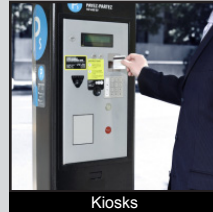
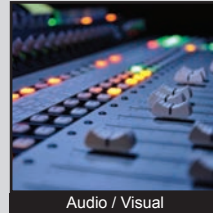


# ULP SERIES PUSHBUTTON SWITCH

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
ULP	12- SPDT 22 - DPDT	EE - Latching OA - Momentary	P1 - PC Pins M1- Solder Lug	Q - Silver R - Gold	SS - Square Sculptured SF - Square Flat RF - Rectangular Flat PM - Panel Mount LS - Large Sculptured	CL1 - Clear Lens / White Diffuser OP1 - Black Opaque	NIL - No LED B - Blue G - Green R - Red Y - Yellow RGB - Red-Blue-Green	NIL - No LED B - Blue G - Green R - Red 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®**

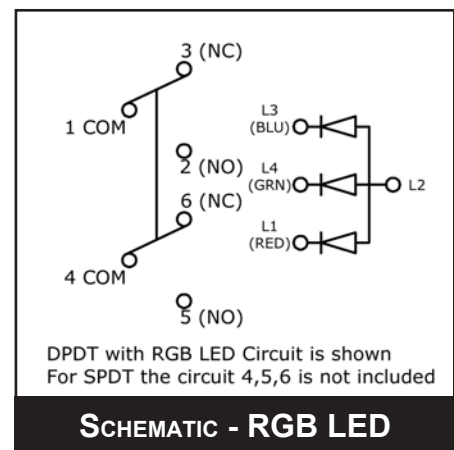
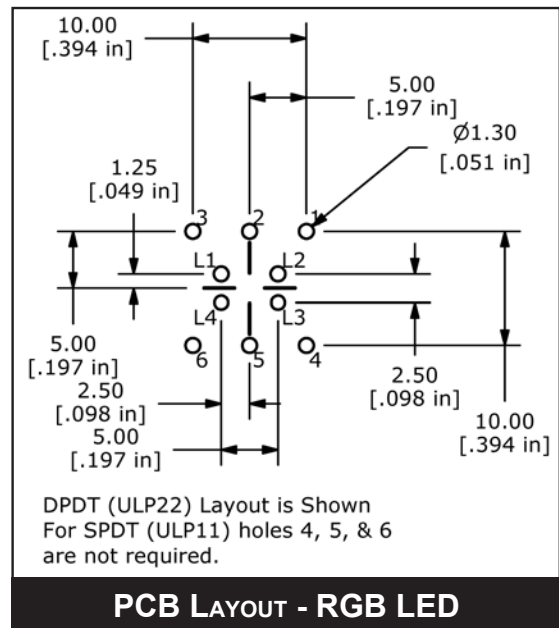
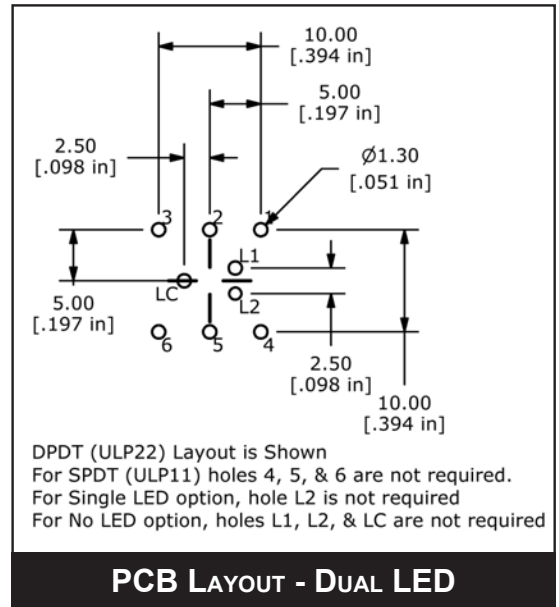
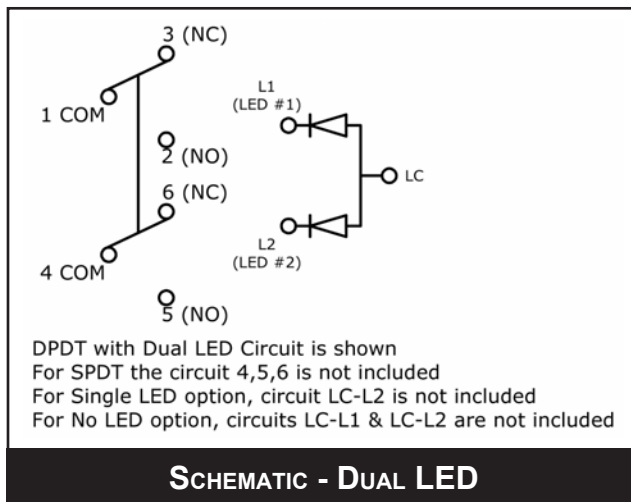
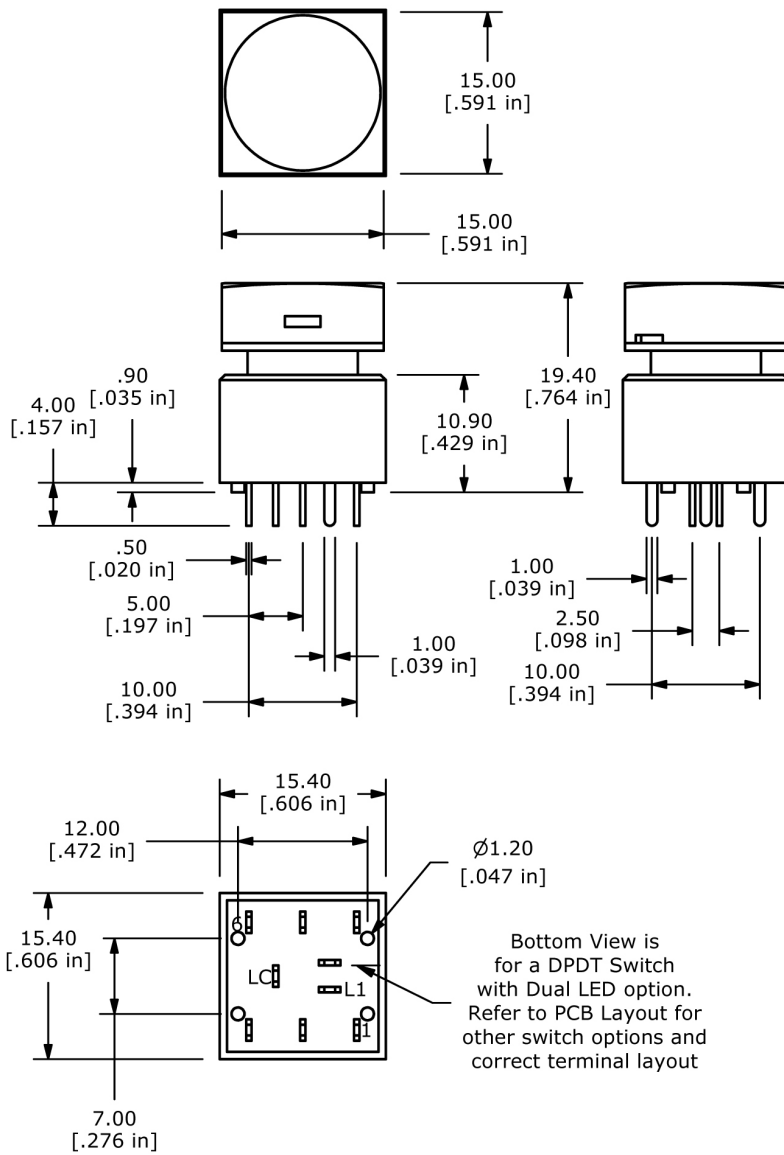
www.e-switch.com

