## omROn

## Lighted Pushbutton Switch <br> A3A

## Compact Switch Unit Allows Signal and Power Switching in the Same Model

- Capable of switching within the range 1 mA 5 VDC to 6A 125VAC.
■ Mounting direct to PCB, or panel mounting using appropriate bezel.
■ Requires only 14.5 mm behind panel depth.
- Options include:
- Round or Square
- Momentary or Latching
- Illuminated or Non-illuminated



## Ordering Information

A3A $\square_{1}-9 \square_{2} \quad \square_{3} 1-00 \square_{4}$

## $\square 1$ Pushbutton Shape

| Code | Shape |
| :--- | :--- |
| $\mathbf{A}$ | Square |
| $\mathbf{T}$ | Round |

## 2 Terminals

| Code | Type |
| :--- | :--- |
| 0 | Solder |
| 1 | PCB |

## 3 Action

| Code | Action |
| :--- | :--- |
| K | Momentary |
| L | Alternate |

## Specifications

## ■ LED Ratings

## Absolute Maximum

| Characteristic | Unit | Value |
| :--- | :--- | :--- |
| Reverse Voltage | VR | 4 V |
| Forward Current | IF | 25 mA |
| Permissable loss | PD | 70 mW |
| Operating Temp | ToPR | -20 to +75 C |
| Storage Temp | TsTO | -30 to +100 C |

## - Contact Ratings

| Voltage <br> (V) | Current (A) |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  | Resistive | Lamp | Inductive | Motor |
| 125 AC | 6 | 1 | 2 | 1 |
| 250 AC | 2 | 0.5 | 1 | 0.5 |
| 8 DC | 4 | 1 | 2 | 1 |
| 14 DC | 4 | 1 | 2 | 1 |
| 30 DC | 4 | 1 | 1.5 | 1 |
| 125 DC | 0.4 | 0.05 | 0.4 | 0.05 |
| 250 DC | 0.4 | 0.03 | 0.2 | 0.03 |

Note: Min. permissible load 1mA 5VDC

## - LED Ratings

 Standard Ratings| Characteristic | Unit | Condition | Typical | Max |
| :--- | :--- | :--- | :--- | :--- |
| Forward voltage | VF | IF $=15 \mathrm{~mA}$ | 2.05 V | 2.8 V |
| Reverse current | IR | VR $=4 \mathrm{~V}$ | - | 100 mA |

## Characteristics

| Insulation resistance | $100 \mathrm{M} \Omega \mathrm{min}$. (at 500 VDC ) |
| :--- | :--- |
| Dielectric strength | $600 \mathrm{VAC}, 50 / 60 \mathrm{~Hz}$ for 1 minute between terminals of same polarity <br> $2,000 \mathrm{VAC}, 50 / 60 \mathrm{~Hz}$ for 1 minute between terminals of different <br> polarity and also between each terminal and ground |
| Vibration | Mechanical and malfunction durabiltiy: <br> 10 to $55 \mathrm{~Hz}, 1.5 \mathrm{~mm}$ double amplitude |
| Shock | Mechanical durability: $500 \mathrm{~m} / \mathrm{s}^{2}$ (approx. 50 G ) <br> Mechanical durability: $150 \mathrm{~m} / \mathrm{s}^{2}$ (approx. 15 G ) |
| Ambient temperature | Operating: $-10^{\circ} \mathrm{C}$ to $55^{\circ} \mathrm{C}$ |
| Humidity | 35 to $85 \% \mathrm{RH}$ |
| Life expectancy | Mechanical: <br> Momentary action type: $1,000,000$ operations min. <br> Alternate action type: 50,000 operations min. <br> Electrical: <br> 50,000 operations min. |
| Weight | Approx. 3.2 g |

## Dimensions

Panel cutout

## For separate mounting



* Recommended panel thickness: 1 to 1.6 mm
** Flange dimensions:
Round: 12.7 dia
Square: $\square 12.7$

|  | For round pushbutton | For square pushbutton |
| :---: | :---: | :---: |
| Horizontal multiple mounting |  |  |
| Vertical Multiple mounting |  |  |

1. Unless otherwise specified, a tolerance of $+/-0.2 \mathrm{~mm}$ applies to all dimensions.
2. The illustrations below show switches with solder terminals, without flange or leafspring.

Non-lighted



## Illuminated




| Type | High capacity (SPST-NO) |
| :---: | :---: |
| PCB Terminals | Non-lighted model <br> LED terminals are provided in the lighted models only <br> Mounting holes |


| Type | High capacity (SPST-NO) |
| :---: | :---: |
| Solder terminals | Non-lighted model <br> Lighted model <br> LED terminals are provided in the lighted models only |

## Accessories (Order Separately)

Flange (select according to colour)

| Name | Shape | Classification | Model | Remarks |
| :---: | :---: | :---: | :---: | :---: |
| Flange | $a^{2}$ | Flange alone | Black | A3A-251 |
|  |  |  | