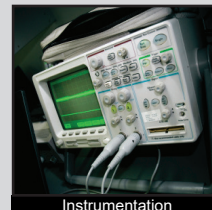
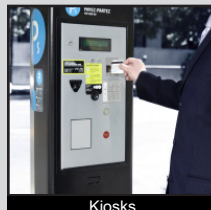
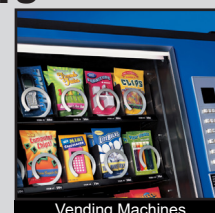
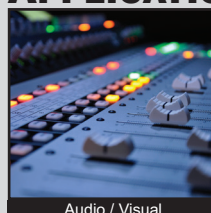


ULP SERIES PUSHBUTTON SWITCH

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: 0.1A Max @ 28VDC
Electrical Life: 200,000 Cycles
Contact Resistance: Silver: 50mΩ Max. initial
Gold: 100mΩ Max. initial
Insulation Resistance: 100 MΩ Min. @ 500VDC
Dielectric Strength: 1,000VAC
Operating/Storage Temperature: -40°C to 85°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 PM - Panel Mount LS - Large Sculptured	 CL1 - Clear Lens / White Diffuser OP1 - Black Opaque	 NIL - No LED BLU - Blue GRN - Green RED - Red YEL - Yellow RGB - Red-Green-Blue	 NIL - No LED BLU - Blue GRN - Green RED - Red YEL - 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 6.27.2022



E-SWITCH®

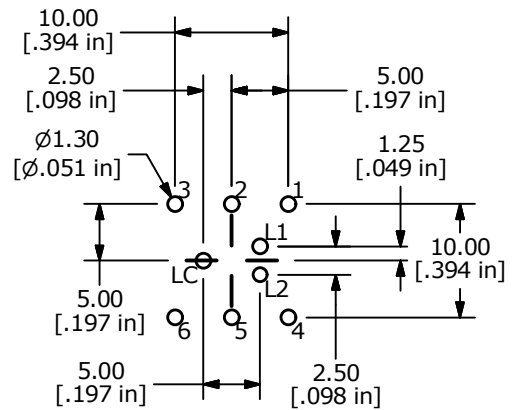
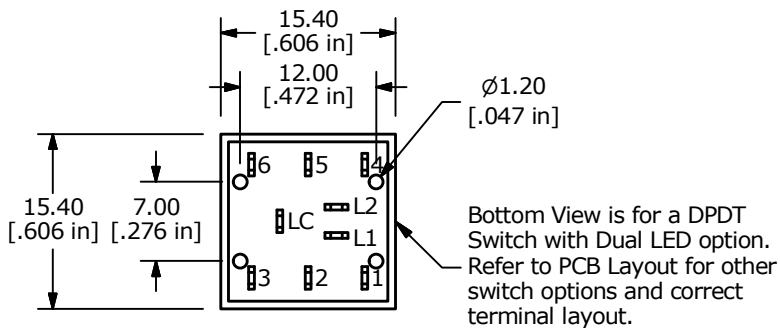
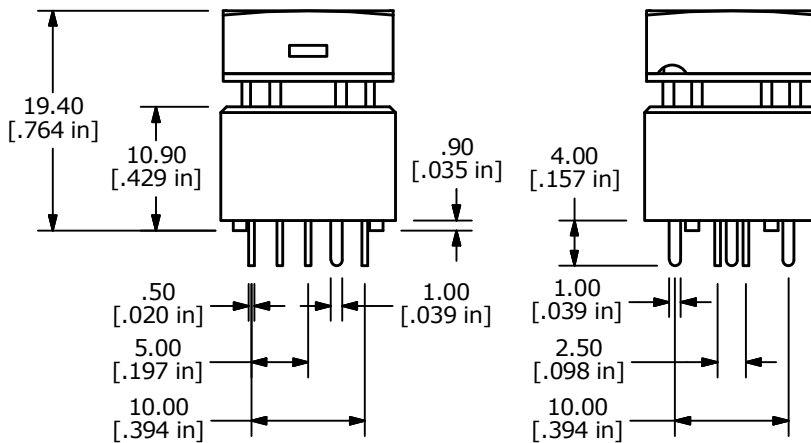
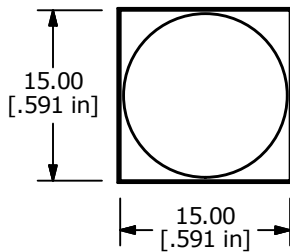
www.e-switch.com

