K5V
Illuminated Tact Switch

Description

The K5V series illuminated tact switch comes with high, bright LEDs that are able to meet customization requirements. With its reduced space usage on board – and excellent ergonomics – the K5V is perfect for network infrastructure, automotive and medical applications.

Features & Benefits

- 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

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

Specifications

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
Packaging	THT: 60 pieces per tray; 1800 pieces per box SMT: 330 pieces per reel (reel ø 360mm); 1320 pieces per box PM: 60 pieces per tray; 2100 pieces per box

Electrical Characteristics

Min. / Max. Power	0.02 VA / 1.0 VA
Min. / Max. Voltage	20 VDC - 32 VDC
Min. / Max. Current	0.1mA - 100 mA
Contact Resistance	<150m Ω
Insulation Resistance	>1G Ω initial, >10M Ω after damp heat
Bounce Time	< 5 ms

Environmental Characteristics

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

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

Process

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

Mechanical Characteristics

Part #	Operating Force FA[1] Newtons (grams)	Operating Life (operations)	Travel (total travel mm)
K5V	4.0	25,000	1.2 (2.4)

Notes:
1. Tolerances on actuation force is ± 25%.

Materials

Contacts	Au over Ni
Soldering	
Housing	Thermoplastic UL94 V0

Revised: CM.11/07/24

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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. For any part number different from those listed above, please consult your local representative.

K5V - x - xx - 4 - 3 - x - xx - x

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: Translucid/No LED
90: Translucid/No LED

Operating Force
4: 4.0N (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: No option
P3: Terminal 3 is cut
P4: Terminal 4 is cut
P13: Terminal 1 & 3 is cut
P14: Terminal 1 & 4 is cut

Option
None: General version (260˚C)
H: High temperature version with robust design (270˚C)[1]

Notes:
1. When high temeprature version with robust design is requested, K5V1 and K5V2 THT version are the right options

K5V - x - xx - 4 - 3 - x - xx

Option
4: High tempratures 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: Translucid/No LED
90: Translucid/No LED

