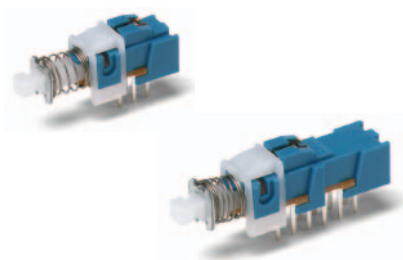




A

Pushbutton

# PHA Series Short Stroke Pushbutton Switches



## Features/Benefits

- **Momentary or latching action**
- **Low cost, reliable contact design**
- **2 & 4 pole configurations**
- **Sealed contacts**
- **Optional buttons**
- **RoHS compliant**

## Typical Applications

- **Computers and peripherals**
- **Instrumentation and measurement equipment**
- **Non-power, on-off switch applications**

## Specifications

SWITCHING POWER MAX.: 3 W DC  
SWITCHING VOLTAGE MAX.: 30 V DC  
SWITCHING CURRENT MAX.: 100 mA DC  
DIELECTRIC STRENGTH (50 Hz/1 min.): 500 V between open contacts. 1500 V between chassis and contacts.  
OPERATING LIFE: 10,000 cycles at rated load  
CONTACT RESISTANCE: 20 m ohms initial $\Omega$   
INSULATION RESISTANCE: 100 M ohms $\Omega$   
TOTAL TRAVEL/LATCHING TRAVEL: 2.5mm/1.5mm (.098 inch/.059 inch)  
OPERATING FORCE:  
170 grams  $\pm$  50 grams (1.67  $\pm$  0.98N)  
230 grams  $\pm$  50 grams (2.26  $\pm$  0.98N)  
OPERATING TEMPERATURE: -10°C to 60°C  
SEALING: Sealed contacts.

## Materials

FIXED TERMINAL: Brass, silver plated.  
MOVABLE CONTACT: Phosphor bronze, silver plated.  
SWITCH BODY: PPE  
ACTUATOR: POM  
STANDOFF CLIP: POM  
RETURN SPRING: Music wire.  
RETURN SPRING RETAINER: Carbon steel, tin plated.  
DETENT SPRING PLATE: Phosphor bronze.  
DETENT SPRING: Stainless steel.  
BASE: Laminated phenolic.  
TERMINAL SEAL: Epoxy.

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

## Build-A-Switch

To order, simply select desired option from each category and place in the appropriate box. Available options are shown and described on pages A-85 thru A-87. For additional options not shown in catalog, consult Customer Service Center.

| Switch                     |              | Button                     |  |                    |  |               |  |
|----------------------------|--------------|----------------------------|--|--------------------|--|---------------|--|
| <div>P</div>               | <div>H</div> | <div>A</div>               |  |                    |  |               |  |
| <b>Contact Arrangement</b> |              | <b>Mechanical Function</b> |  | <b>Indexed</b>     |  | <b>Round</b>  |  |
| 2U 2 Changeovers           |              | OA Momentary               |  | G001A Black        |  | G003A Black   |  |
| 4U 4 Changeovers           |              | EE Push-push               |  | G001G Gray         |  | G003G Gray    |  |
|                            |              |                            |  | G001I Ivory        |  | G003I Ivory   |  |
|                            |              |                            |  | G001R Red          |  | G003R Red     |  |
|                            |              |                            |  | <b>Rectangular</b> |  | <b>Square</b> |  |
|                            |              |                            |  | G002A Black        |  | G004A Black   |  |
|                            |              |                            |  | G002G Gray         |  | G004G Gray    |  |
|                            |              |                            |  | G002I Ivory        |  | G004I Ivory   |  |
|                            |              |                            |  | G002R Red          |  | G004R Red     |  |

### BUTTON REMOVAL

A button of a push-push switch should only be removed in the "OFF" non-latching position.



Dimensions are shown: Inches (mm)  
Specifications and dimensions subject to change

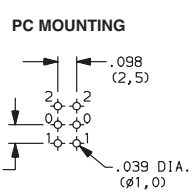
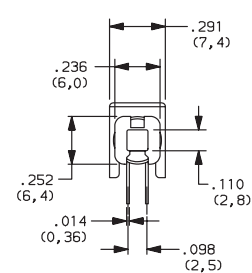
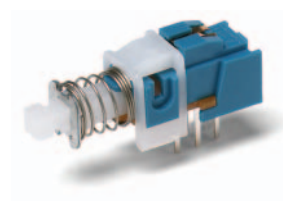
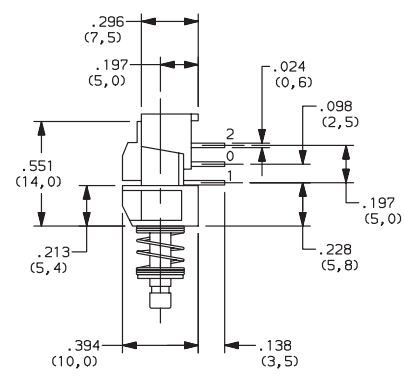
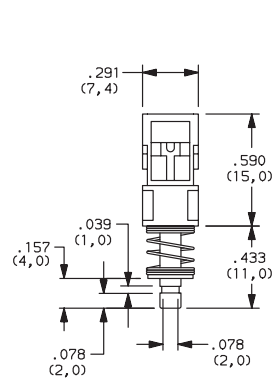
# PHA Series Short Stroke Pushbutton Switches