800.867.2717

1

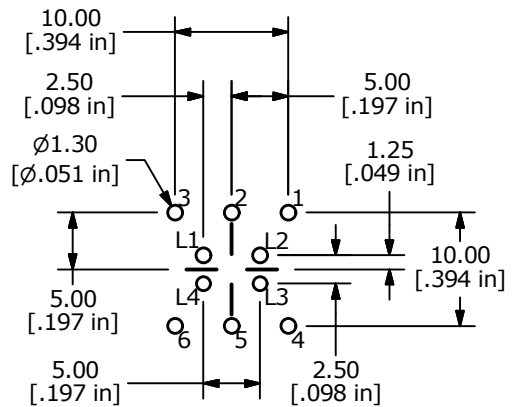
ULP SERIES PUSHBUTTON SWITCH

ACTUATOR OPTIONS - SQUARE SCULPTURED



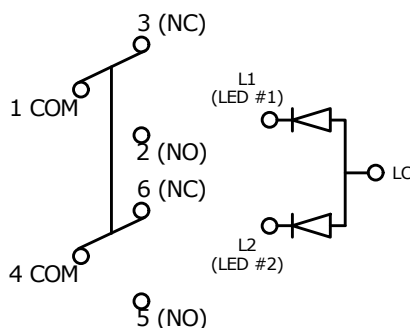
DPDT (ULP22) Layout is Shown
For SPDT (ULP11) holes 4, 5, & 6 are not required.
For Single LED option, hole L2 is not required
For No LED option, holes L1, L2, & LC are not required

PCB LAYOUT - DUAL LED



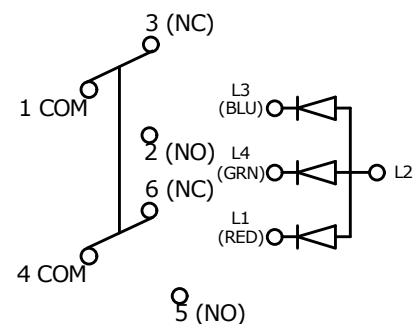
DPDT (ULP22) Layout is Shown
For SPDT (ULP11) holes 4, 5, & 6 are not required.

PCB LAYOUT - RGB LED



DPDT with Dual LED Circuit is shown
For SPDT the circuits 4, 5, & 6 are not included
For Single LED option, circuit LC-L2 is not included
For No LED option, circuits LC-L1 & LC-L2 are not included

SCHEMATIC - DUAL LED



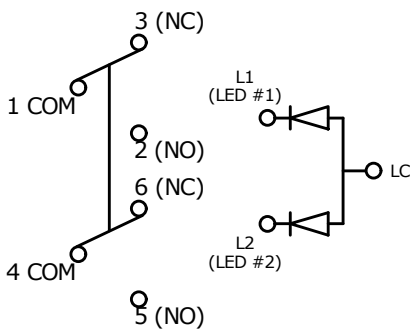
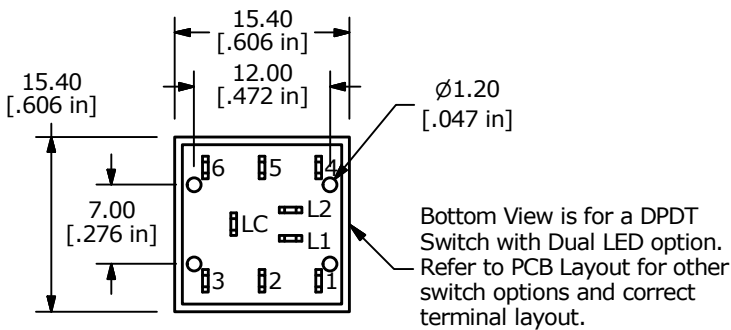
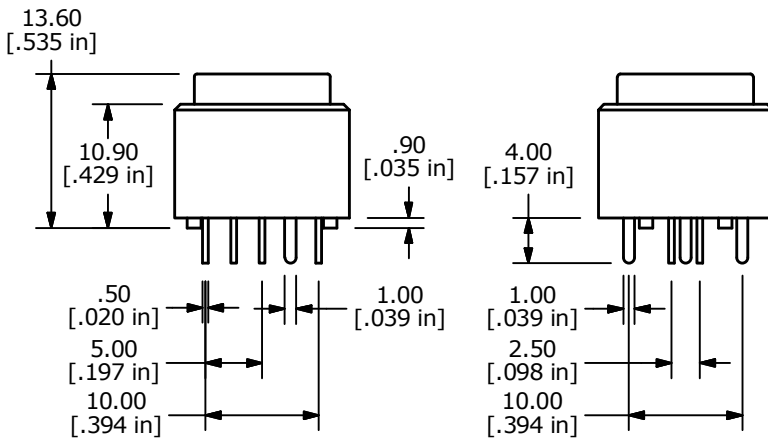
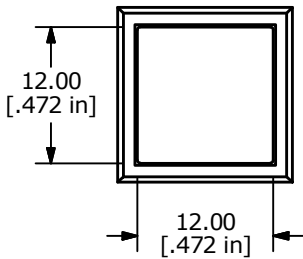
DPDT with RGB LED Circuit is shown
For SPDT the circuits 4, 5, & 6 are not included

