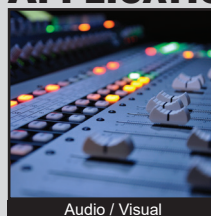


ULP SERIES PUSHBUTTON SWITCH

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



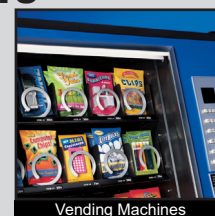
APPLICATIONS / MARKETS



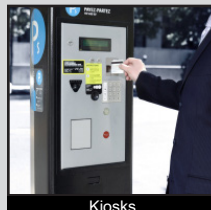
Audio / Visual



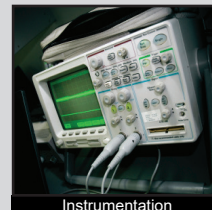
Consumer Electronics



Vending Machines



Kiosks



Instrumentation



Medical Equipment

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
<input type="text"/> <input type="text"/> <input type="text"/> ULP	<input type="text"/> <input type="text"/> 12 - SPDT 22 - DPDT	<input type="text"/> <input type="text"/> EE - Latching OA - Momentary	<input type="text"/> <input type="text"/> P1 - PC Pins M1 - Solder Lug	<input type="text"/> Q - Silver R - Gold	<input type="text"/> <input type="text"/> SS - Square Sculptured SF - Square Flat PM - Panel Mount LS - Large Sculptured	<input type="text"/> <input type="text"/> <input type="text"/> CL1 - Clear Lens / White Diffuser OP1 - Black Opaque	<input type="text"/> <input type="text"/> <input type="text"/> NIL - No LED BLU - Blue GRN - Green RED - Red YEL - Yellow RGB - Red-Green-Blue	<input type="text"/> <input type="text"/> <input type="text"/> 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



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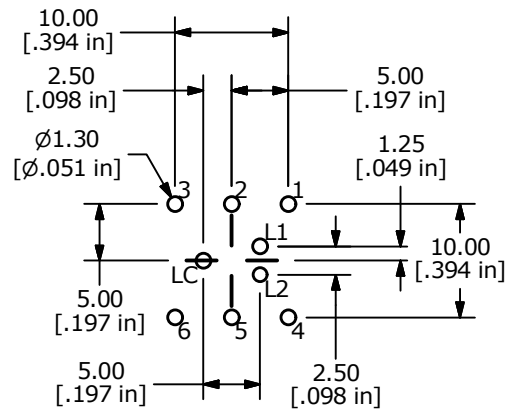
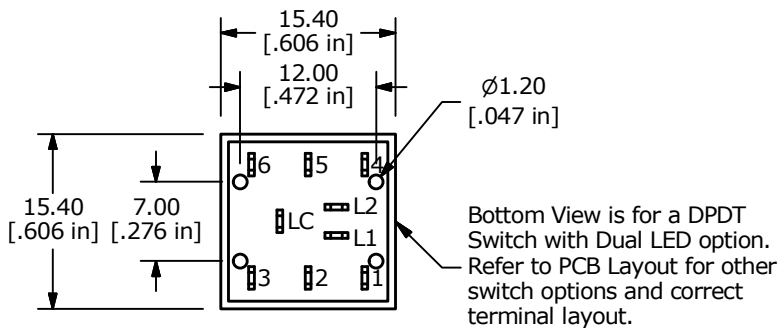
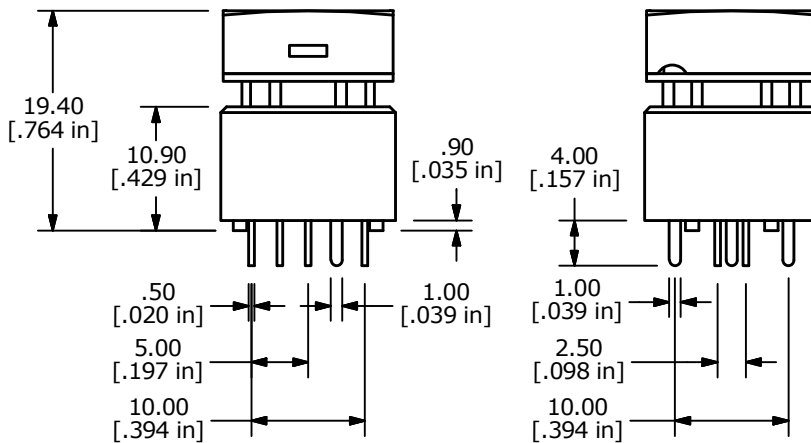
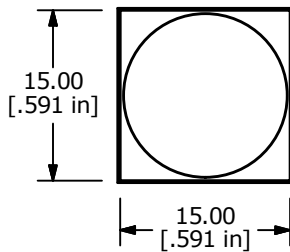
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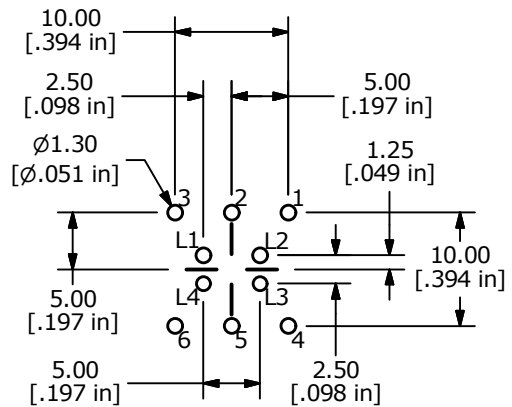
ULP SERIES PUSHBUTTON SWITCH

ACTUATOR OPTIONS - SQUARE SCULPTURED



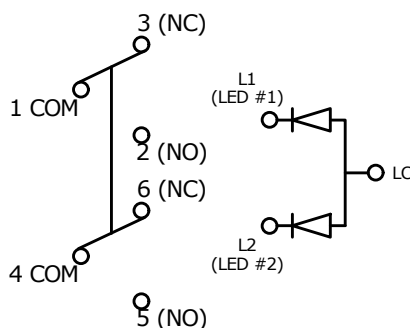
DPDT (ULP22) Layout is Shown
For SPDT (ULP11) holes 4, 5, & 6 are not required.
For Single LED option, hole L2 is not required
For No LED option, holes L1, L2, & LC are not required

PCB LAYOUT - DUAL LED



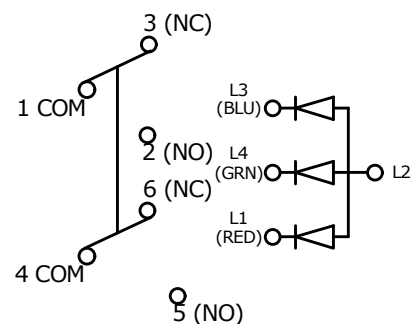
DPDT (ULP22) Layout is Shown
For SPDT (ULP11) holes 4, 5, & 6 are not required.

