

## Illuminated Horizontal Pushbutton

### Specifications

|                    |                       |                       |               |
|--------------------|-----------------------|-----------------------|---------------|
| Electrical Ratings | 300mA @ 30VDC         | Dielectric Strength   | 1000Vrms min  |
| Electrical Life    | 20,000 cycles typical | Insulation Resistance | >100MΩ min    |
| Contact Resistance | <50mΩ initial         | Operating Temperature | -40°C to 85°C |
| Actuation Force    | 300 ± 100gF           | Storage Temperature   | -40°C to 85°C |
| Actuation Travel   | 3.3 ± .25mm           |                       |               |

### Materials

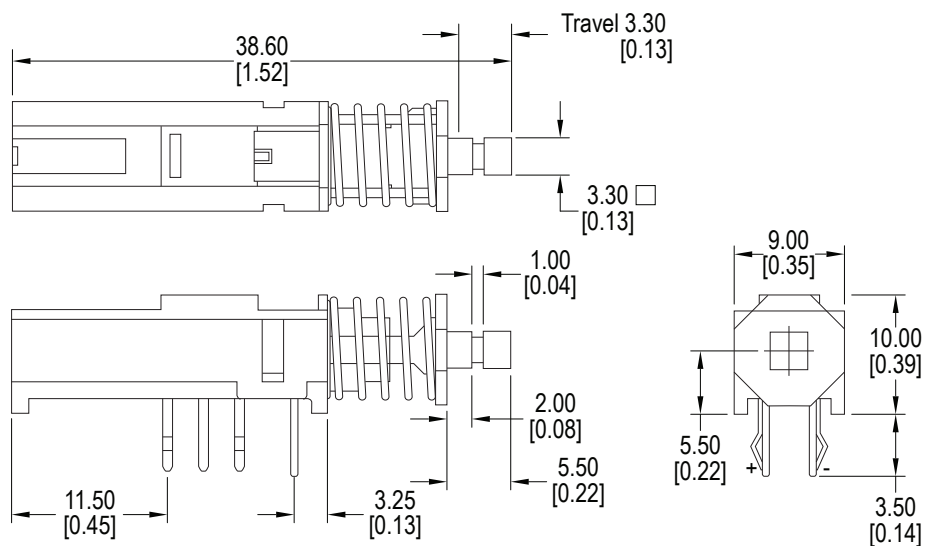
|           |                                  |
|-----------|----------------------------------|
| Actuator  | Poly Carbonate (PC)              |
| Housing   | 6/6 Nylon                        |
| Base      | Polybutylene Terephthalate (PBT) |
| Spring    | Stainless Steel                  |
| Contacts  | Phosphor Bronze, Silver Plated   |
| Terminals | Brass, Silver Plated             |

### Ordering Information

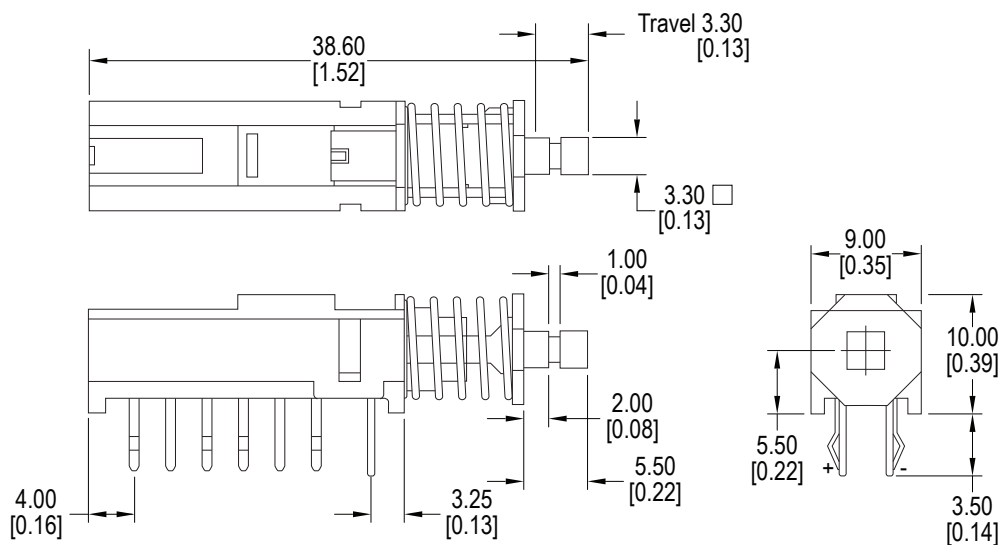
|                                                                                                                                     |                                                                                                      |   |   |    |      |      |
|-------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|---|---|----|------|------|
| 1. Series                                                                                                                           | LPH                                                                                                  | 4 | L | RG | C170 | MS04 |
| LPH                                                                                                                                 |                                                                                                      |   |   |    |      |      |
| 2. Switch Function<br>2 = DPDT<br>4 = 4PDT                                                                                          |                                                                                                      |   |   |    |      |      |
| 3. Latching Option<br>N = Non-Latching (Momentary)<br>L = Latching                                                                  |                                                                                                      |   |   |    |      |      |
| 4. LED Color **For a bi-color LED, choose two color designators<br>R = Red      Example : RG<br>G = Green<br>Y = Yellow<br>B = Blue |                                                                                                      |   |   |    |      |      |
| 5. Cap Option<br>C150<br>C170                                                                                                       |                                                                                                      |   |   |    |      |      |
| 6. Cap Finishes<br>Blank = No cap finish<br>MS = Misty Silver                                                                       | Laser Etching Option **Only available with MS cap finish<br>01, 02, 03, 04, 05<br>06, 07, 08, 09, 10 |   |   |    |      |      |

