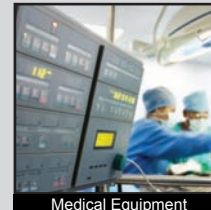
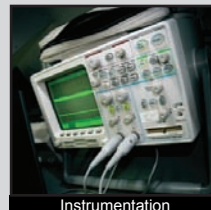
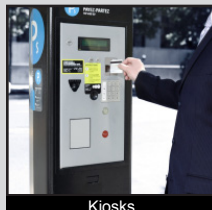
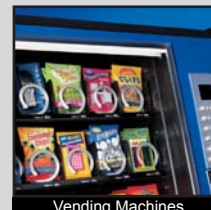
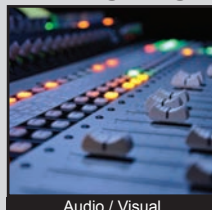


# ULP SERIES PUSHBUTTON SWITCH

ANTI-VANDAL SWITCHES  
DETECTOR SWITCHES  
DIP SWITCHES  
KEYLOCK SWITCHES  
NAVIGATION SWITCHES  
PUSHBUTTON SWITCHES  
ROCKER SWITCHES  
ROTARY SWITCHES  
SLIDE SWITCHES  
SNAP ACTION SWITCHES  
TACTILE SWITCHES  
TOGGLE SWITCHES  
CAP OPTIONS



## APPLICATIONS / MARKETS



**RoHS**

## SPECIFICATIONS

**Electrical Rating:** Silver: .5A @ 25VDC  
Gold: .4VA Max @ 28V (AC or DC)  
**Mechanical Life:** 1,000,000 Cycles  
**Electrical Life:** 200,000 Cycles  
**Contact Resistance:** Silver: 50mΩ Max. initial  
Gold: 100mΩ Max. initial  
**Insulation Resistance:** 100 MΩ Min. @ 500VDC  
**Dielectric Strength:** 2,000VAC  
**Operating/Storage Temperature:** -20°C to 70°C  
**Travel:** 2.20mm  
**Contact Arrangement:** SPDT, DPDT  
**Actuation Force:** SPDT: 200gf; DPDT: 300 gf  
**Panel Thickness:** 0.75-3.0mm (panel mount version only)

## FEATURES & BENEFITS

- Single pole or double pole functions
- Multiple color options including RGB color
- Multiple cap color and style options
- PC pin or solder lug termination
- Latching or momentary options
- Gold or silver contact material

## PART NUMBER CONFIGURATOR

Series	Circuit Options	Mechanical Configuration Options	Termination Options	Contact Material Options	Cap Style Options	Cap Color Options	LED #1 Options	LED #2 Options
<input type="text" value="ULP"/>	<input type="text" value="12- SPDT"/> <input type="text" value="22- DPDT"/>	<input type="text" value="EE - Latching"/> <input type="text" value="OA - Momentary"/>	<input type="text" value="P1 - PC Pins"/> <input type="text" value="M1 - Solder Lug"/>	<input type="text" value="Q - Silver"/> <input type="text" value="R - Gold"/>	<input type="text" value="SS - Square Sculptured"/> <input type="text" value="SF - Square Flat"/> <input type="text" value="RF - Rectangular Flat"/> <input type="text" value="PM - Panel Mount"/> <input type="text" value="LS - Large Sculptured"/>	<input type="text" value="CL1 - Clear Lens / White Diffuser"/> <input type="text" value="OP1 - Black Opaque"/>	<input type="text" value="NIL - No LED"/> <input type="text" value="B - Blue"/> <input type="text" value="G - Green"/> <input type="text" value="R - Red"/> <input type="text" value="Y - Yellow"/> <input type="text" value="RGB - Red-Blue-Green"/>	<input type="text" value="NIL - No LED"/> <input type="text" value="B - Blue"/> <input type="text" value="G - Green"/> <input type="text" value="R - Red"/> <input type="text" value="Y - Yellow"/>

**NOTES:**

- 1) M1 Termination is only available with Panel Mount Cap Style
- 2) P1 Termination is not available with Panel Mount cap Style
- 3) OP1 Cap Color (black opaque) is not available with LEDs
- 4) When ordering RGB LED option, no designation is required for LED#2