800.867.2717

2

# ULP SERIES PUSHBUTTON SWITCH

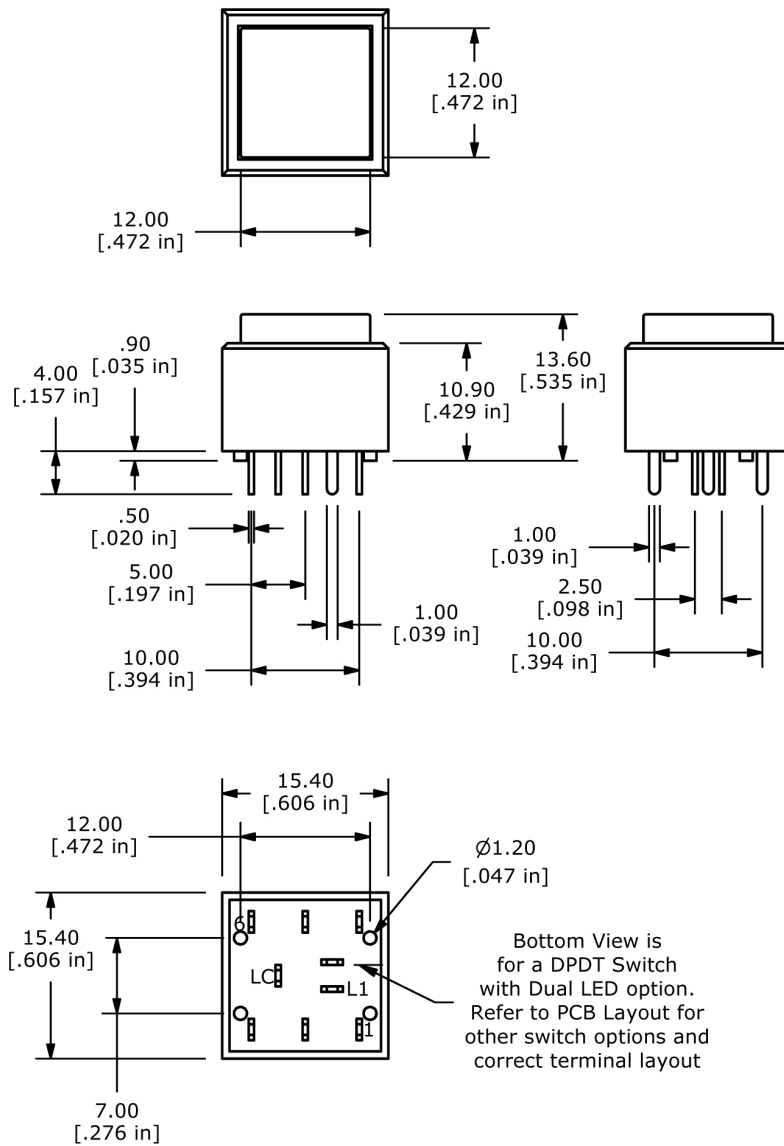
## ACTUATOR OPTIONS - SQUARE SCULPTURED



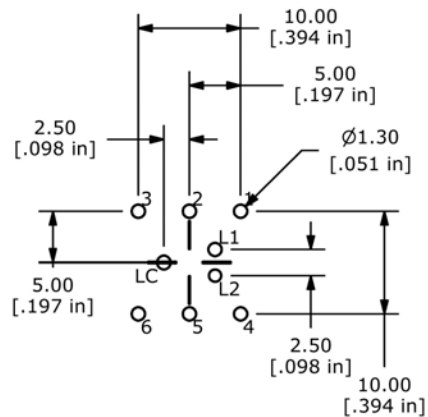
ANTI-VANDAL SWITCHES  
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 TOGGLE SWITCHES  
 CAP OPTIONS