## Dimensions

### 2 Pole

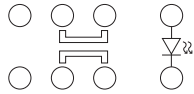


### 4 Pole

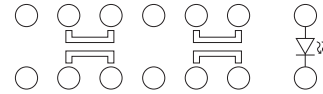


## Schematic Bottom Views

2 Pole

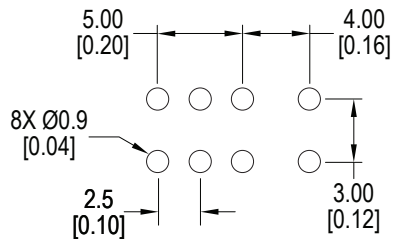


4 Pole

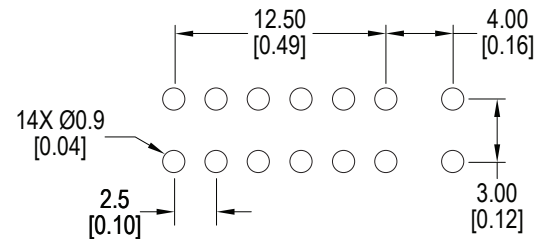


## PC Layout Bottom Views

2 Pole



4 Pole



## Cap Options

C150

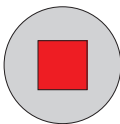
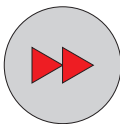
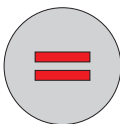
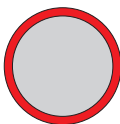


C170



## Illuminated Horizontal Pushbutton

### Laser Etching Styles

|                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 01 Style                                                                          | 02 Style                                                                          | 03 Style                                                                          | 04 Style                                                                            | 05 Style                                                                            |
|  |  |  |  |  |
| 06 Style                                                                          | 07 Style                                                                          | 08 Style                                                                          | 09 Style                                                                            | 10 Style                                                                            |
|  |  |  |  |  |

### LED Characteristics

| LED Ratings                                |                 | Color     |     |     |     |             |
|--------------------------------------------|-----------------|-----------|-----|-----|-----|-------------|
|                                            |                 | R         | G   | Y   | B   | Units       |
| Reverse Voltage                            | $V_R$           | 5         | 5   | 5   | 5   | V           |
| Forward Current (avg)                      | $I_F$           | 15        | 30  | 20  | 30  | mA          |
| Forward Current (peak)                     | $I_{FS}$        | 60        | 120 | 80  | 100 | mA          |
| Reverse Current $V_R = 5V$                 | $I_R$           | 10        | 10  | 10  | 10  | $\mu A$     |
| Power Dissipation                          | $P_T$           | 40        | 100 | 60  | 120 | mW          |
| Operating & Storage Temperature            | $T_A$           | -40 ~ +85 |     |     |     | $^{\circ}C$ |
| Forward Voltage (typ) $I_F = 20mA$         | $V_F$           | 1.7       | 1.7 | 1.7 | 3.5 | V           |
| Forward Voltage (max) $I_F = 20mA$         | $V_F$           | 2.6       | 2.6 | 2.6 | 4.0 | V           |
| Wavelength at Peak Emmission, $I_F = 20mA$ | $\lambda_P$     | 697       | 565 | 585 | 470 | nm          |
| Spectral Line Half-Width, $I_F = 20mA$     | $\Delta\lambda$ | 90        | 30  | 35  | 25  | nm          |
| Luminous Intensity, $I_F = 20mA$           | LI              | 7.6       | 26  | 26  | 450 | mcd         |
| Viewing Angle                              | $\Theta$        | 44        | 44  | 44  | 30  | deg         |