*Specifications subject to change without notice*



**E-SWITCH®**

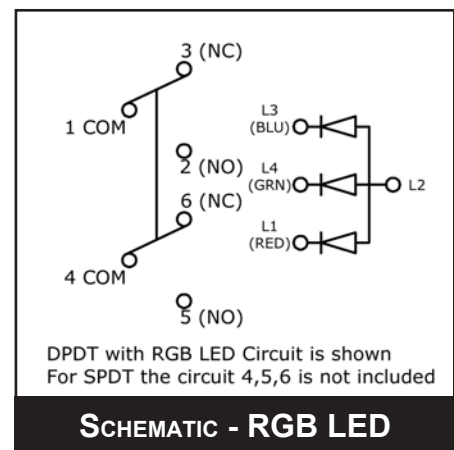
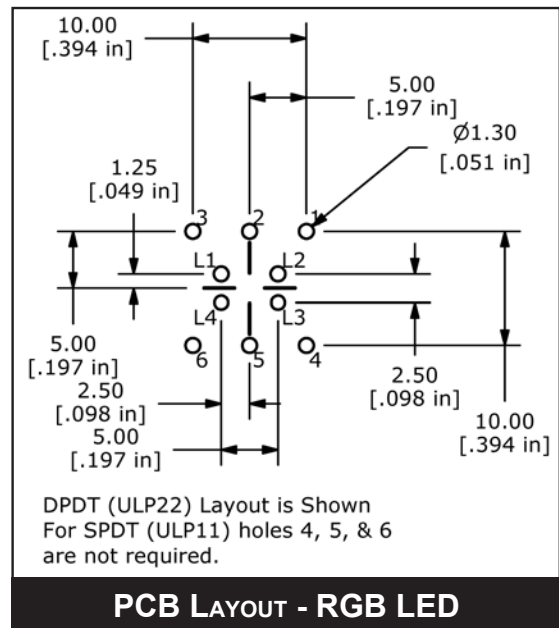
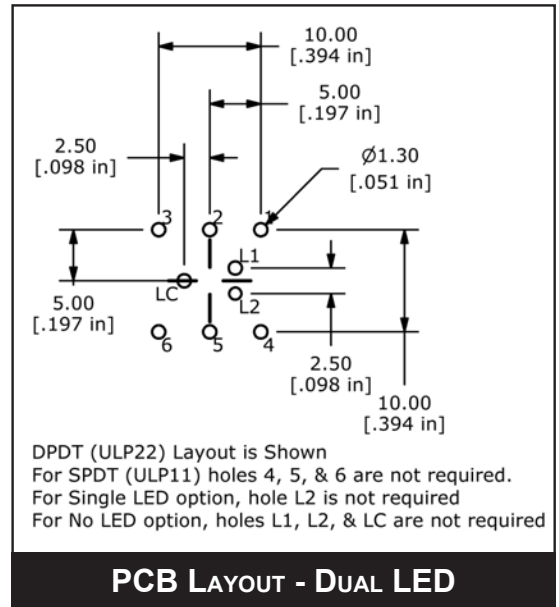
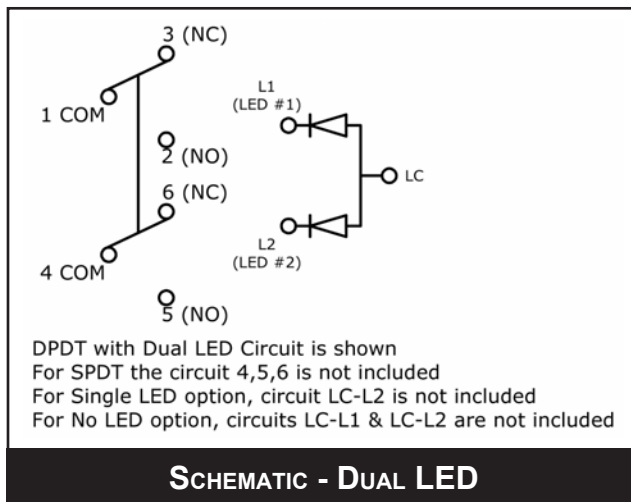
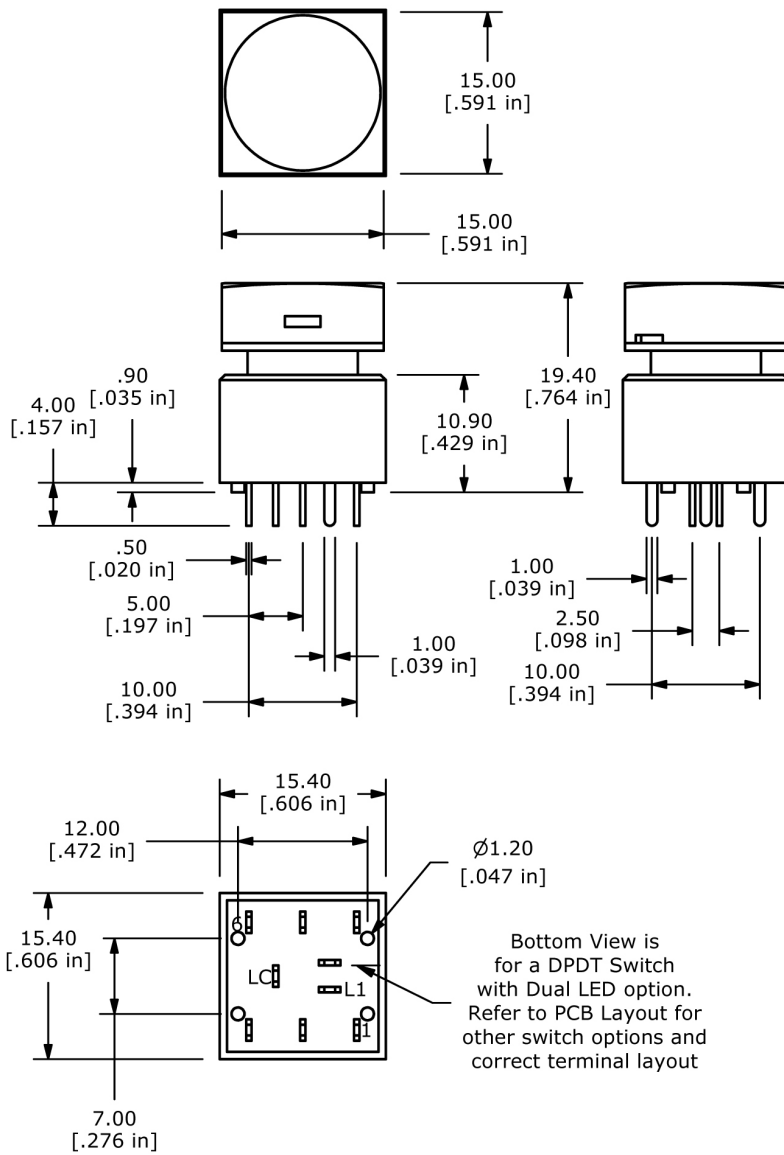
www.e-switch.com