SCHEMATIC - RGB LED



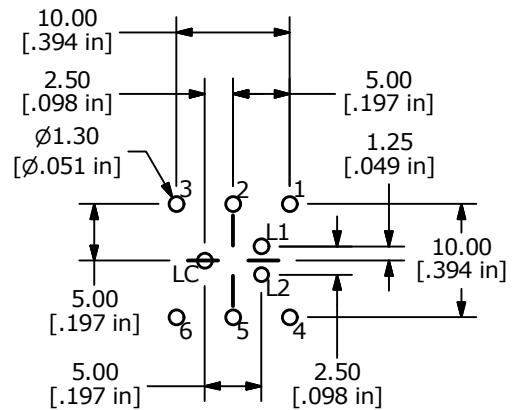
ULP SERIES PUSHBUTTON SWITCH

ACTUATOR OPTIONS - SQUARE FLAT

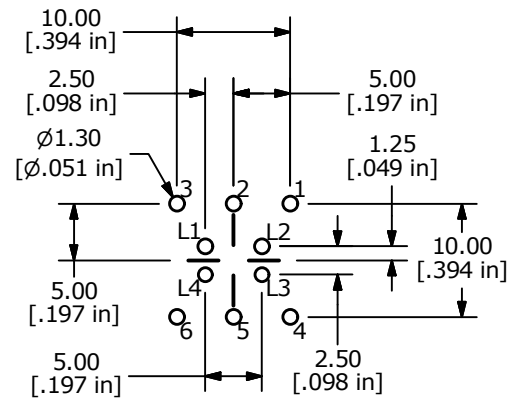


DPDT with Dual LED Circuit is shown
For SPDT the circuits 4, 5, & 6 is not included
For Single LED option, circuit LC-L2 are not included
For No LED option, circuits LC-L1 & LC-L2 are not included

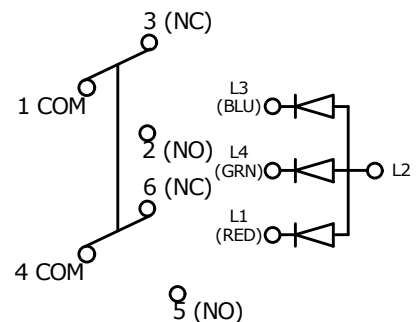
SCHEMATIC - DUAL LED



PCB LAYOUT - DUAL LED



PCB LAYOUT - RGB LED



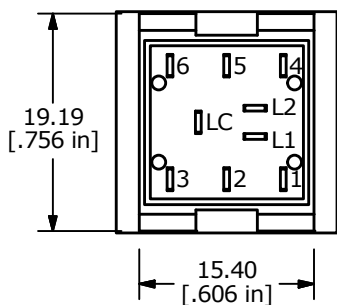
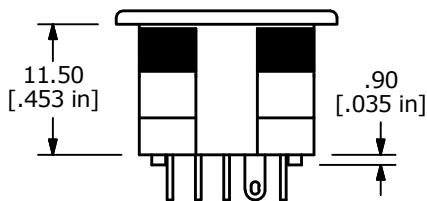
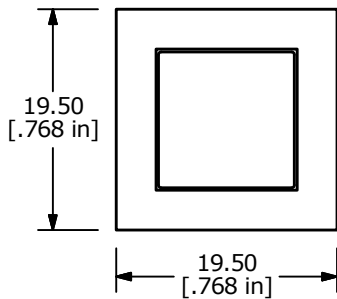
DPDT with RGB LED Circuit is shown
For SPDT the circuits 4, 5, & 6 are not included