# ULP SERIES PUSHBUTTON SWITCH

## ACTUATOR OPTIONS - SQUARE FLAT

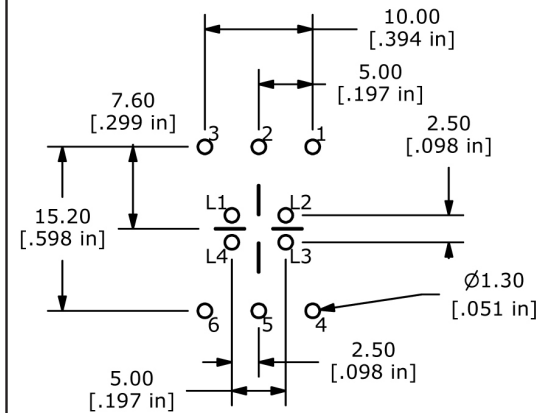


Bottom View is for a DPDT Switch with Dual LED option. Refer to PCB Layout for other switch options and correct terminal layout



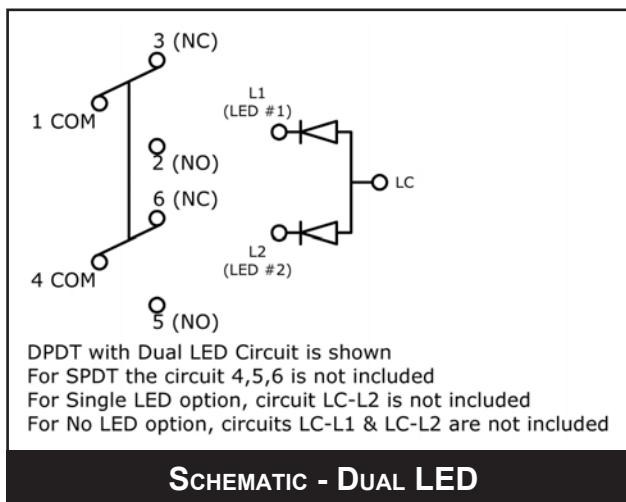
DPDT (ULP22) Layout is Shown  
For SPDT (ULP11) holes 4, 5, & 6 are not required.  
For Single LED option, hole L2 is not required  
For No LED option, holes L1, L2, & LC are not required

### PCB LAYOUT - DUAL LED

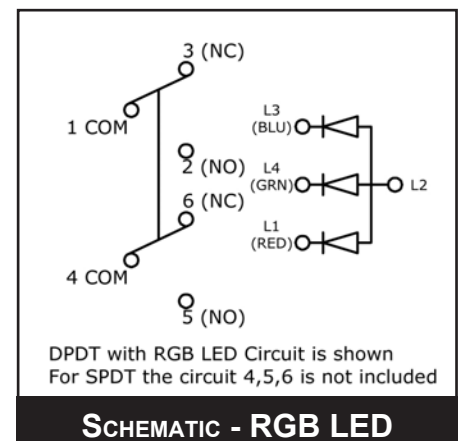


DPDT (ULP22) Layout is Shown  
For SPDT (ULP11) holes 4, 5, & 6 are not required.