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



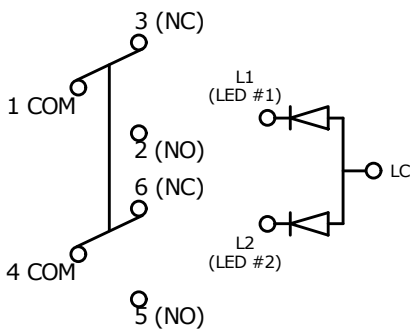
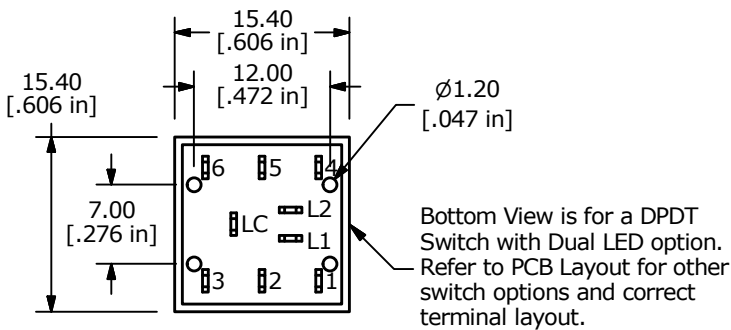
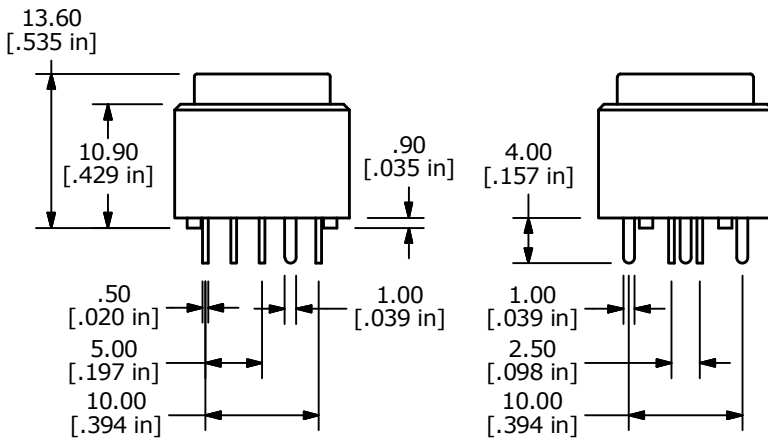
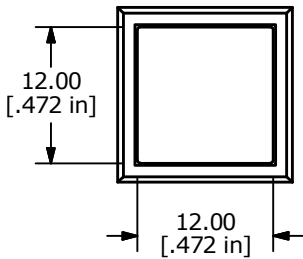
DPDT with RGB LED Circuit is shown
For SPDT the circuits 4, 5, & 6 are not included

SCHEMATIC - RGB LED



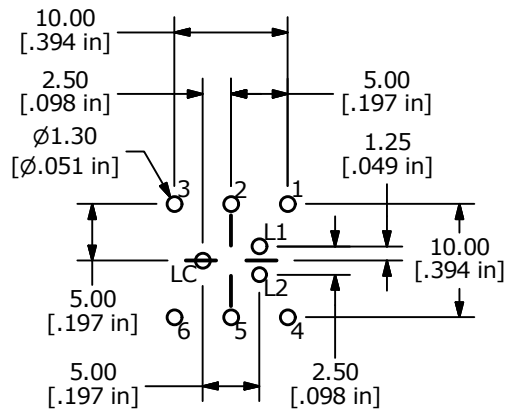
ULP SERIES PUSHBUTTON SWITCH

ACTUATOR OPTIONS - SQUARE FLAT

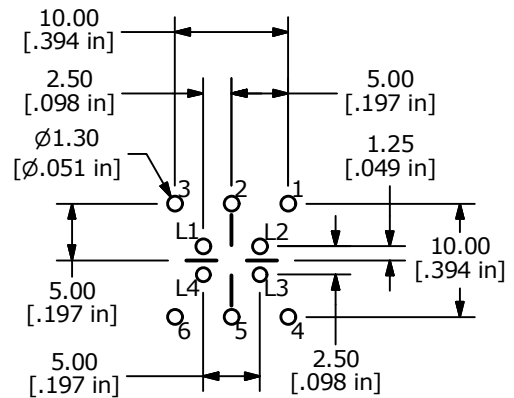


DPDT with Dual LED Circuit is shown
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For No LED option, circuits LC-L1 & LC-L2 are not included