Operating Force
4: 4.0N (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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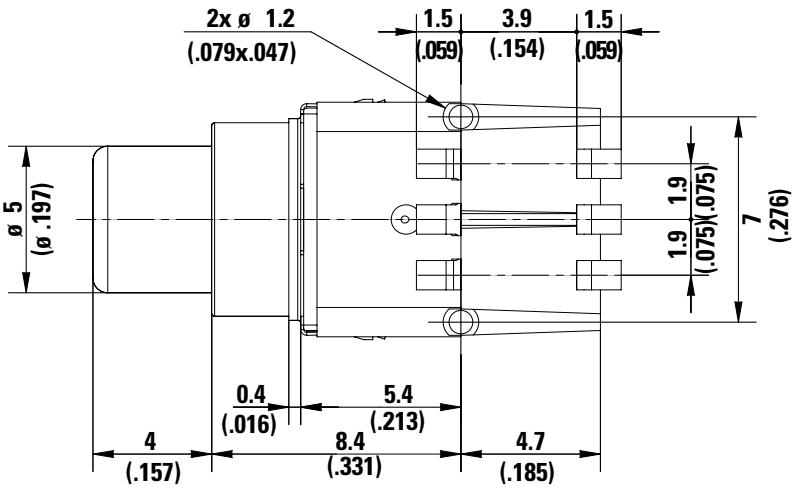
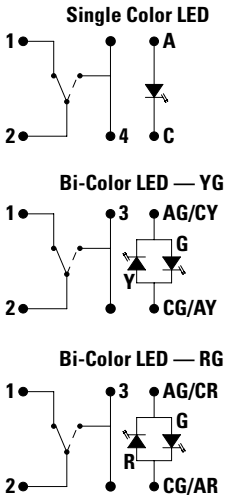
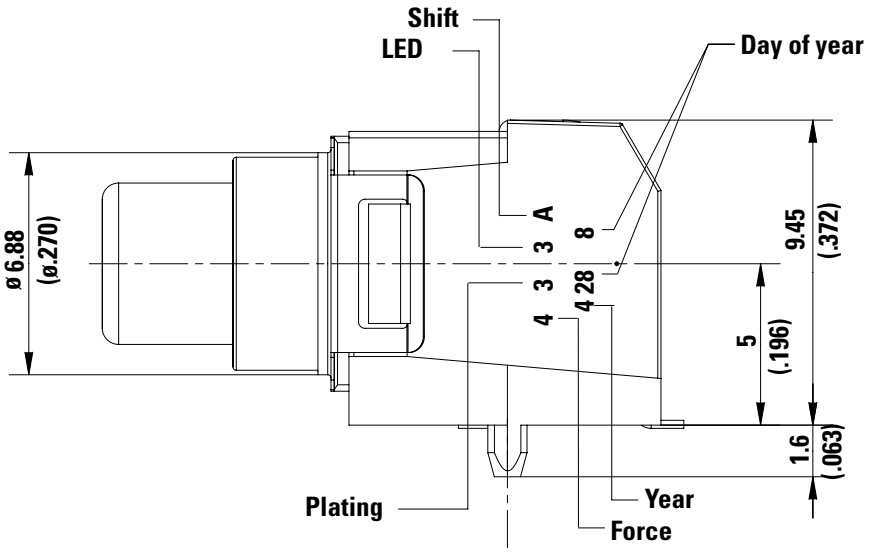
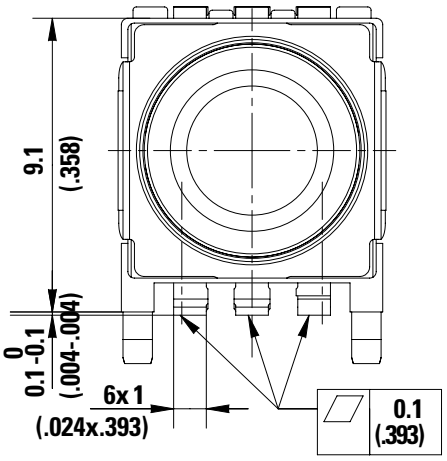
K5V SMT Drawing and Dimensions inches (mm)