### PCB LAYOUT - RGB LED



### SCHEMATIC - DUAL LED

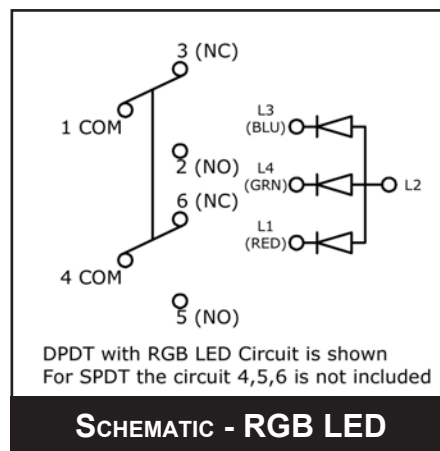
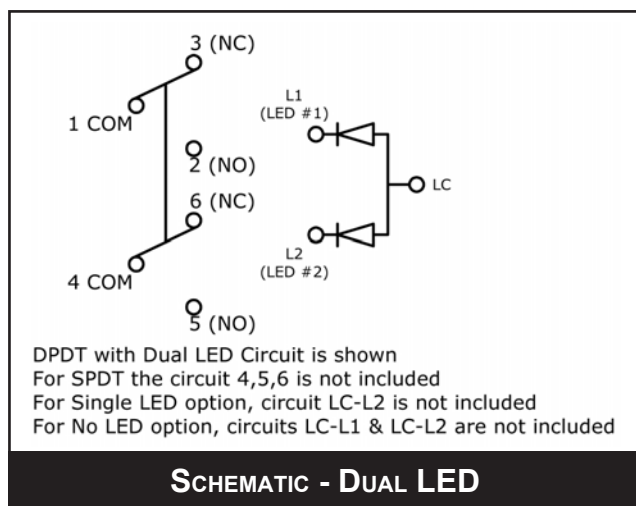
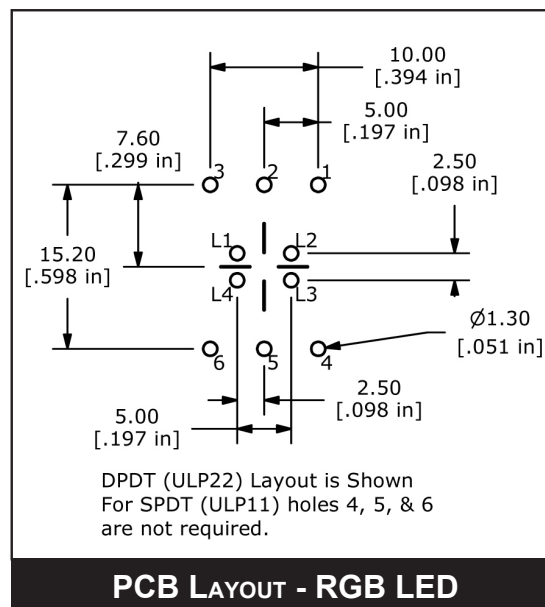
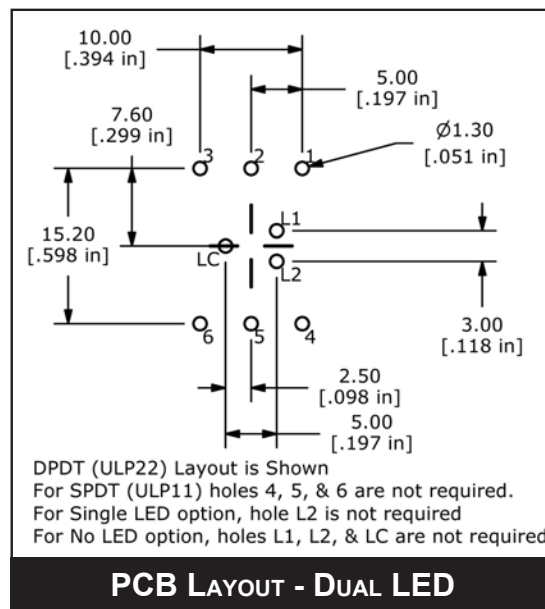
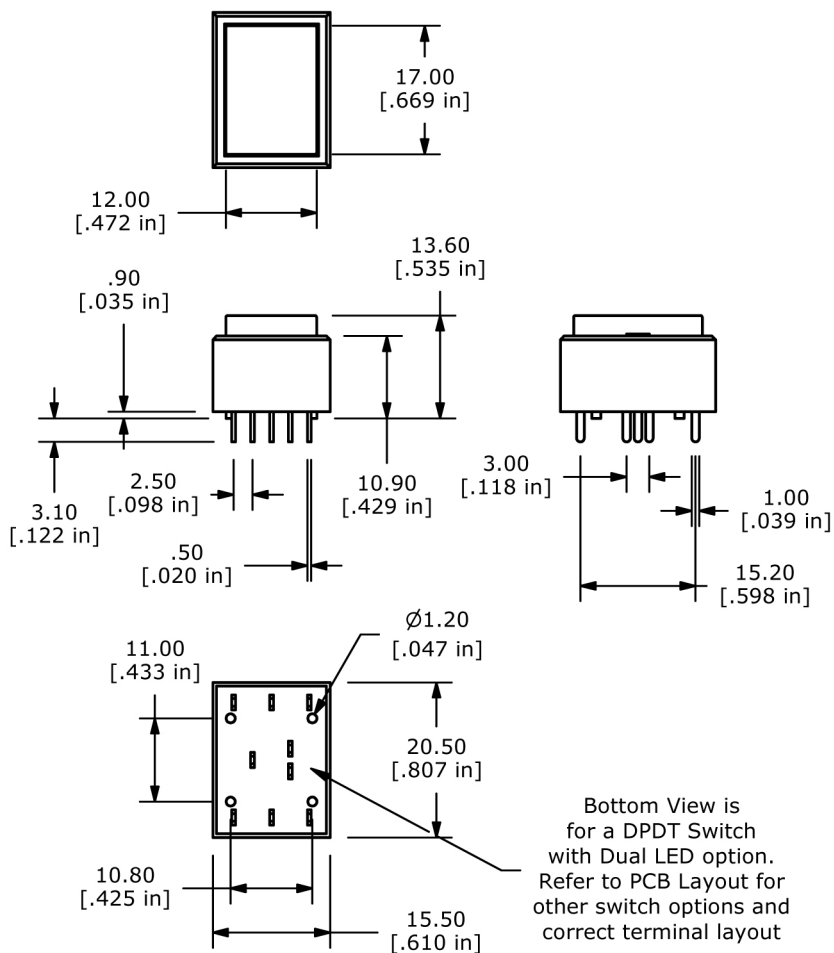