800.867.2717

2

# ULP SERIES PUSHBUTTON SWITCH

## ACTUATOR OPTIONS - SQUARE SCULPTURED

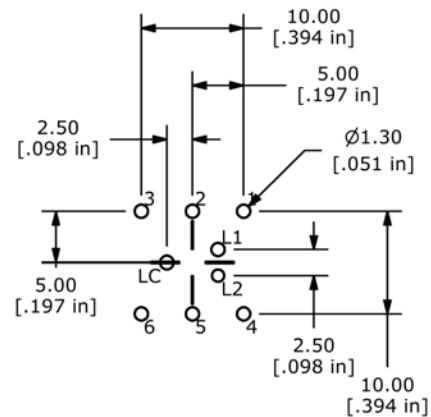
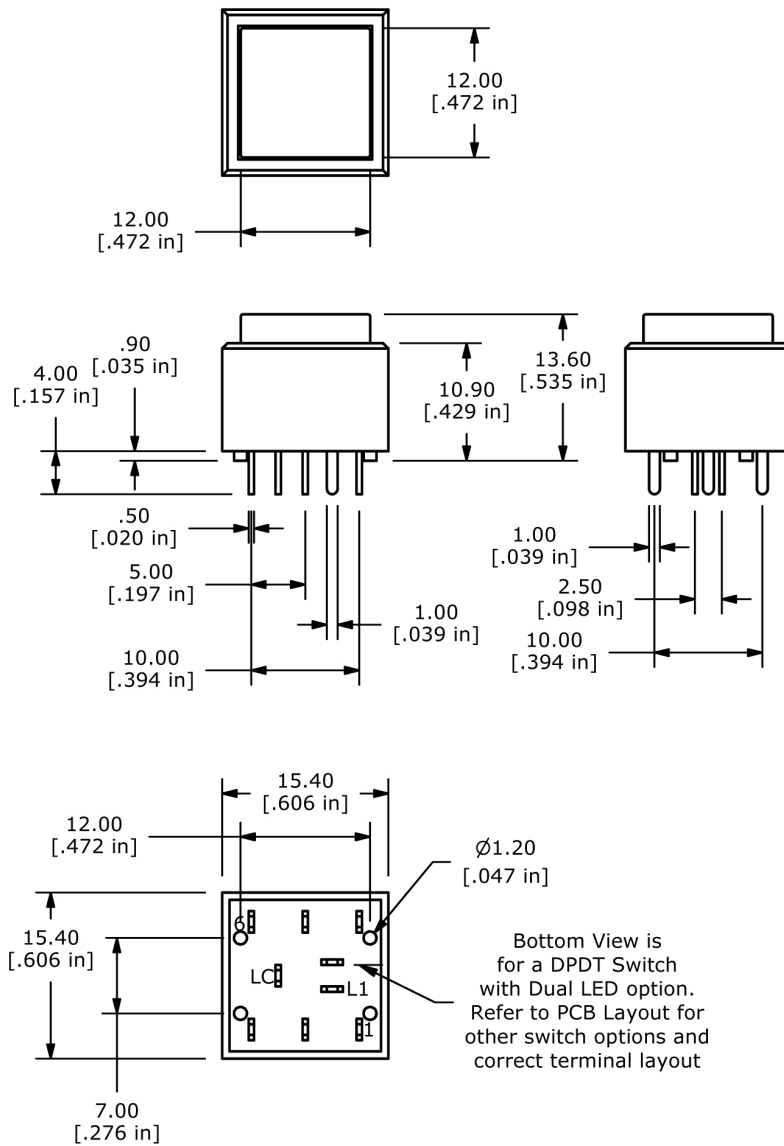