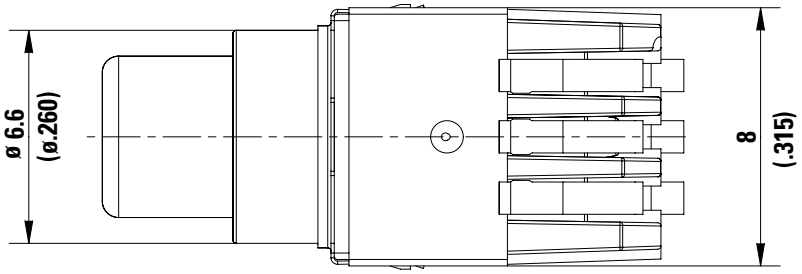


Electrical Diagram



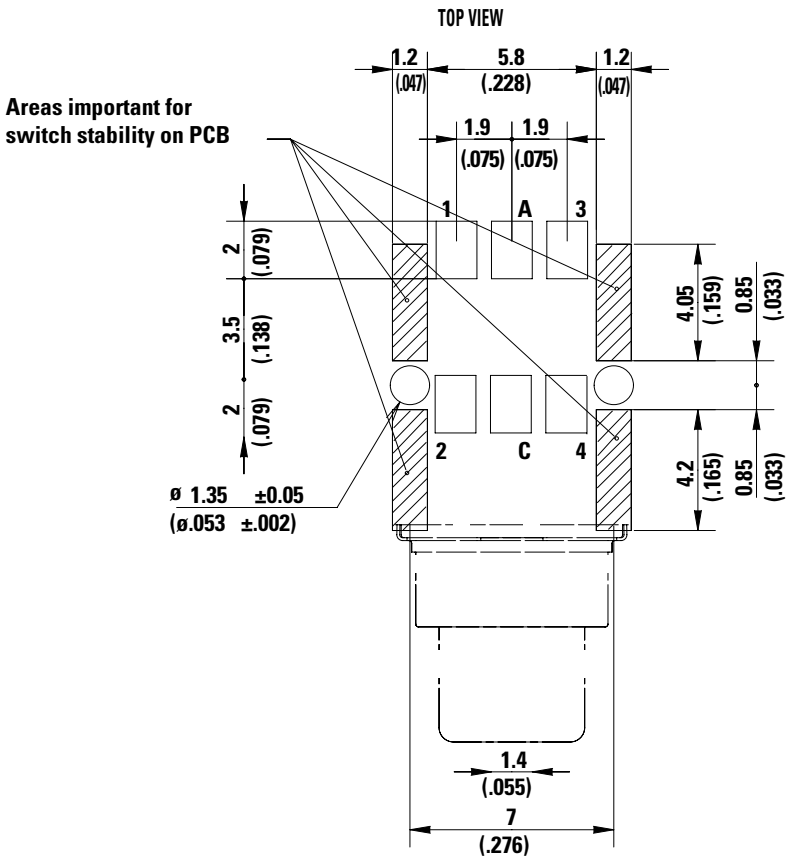




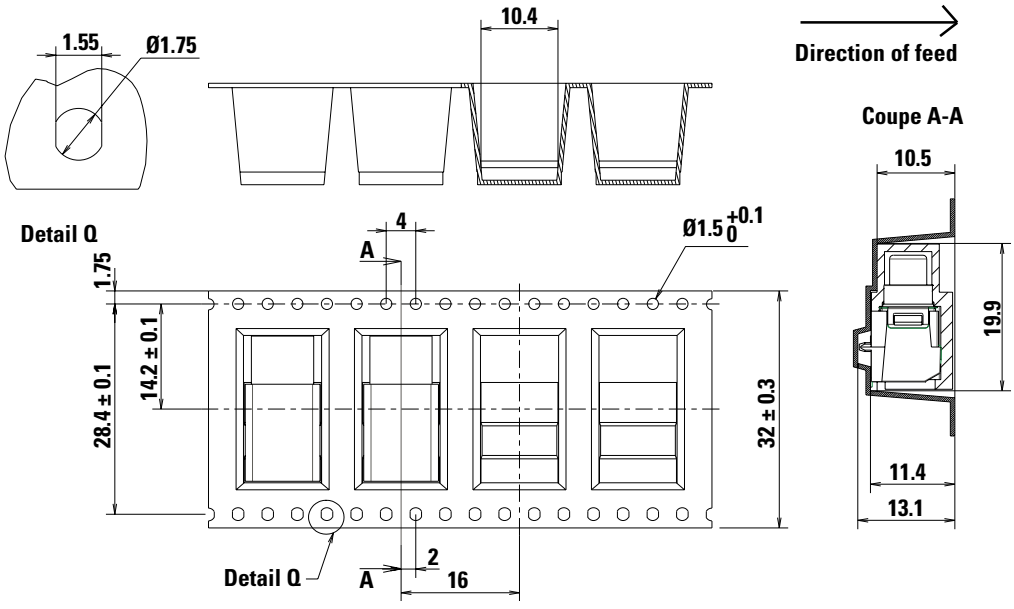


Revised: CM.11/07/24

Recommended PCB Layout (with holes)