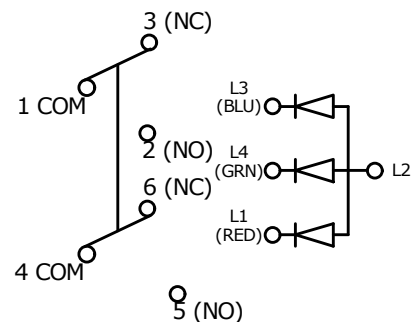
SCHEMATIC - DUAL LED



PCB LAYOUT - DUAL LED



PCB LAYOUT - RGB LED



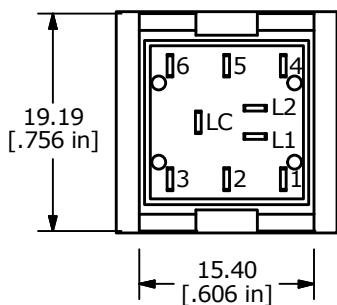
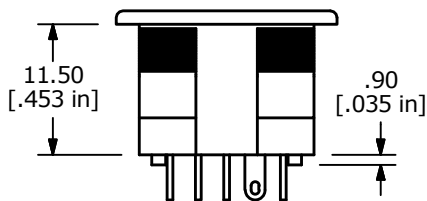
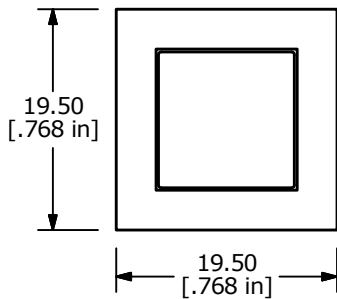
DPDT with RGB LED Circuit is shown
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SCHEMATIC - RGB LED

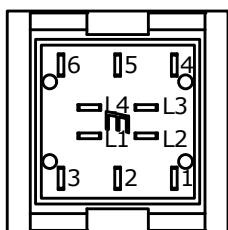


ULP SERIES PUSHBUTTON SWITCH

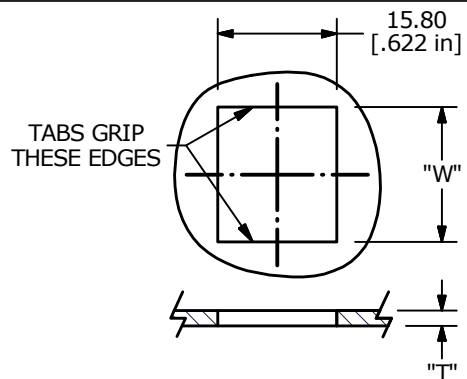
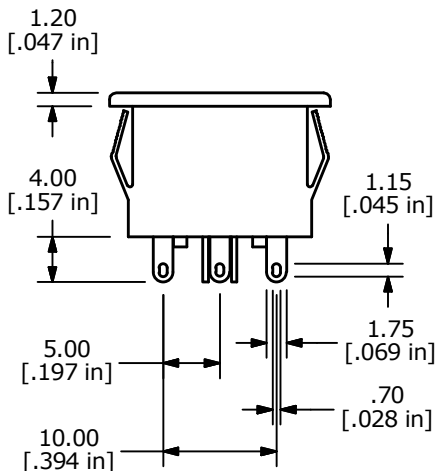
ACTUATOR OPTIONS - PANEL MOUNT



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.

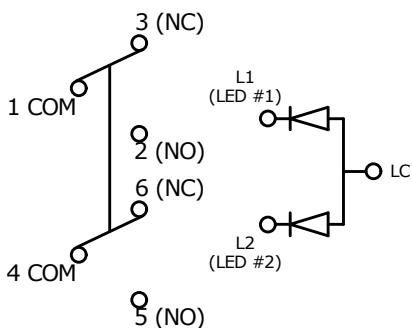


Bottom View of a DPDT Switch with RGB LED option. Refer to Schematic for SPST option and correct terminal layout.



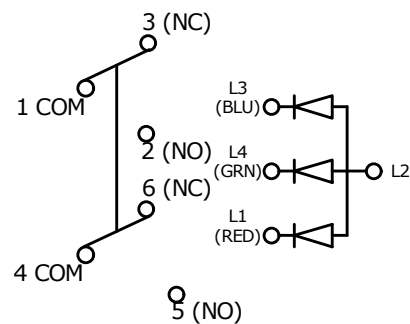
Panel Cut-out	
Dim "T"	Dim "W"
.75-1.25mm	17.6-17.8mm
1.25-2.0mm	17.8-18.0mm
2.0-3.0mm	18.0-18.2mm