ANTI-VANDAL SWITCHES  
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 CAP OPTIONS



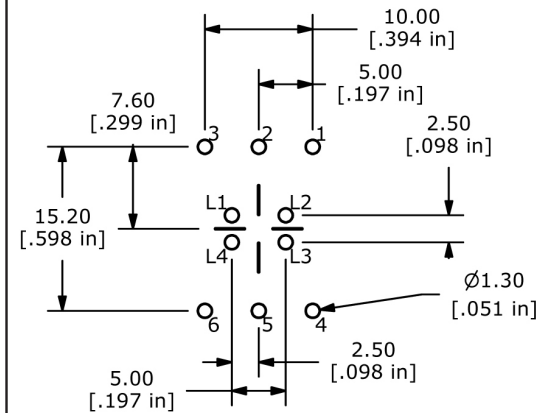
# ULP SERIES PUSHBUTTON SWITCH

## ACTUATOR OPTIONS - SQUARE FLAT



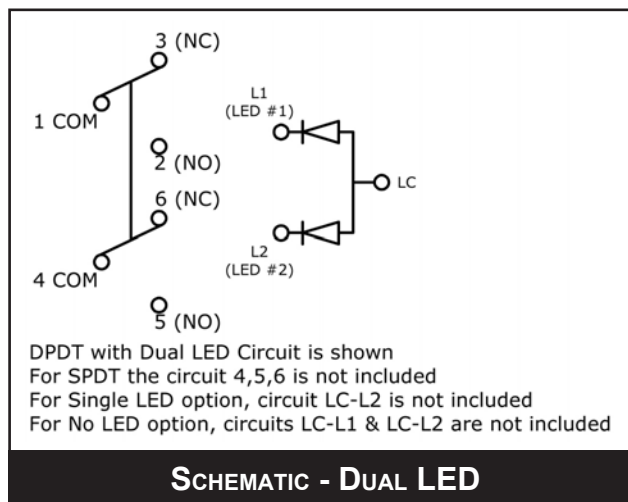
DPDT (ULP22) Layout is Shown  
 For SPDT (ULP11) holes 4, 5, & 6 are not required.  
 For Single LED option, hole L2 is not required  
 For No LED option, holes L1, L2, & LC are not required

### PCB LAYOUT - DUAL LED

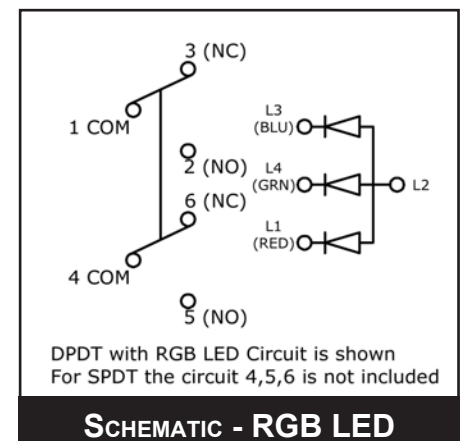


DPDT (ULP22) Layout is Shown  
 For SPDT (ULP11) holes 4, 5, & 6 are not required.