SCHEMATIC - RGB LED

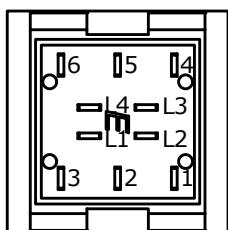


ULP SERIES PUSHBUTTON SWITCH

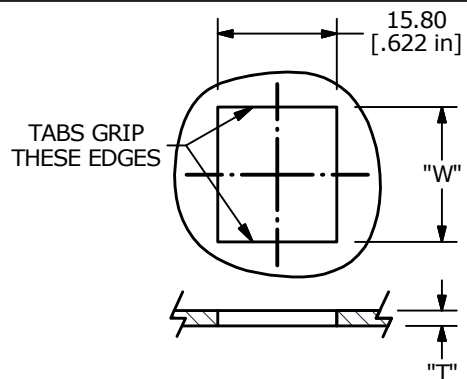
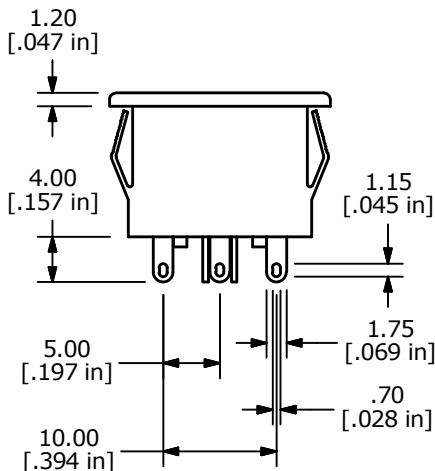
ACTUATOR OPTIONS - PANEL MOUNT



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

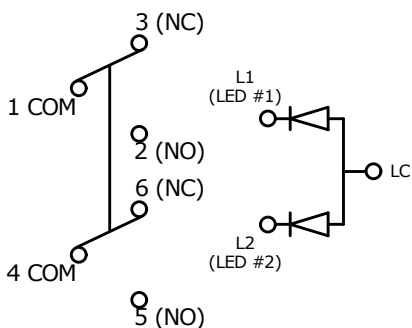


Bottom View of a DPDT Switch with RGB LED option. Refer to Schematic for SPST option and correct terminal layout.



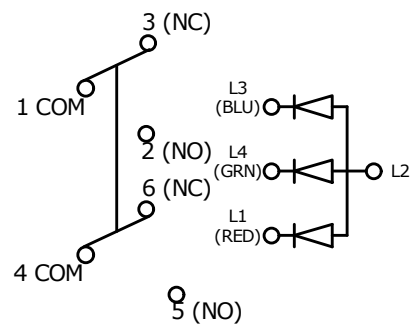
Panel Cut-out	
Dim "T"	Dim "W"
.75-1.25mm	17.6-17.8mm
1.25-2.0mm	17.8-18.0mm
2.0-3.0mm	18.0-18.2mm

RECOMMENDED PANEL CUTOUT



DPDT with Dual LED Circuit is shown
For SPDT the circuits 4, 5, & 6 are not included
For Single LED option, circuit LC-L2 is not included
For No LED option, circuits LC-L1 & LC-L2 are not included

SCHEMATIC - DUAL LED



DPDT with RGB LED Circuit is shown
For SPDT the circuits 4, 5, & 6 are not included

SCHEMATIC - RGB LED



E-SWITCH®

www.e-switch.com

800.867.2717

4

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

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

Technical drawings of the DPDT Switch with Dual LED option, showing Top, Side, and Bottom views with dimensions in inches and millimeters.

Top View:

- Overall width: 21.00 [.827 in]
- Overall height: 21.00 [.827 in]
- Mounting hole diameter: $\varnothing 1.20$ [.047 in]

Side View (Left):

- Overall height: 19.3 [.762 in]
- Mounting tab height: 6.20 [.244 in]
- Terminal block height: 10.90 [.429 in]
- Terminal block width: .90 [.035 in]
- Terminal pitch: 1.00 [.039 in]
- Terminal width: .50 [.020 in]
- Terminal spacing: 5.00 [.197 in]
- Terminal block width: 10.00 [.394 in]

