



Illuminated Pushbutton

## Specifications

|                    |                        |                       |               |
|--------------------|------------------------|-----------------------|---------------|
| Electrical Ratings | 50mA @ 24VDC           | Dielectric Strength   | 1000Vrms min  |
| Electrical Life    | 500,000 cycles typical | Insulation Resistance | >100MΩ min    |
| Contact Resistance | <10mΩ initial          | Operating Temperature | -40°C to 85°C |
| Actuation Force    | 150 ± 50gF             | Storage Temperature   | -40°C to 85°C |
| Actuation Travel   | 1.5 ± .3mm             |                       |               |

## Materials

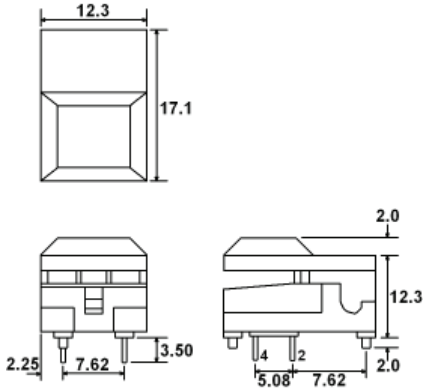
|           |                                       |
|-----------|---------------------------------------|
| Cap       | 6/6 Nylon                             |
| Housing   | 6/6 Nylon                             |
| Stem      | ABS                                   |
| Contacts  | Copper Alloy, Gold over Nickel Plated |
| Terminals | Copper Alloy, gold over Nickel Plated |

## Ordering Information

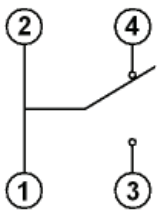
|                     |                  |    |   |   |
|---------------------|------------------|----|---|---|
| 1. Series           | JH               | A1 | 3 | 1 |
| JH                  |                  |    |   |   |
| 2. Cap Style        |                  |    |   |   |
| A0                  |                  |    |   |   |
| A1                  |                  |    |   |   |
| A2                  |                  |    |   |   |
| B0                  |                  |    |   |   |
| B1                  |                  |    |   |   |
| B2                  |                  |    |   |   |
| 3. Cap Color        |                  |    |   |   |
| 1 = White           | 6 = Orange       |    |   |   |
| 2 = Black           | 7 = Blue         |    |   |   |
| 3 = Red             | 9 = Light Gray   |    |   |   |
| 4 = Yellow          | 10 = Transparent |    |   |   |
| 5 = Green           |                  |    |   |   |
| 4. First LED Color  |                  |    |   |   |
| Blank = No LED      |                  |    |   |   |
| R = Red             |                  |    |   |   |
| Y = Yellow          |                  |    |   |   |
| G = Green           |                  |    |   |   |
| 5. Second LED Color |                  |    |   |   |
| Blank = No LED      |                  |    |   |   |
| R = Red             |                  |    |   |   |
| Y = Yellow          |                  |    |   |   |
| G = Green           |                  |    |   |   |

# Illuminated Pushbutton

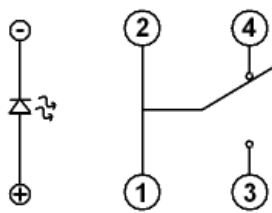
## Dimensions



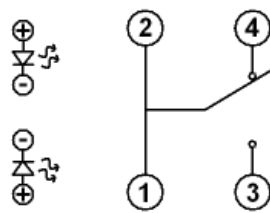
## Schematic & PC Layout



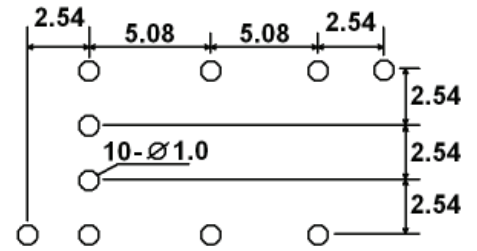
No LED



One LED

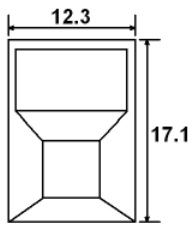


Two LED

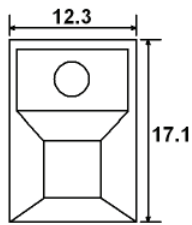


Bottom View

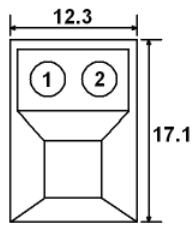
## Cap Options



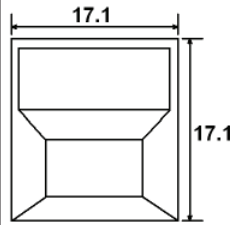
A0



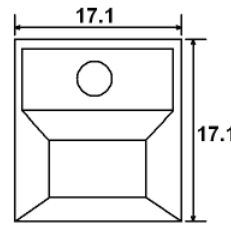
A1



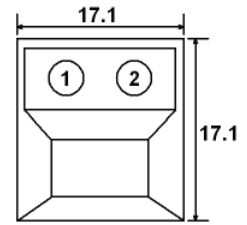
A2



B0



B1



B2

## LED Characteristics

| LED Ratings                                |                 | Color     |           |           |         |
|--|-----------------|-----------|-----------|-----------|---------|
|  |                 | R         | G         | Y         | Units   |
| Reverse Voltage                            | $V_R$           | 5         | 5         | 5         | V       |
| Forward Current (avg / peak)               | $I_F$           | 30 / 125  | 30 / 125  | 30 / 125  | mA      |
| Reverse Current $V_R = 5V$                 | $I_R$           | 10        | 10        | 10        | $\mu A$ |
| Power Dissipation                          | $P_T$           | 69        | 81        | 81        | mW      |
| Forward Voltage (typ / max) $I_F = 20mA$   | $V_F$           | 1.8 / 2.3 | 2.2 / 2.7 | 2.2 / 2.7 | V       |
| Wavelength at Peak Emmission, $I_F = 20mA$ | $\lambda_P$     | 660       | 565       | 585       | nm      |
| Spectral Line Half-Width, $I_F = 20mA$     | $\Delta\lambda$ | 24        | 30        | 35        | nm      |
| Luminous Intensity, $I_F = 20mA$           | LI              | 4         | 6         | 6         | mcd     |
| Viewing Angle                              | $\Theta$        | 150       | 150       | 150       | deg     |