Tape and Reel



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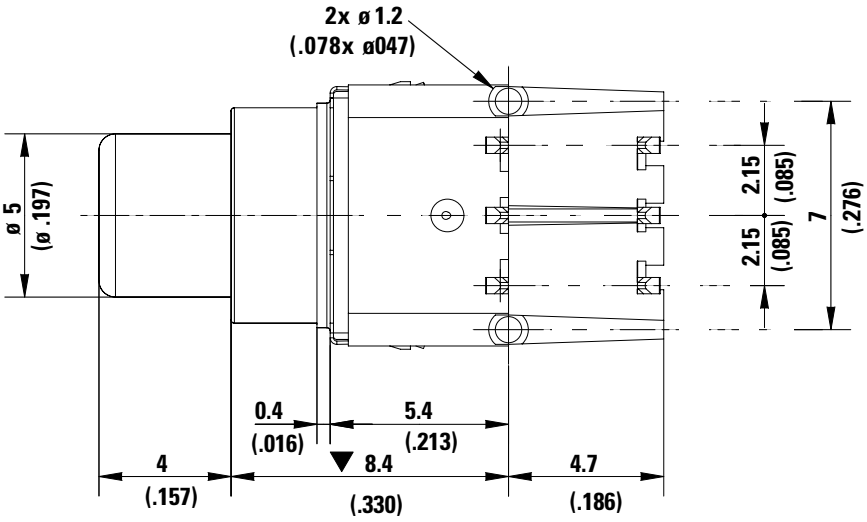
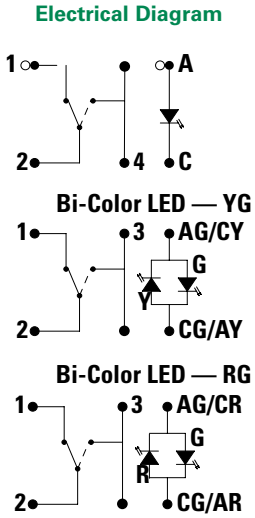
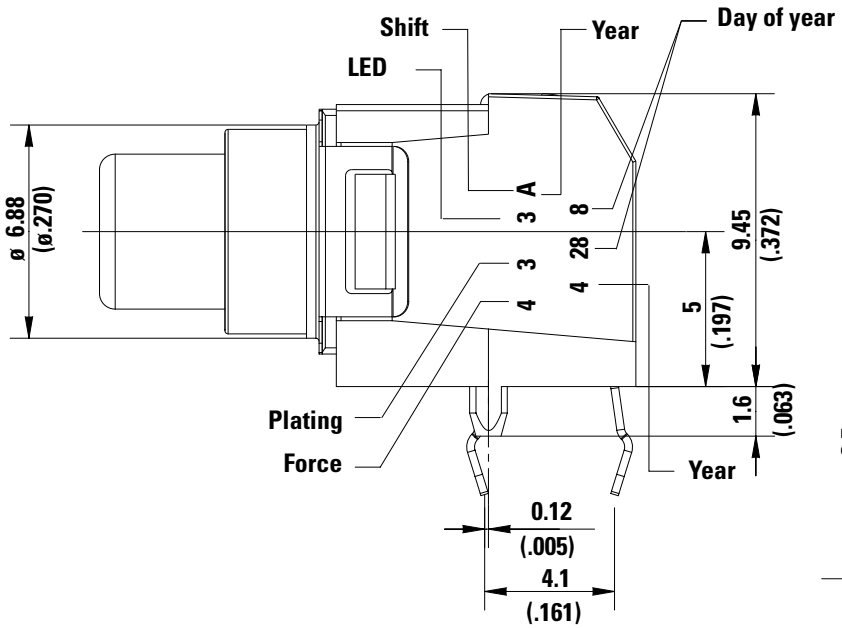
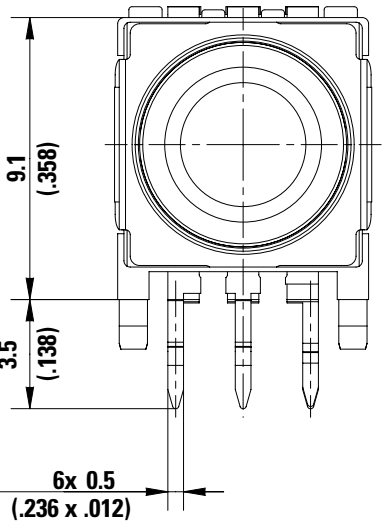
K5V THT Drawing and Dimensions inches (mm)