### PCB LAYOUT - RGB LED



### SCHEMATIC - DUAL LED

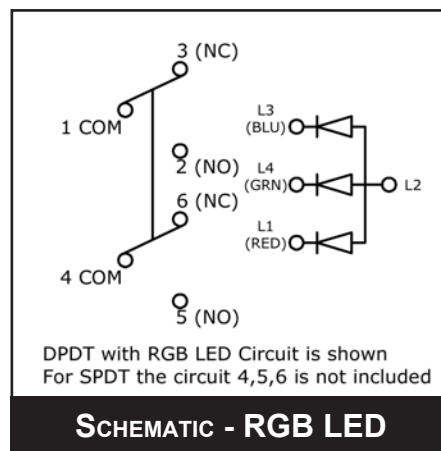
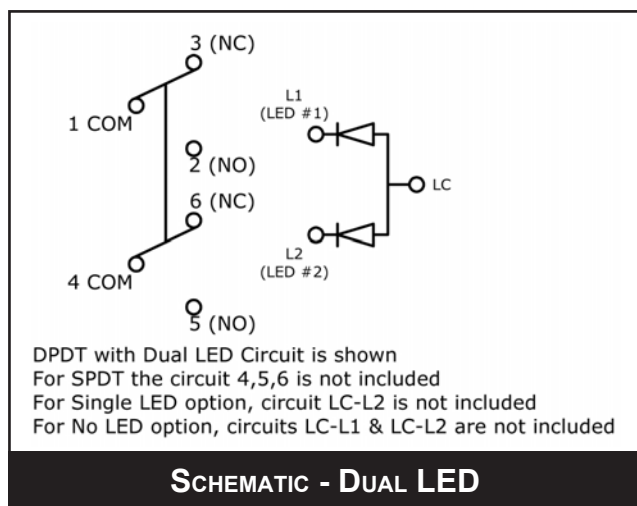
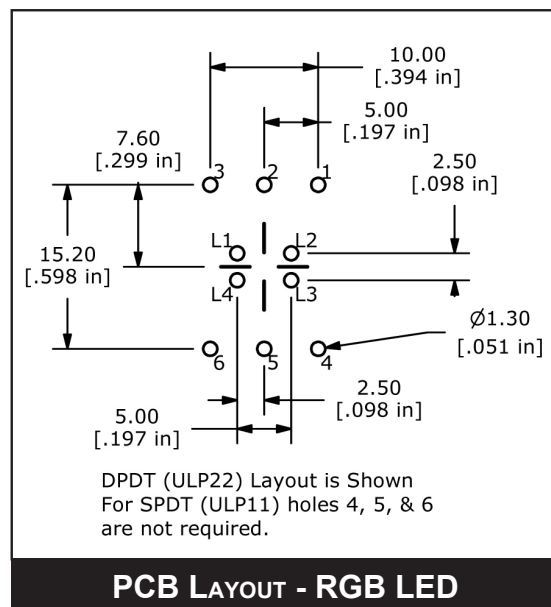
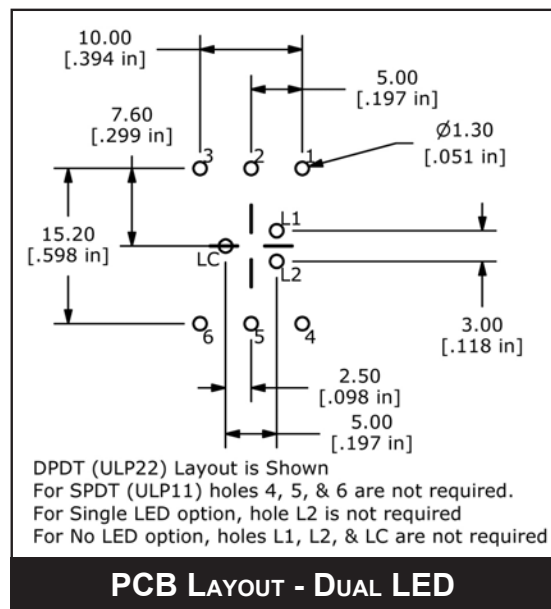
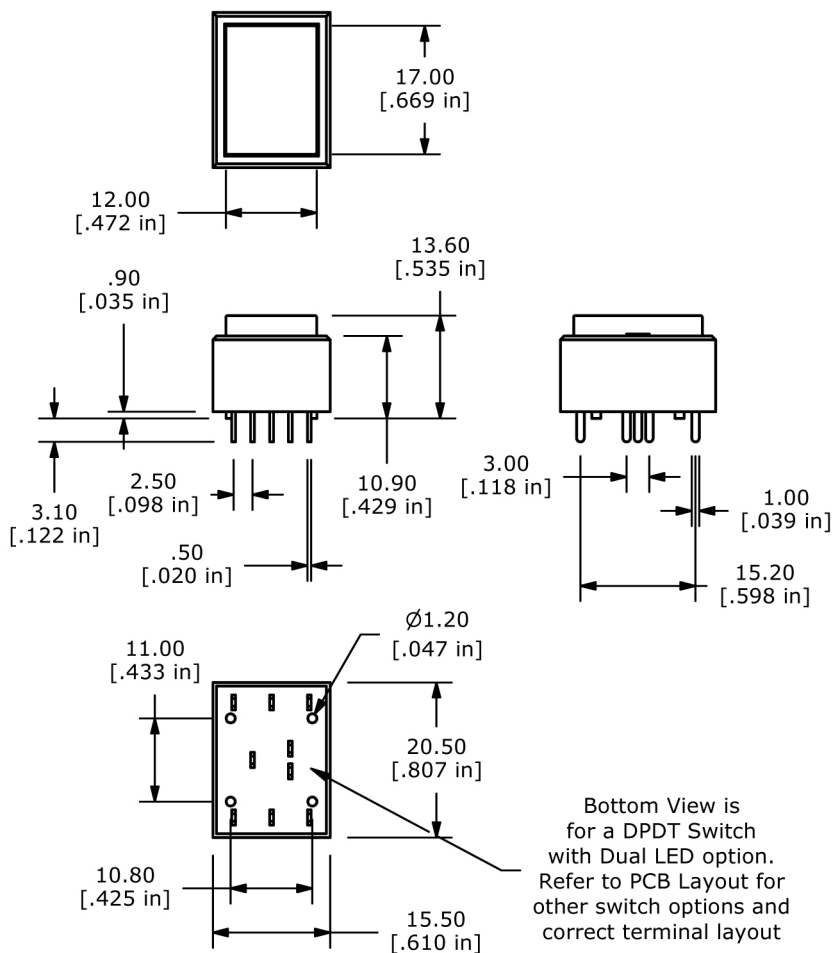


