## ULP SERIES PuSHBUTTON SwITCH

## Specifications

Electrical Rating: Silver: .5A @ 25VDC
Gold: 0.1A Max @ 28VDC
Electrical Life: 200,000 Cycles
Contact Resistance: Silver: $50 \mathrm{~m} \Omega$ Max. initial
Gold: $100 \mathrm{~m} \Omega$ Max. initial
Insulation Resistance: $100 \mathrm{M} \Omega$ Min. @ 500VDC
Applications / Markets


RoHS Dielectric Strength: 1,000VAC
Operating/Storage Temperature: $-40^{\circ} \mathrm{C}$ to $85^{\circ} \mathrm{C}$ Travel: 2.20 mm
Contact Arrangement: SPDT, DPDT
Actuation Force: SPDT: 200gf; DPDT: 300 gf
Panel Thickness: $0.75-3.0 \mathrm{~mm}$ (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 <br> Material <br> Options | Cap Style Options | Cap Color Options | LED \#1 <br> Options | LED \#2 <br> Options |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ULP | 12- SPDT <br> 22 - DPDT | EE - Latching <br> OA - Momentary | P1 - PC Pins M1- Solder Lug | Q - Silver <br> R - Gold | SS - Square Sculptured <br> SF - Square Flat <br> RF - Rectangular Flat <br> PM - Panel Mount <br> LS - Large Sculptured | CL1 - Clear <br> Lens / White Diffuser <br> OP1 - Black Opaque | NIL - No LED <br> BLU - Blue <br> GRN - Green <br> RED - Red <br> YEL - Yellow <br> RGB - Red-Blue- <br> Green | NIL - No LED <br> BLU - Blue <br> GRN - Green <br> RED - Red <br> 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
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Actuator Options Square Sculptured



DPDT with Dual LED Circuit is shown For SPDT the circuit 4,5,6 is 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 (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 circuit 4,5,6 is not included

Schematic - RGB LED
$\qquad$

## 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



## Actuator Options -

 Rectangular Flat

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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 circuit 4,5,6 is 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

E•SWITCH ${ }^{\circ}$ $\qquad$

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Actuator Options -
Panel Mount


## Panel Cutout




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


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

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