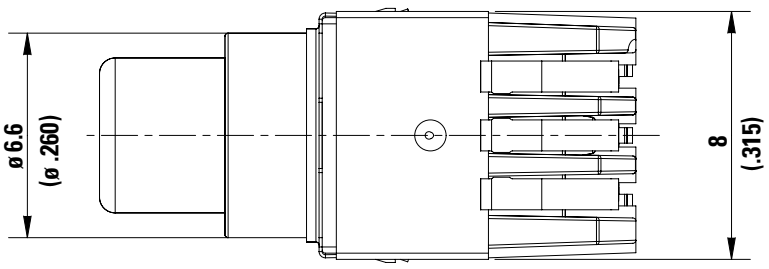


Electrical Diagram

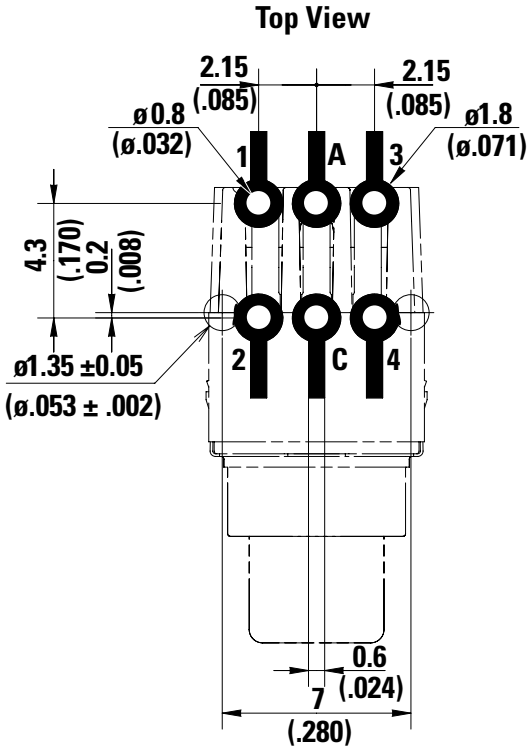




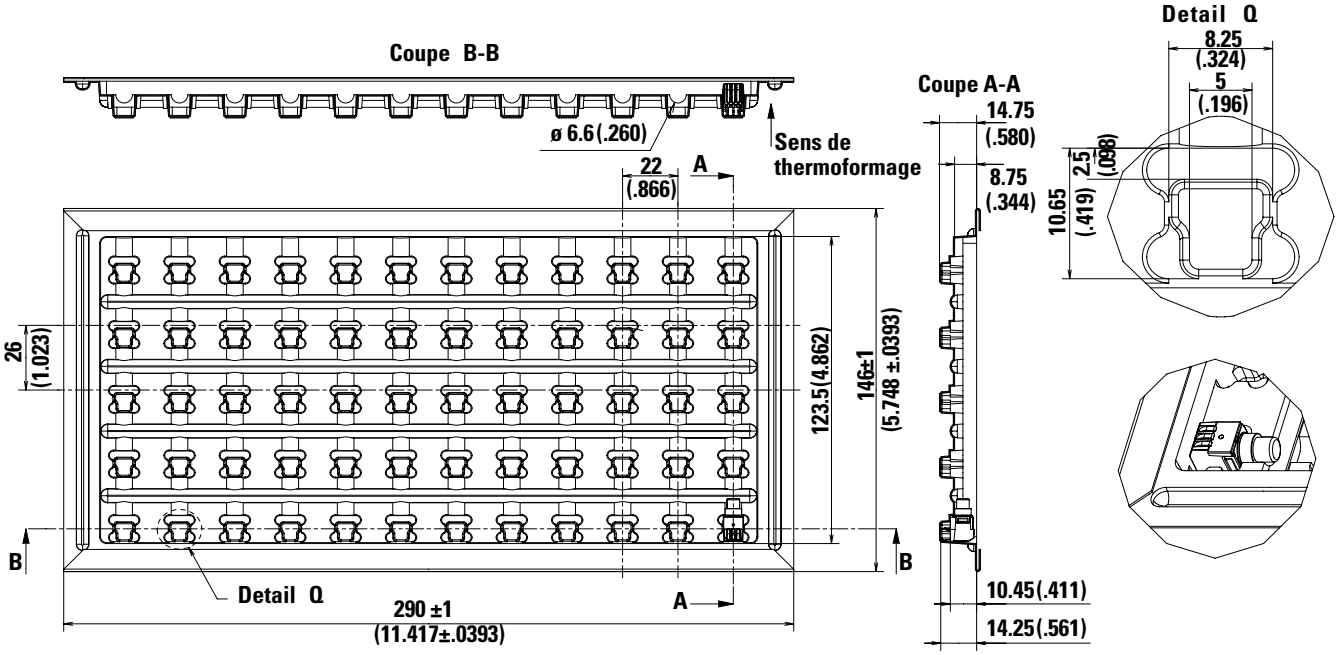




Recommended PCB Layout



Tray



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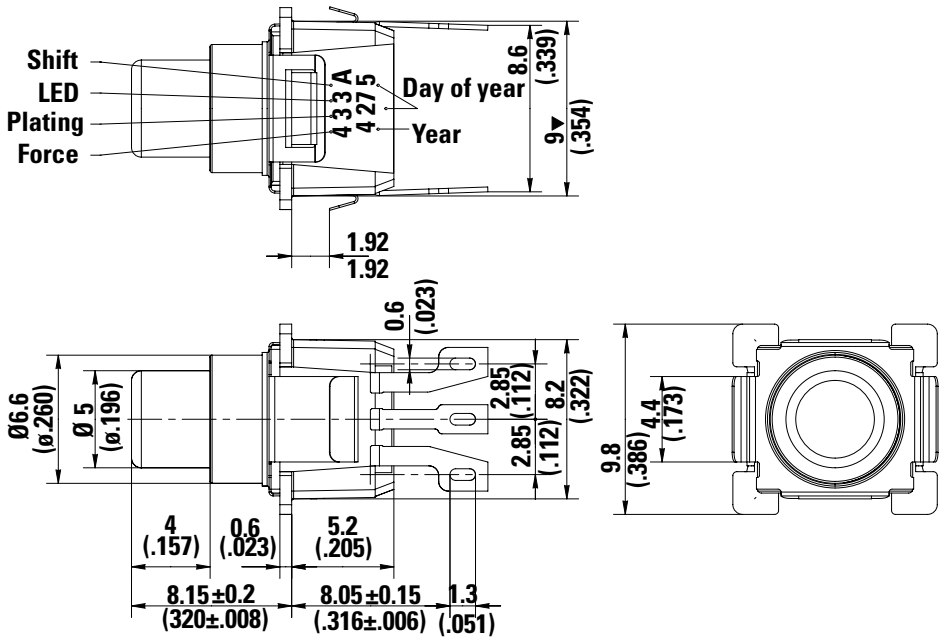