### SCHEMATIC - RGB LED



# ULP SERIES PUSHBUTTON SWITCH

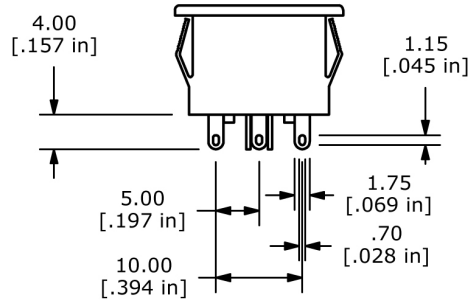
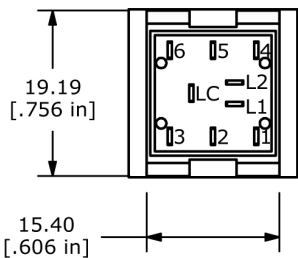
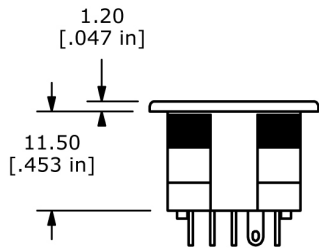
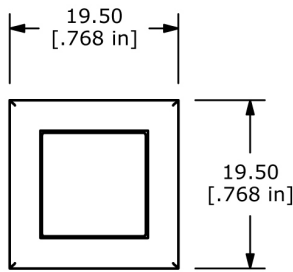
## ACTUATOR OPTIONS - RECTANGULAR FLAT



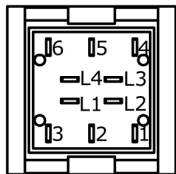
ANTI-VANDAL SWITCHES  
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# ULP SERIES PUSHBUTTON SWITCH

