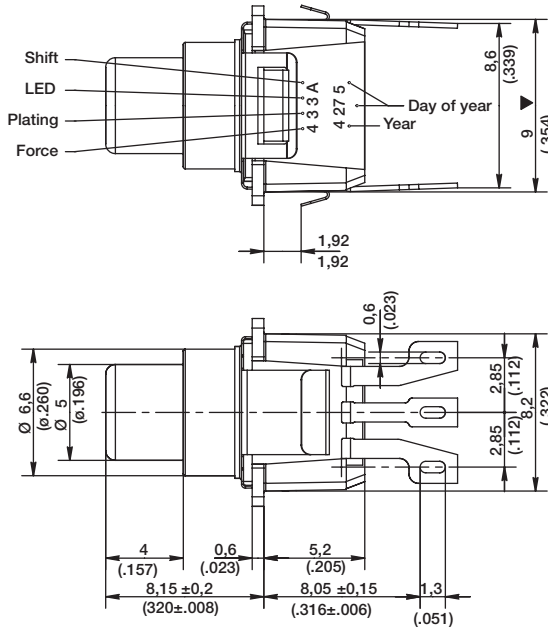


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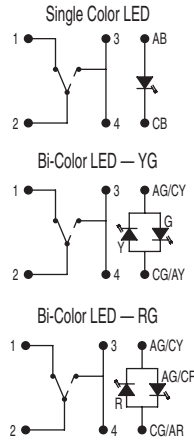
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K5V PM

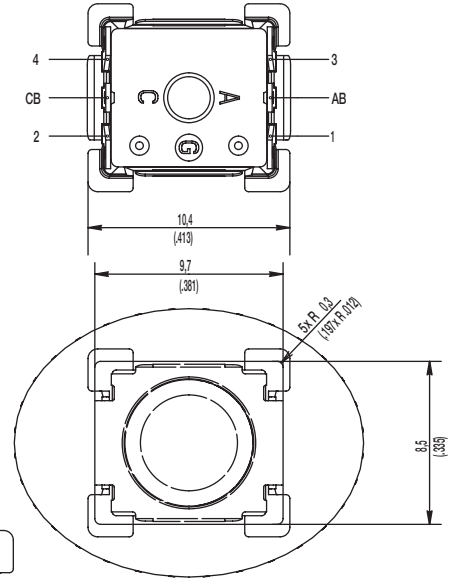
PRODUCT IDENTIFICATION AND DATE CODES



ELECTRICAL DIAGRAM

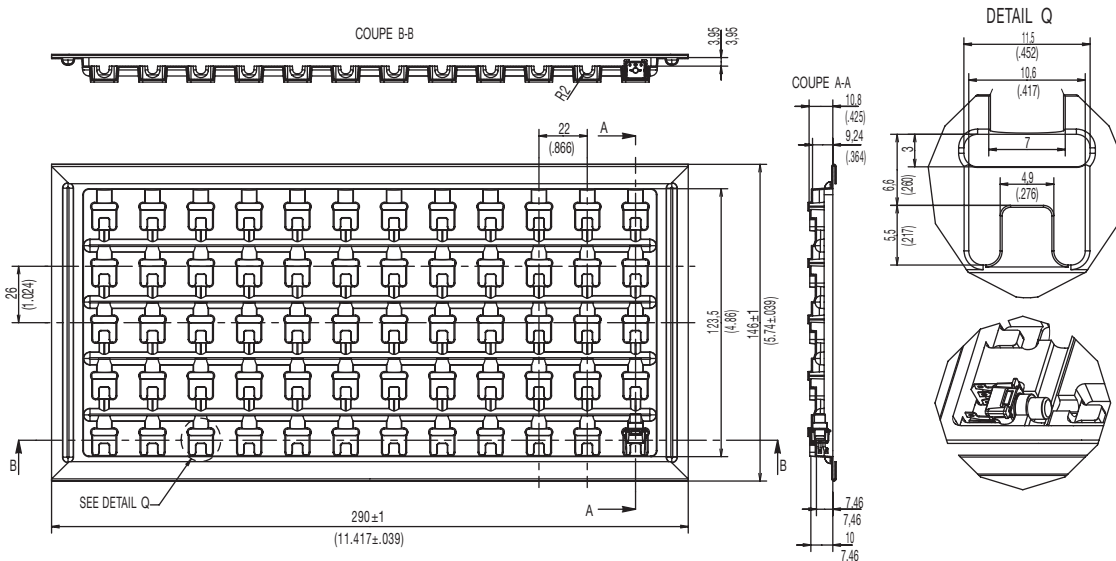


TERMINAL REFERENCES



TRAY

SUITABLE FOR PANEL THICKNESS OF 1.8MM MAX



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B-121

Dimensions are shown: mm
Specifications and dimensions subject to change

www.ckswitches.com

Tactile Switches