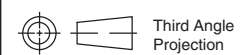
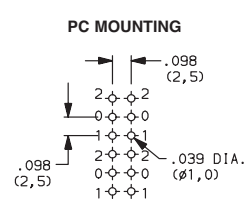
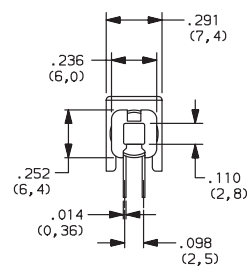
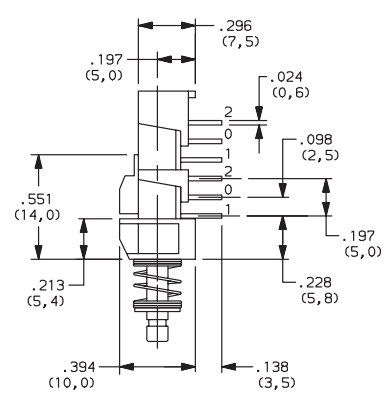
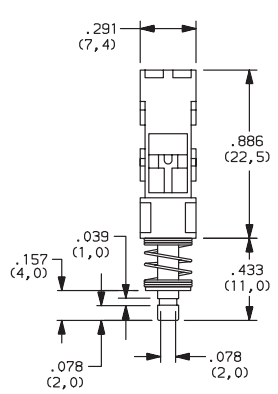
A

Pushbutton

**2U** 2 CHANGEOVERS



**4U** 4 CHANGEOVERS



Dimensions are shown: Inches (mm)  
Specifications and dimensions subject to change

[www.ck-components.com](http://www.ck-components.com)



A

Pushbutton

# PHA Series

## Short Stroke Pushbutton Switches

### CONTACT ARRANGEMENT



| OPTION CODE | NO. OF POLES * | SCHEMATIC |
|-------------|----------------|-----------|
| 2U          | 2PDT           |           |
| 4U          | 4PDT           | 2X        |

\*Non-shorting contacts.

### MECHANICAL FUNCTION



| OPTION CODE | FUNCTION  |
|-------------|-----------|
| OA          | Momentary |
| EE          | Push-push |



Dimensions are shown: Inches (mm)  
Specifications and dimensions subject to change

# PHA Series Short Stroke Pushbutton Switches



A

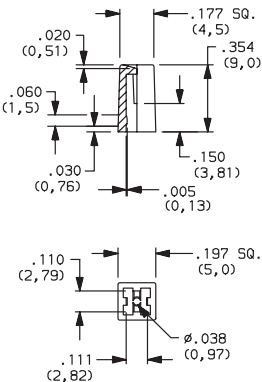
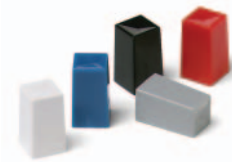
Pushbutton

## BUTTONS



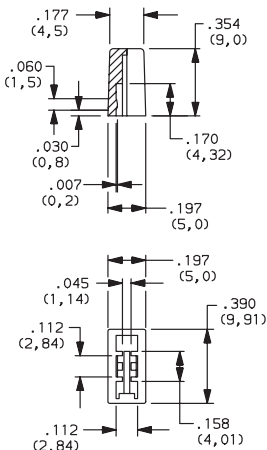
### Indexed

- G001A** Black
- G001G** Gray
- G001I** Ivory
- G001R** Red



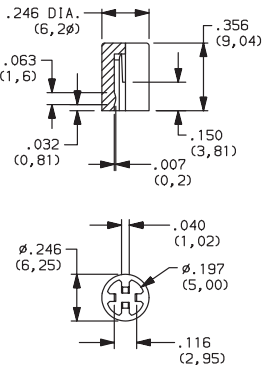
### Rectangular

- G002A** Black
- G002G** Gray
- G002I** Ivory
- G002R** Red



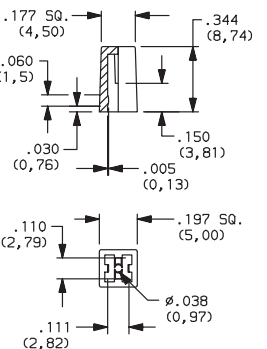
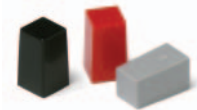
### Round

- G003A** Black
- G003G** Gray
- G003I** Ivory
- G003R** Red



### Square

- G004A** Black
- G004G** Gray
- G004I** Ivory
- G004R** Red



Dimensions are shown: Inches (mm)  
Specifications and dimensions subject to change

[www.ck-components.com](http://www.ck-components.com)