### SCHEMATIC - RGB LED



# ULP SERIES PUSHBUTTON SWITCH

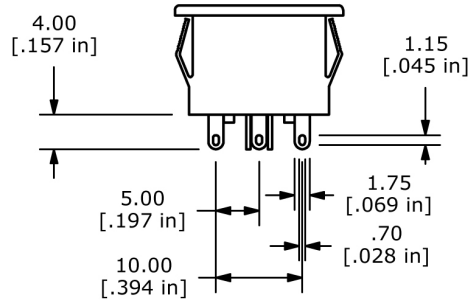
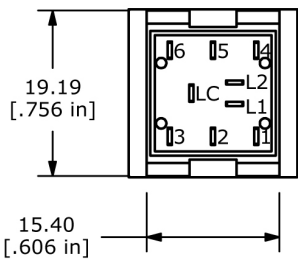
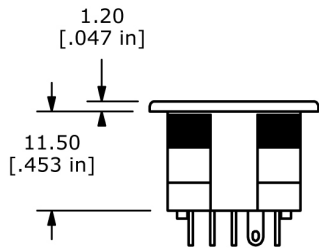
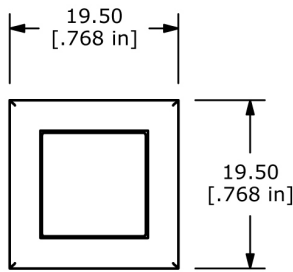
## ACTUATOR OPTIONS - RECTANGULAR FLAT



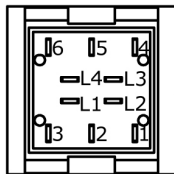
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# ULP SERIES PUSHBUTTON SWITCH