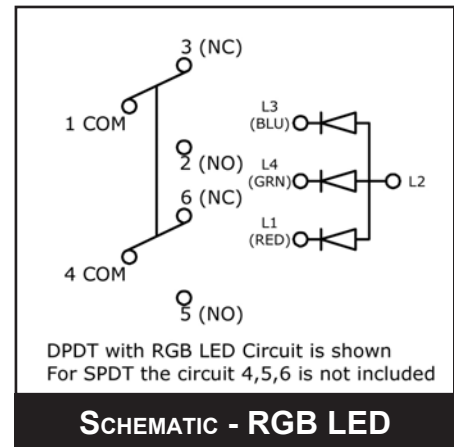
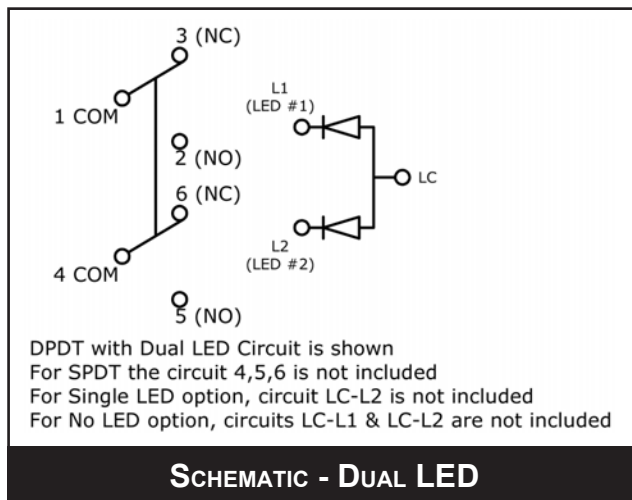
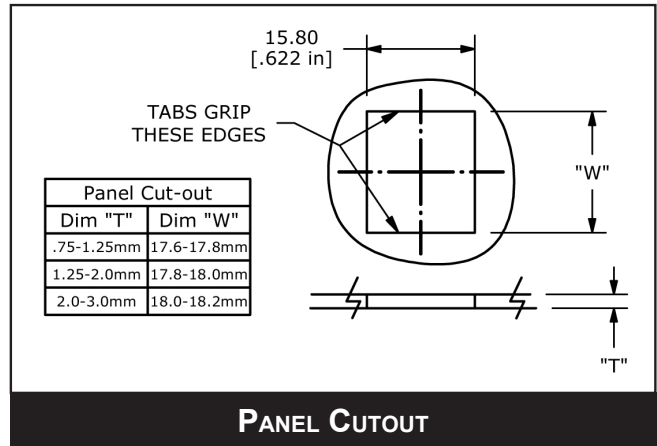
## ACTUATOR OPTIONS - PANEL MOUNT



Bottom View of a DPDT Switch with Dual LED option. Refer to Schematic for one LED, zero LED, and SPST options and correct terminal layout.

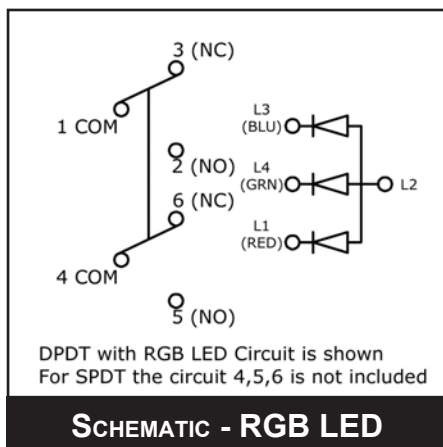
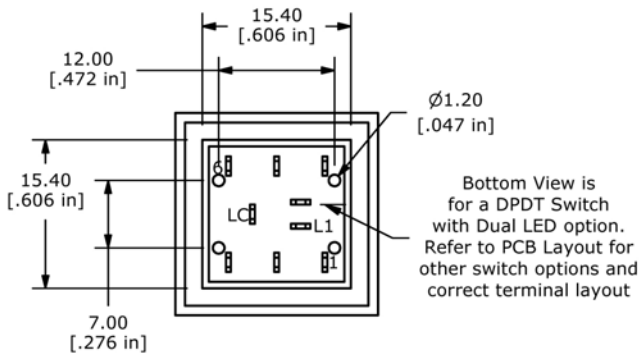
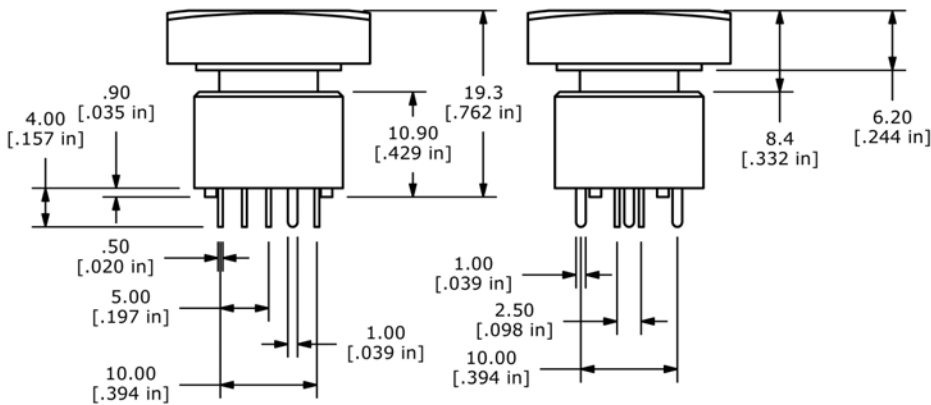
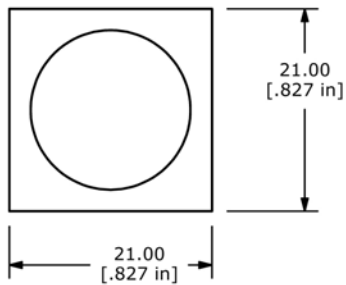