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

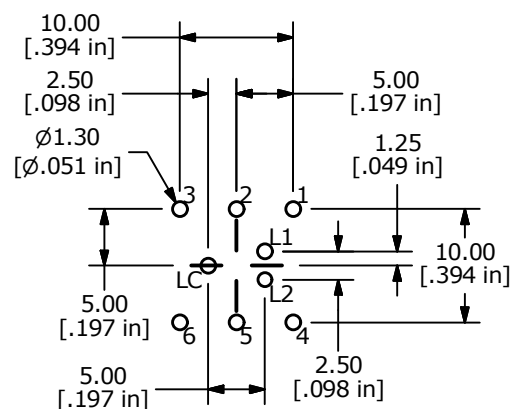
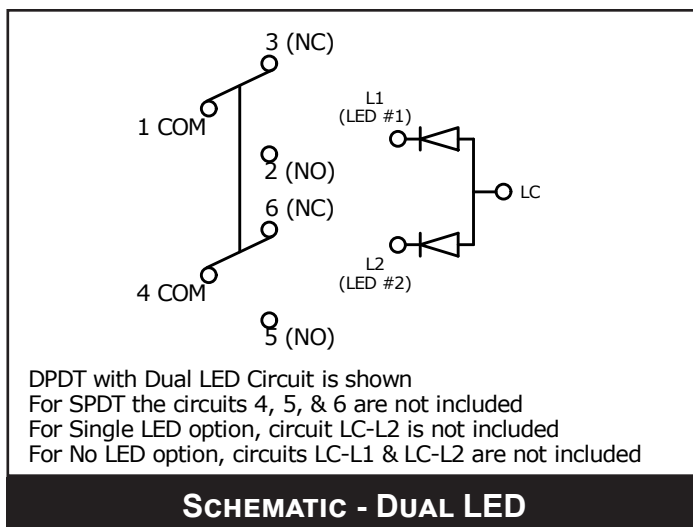


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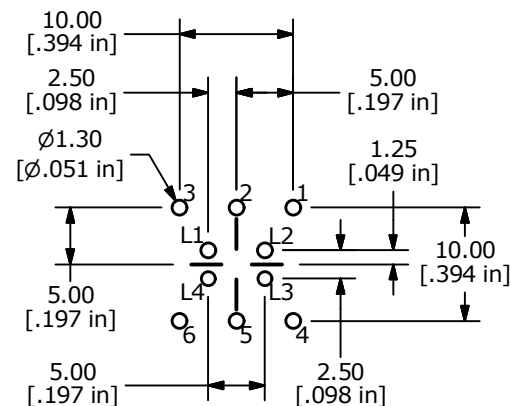
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CAP OPTIONS	TOGGLE SWITCHES	TACTILE SWITCHES	SNAP ACTION SWITCHES	SLIDE SWITCHES	ROTARY SWITCHES	ROCKER SWITCHES	PUSHBUTTON SWITCHES	NAVIGATION SWITCHES	KEYLOCK SWITCHES	DIP SWITCHES	DETECTOR SWITCHES	ANTI-VANDAL SWITCHES
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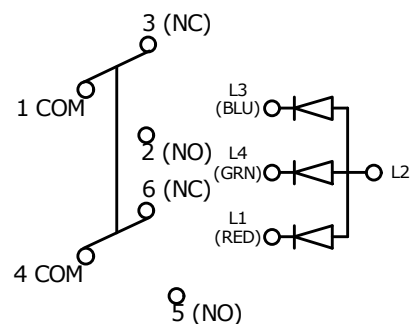
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PCB LAYOUT - DUAL LED



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



Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[E-Switch:](#)

[ULP22EEM1RPMCL1REDGRN](#) [ULP22EEP1QSSNOCAPWHTRED](#) [ULP22OAM1RPMCL1RGB](#)
[ULP12OAM1RPMCL1RGB](#) [ULP12EEM1RPMCL1GRNNIL](#) [ULP12OAM1RPMCL1REDNIL](#)
[ULP12OAP1RSFCL1REDGRNBULK](#) [ULP12OAP1RSFCL1YELBLUBULK](#)