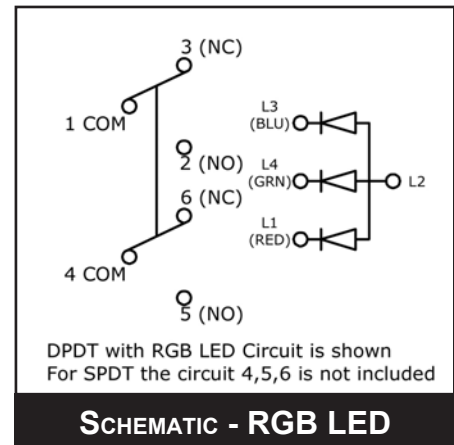
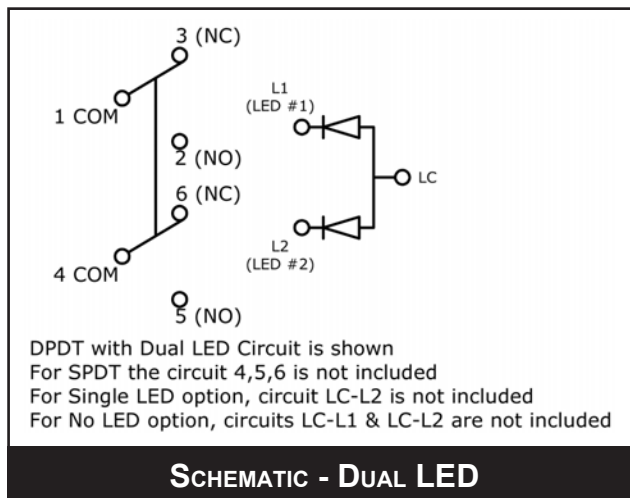
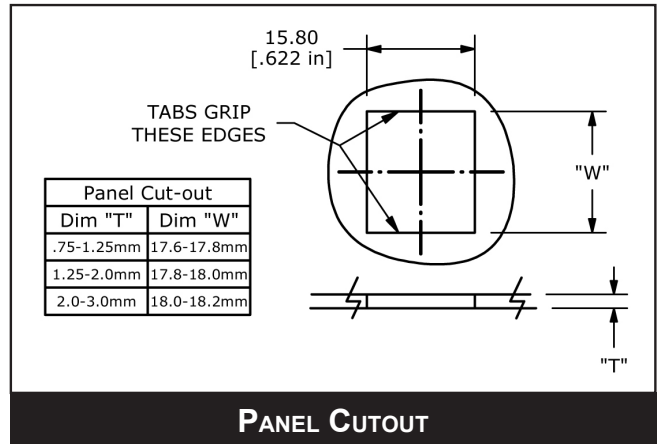
## ACTUATOR OPTIONS - PANEL MOUNT



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.

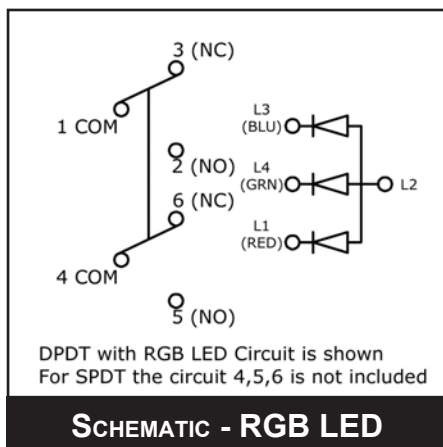
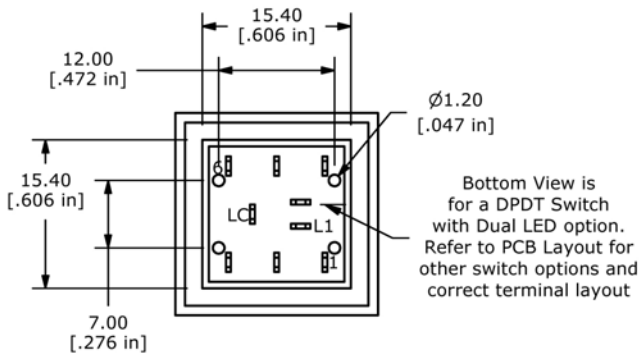
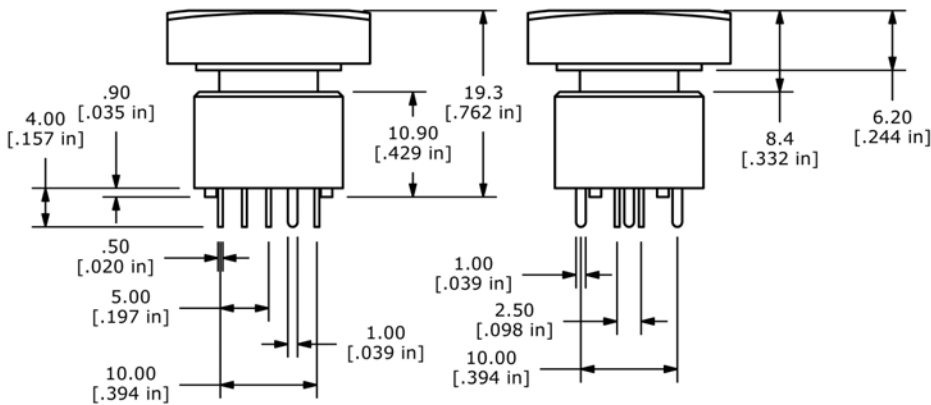
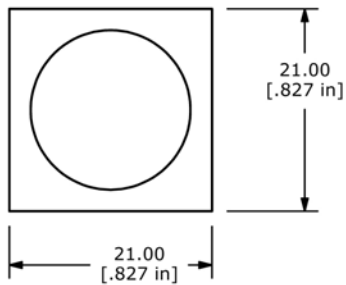