Bottom View of a DPDT Switch with RGB LED option. Refer to Schematic for SPST option and correct terminal layout.

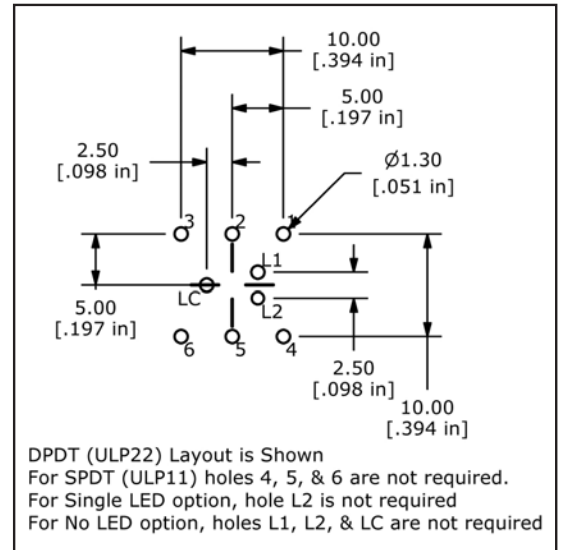


# ULP SERIES PUSHBUTTON SWITCH

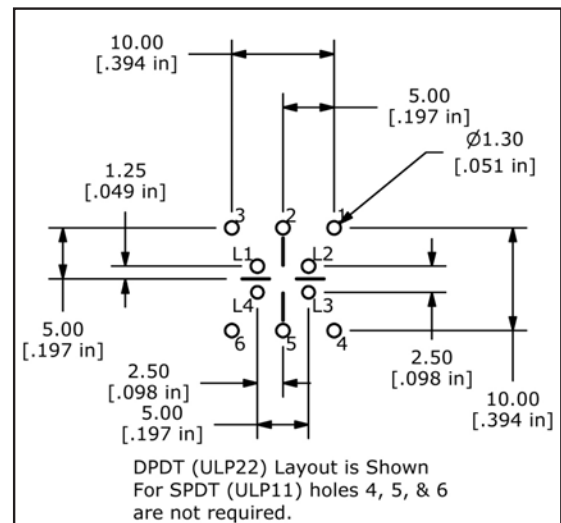
## ACTUATOR OPTIONS - LARGE SCULPTURED



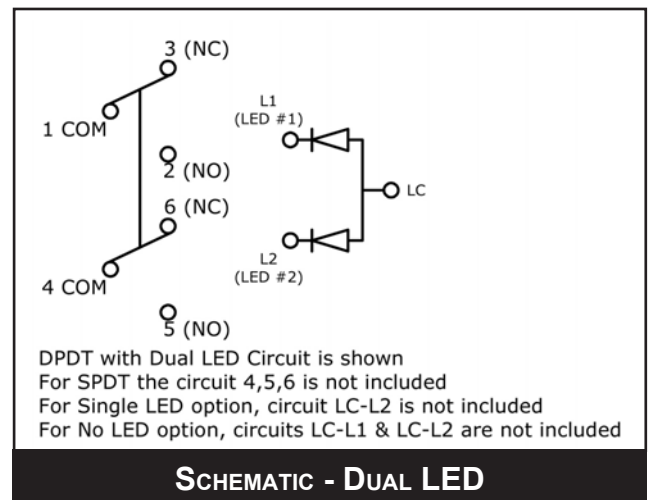
**SCHEMATIC - RGB LED**



**PCB LAYOUT - DUAL LED**



**PCB LAYOUT - RGB LED**



**SCHEMATIC - DUAL LED**



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## Данный компонент на территории Российской Федерации

### Вы можете приобрести в компании MosChip.

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

<http://moschip.ru/get-element>

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

### Офис по работе с юридическими лицами:

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Факс: +7 495 668-12-70 (доб.304)

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