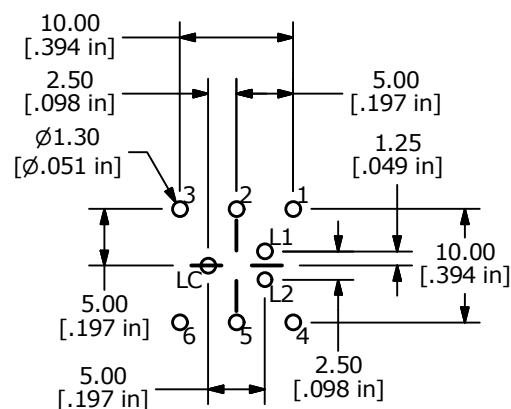
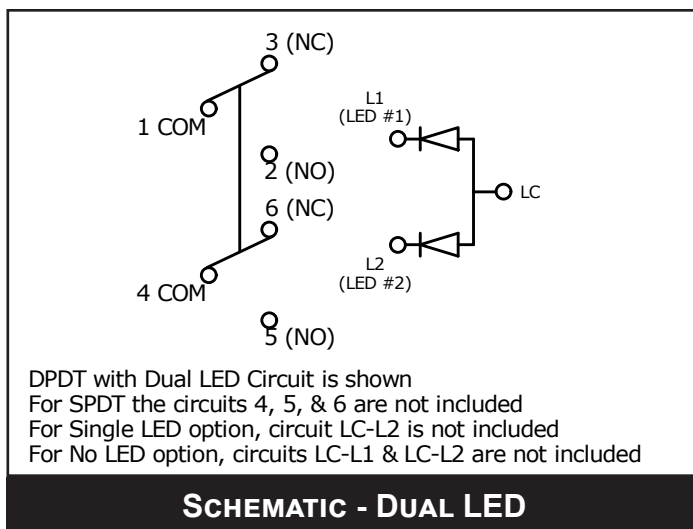
Side View (Right):

- Overall height: 8.4 [.332 in]
- Mounting tab height: 4.00 [.157 in]
- Terminal block height: 4.00 [.157 in]
- Terminal block width: .90 [.035 in]
- Terminal pitch: 1.00 [.039 in]
- Terminal width: .50 [.020 in]
- Terminal spacing: 2.50 [.098 in]
- Terminal block width: 10.00 [.394 in]

Bottom View:

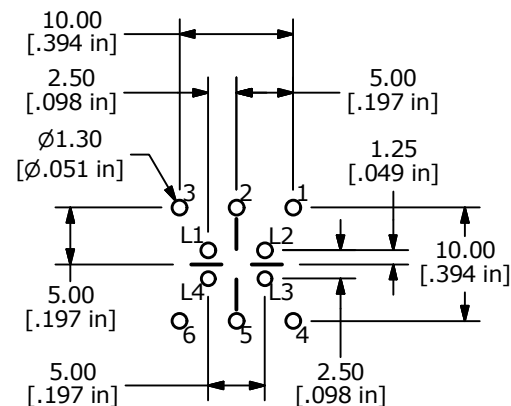
- Overall width: 15.40 [.606 in]
- Overall height: 15.40 [.606 in]
- Mounting hole diameter: $\varnothing 1.20$ [.047 in]
- Terminal pitch: 1.00 [.039 in]
- Terminal width: .50 [.020 in]
- Terminal spacing: 5.00 [.197 in]
- Terminal block width: 10.00 [.394 in]
- Terminal block height: 10.90 [.429 in]
- Terminal block width: .90 [.035 in]
- Terminal pitch: 1.00 [.039 in]
- Terminal width: .50 [.020 in]
- Terminal spacing: 5.00 [.197 in]
- Terminal block width: 10.00 [.394 in]

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



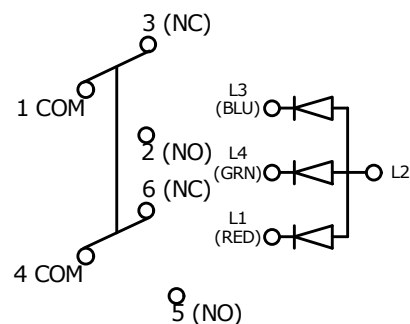
DPDT (ULP22) Layout is Shown
For SPDT (ULP11) holes 4, 5, & 6 are not required.
For Single LED option, hole L2 is not required
For No LED option, holes L1, L2, & LC are not required

PCB LAYOUT - DUAL LED



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

PCB LAYOUT - RGB LED



DPDT with RGB LED Circuit is shown
For SPDT the circuits 4, 5, & 6 are not included

SCHEMATIC - RGB LED