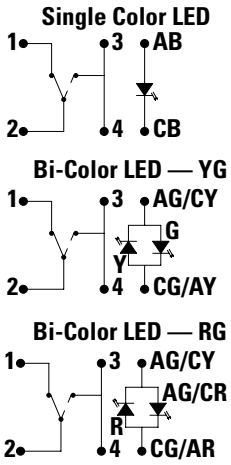
K5V PM Drawing and Dimensions inches (mm)

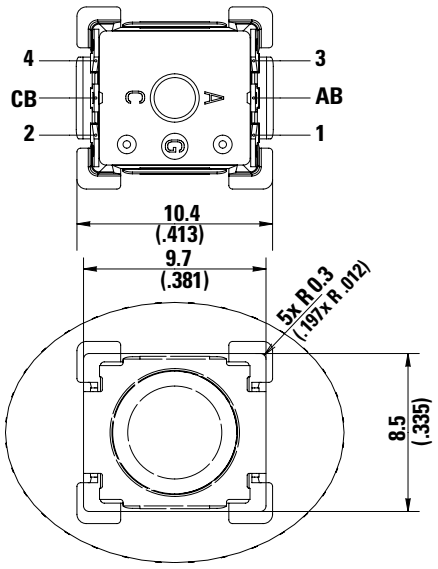
Product Identification and Date Codes



Electrical Diagram



Terminal References



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Tray Suitable for Panel Thickness of 1.8mm max inches (mm)