Bottom View of a DPDT Switch with RGB LED option. Refer to Schematic for SPST option and correct terminal layout.

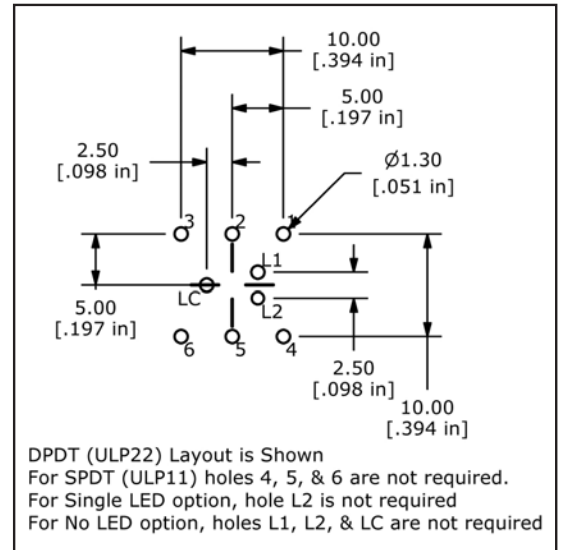


# ULP SERIES PUSHBUTTON SWITCH

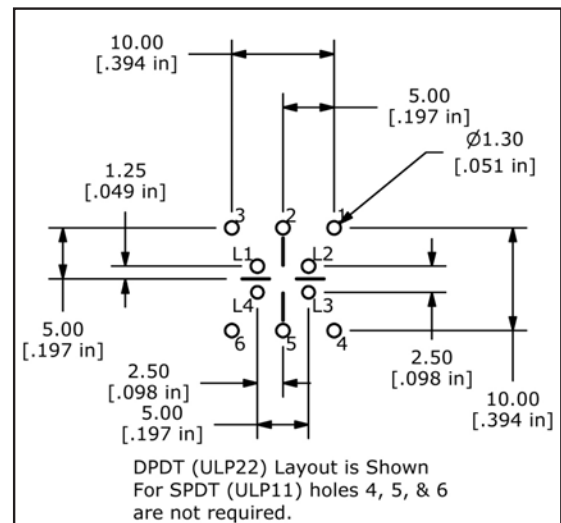
## ACTUATOR OPTIONS - LARGE SCULPTURED



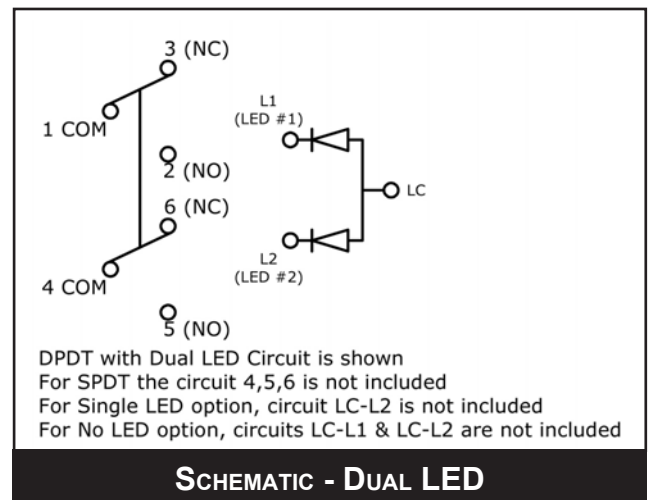
**SCHEMATIC - RGB LED**



**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.

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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.

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

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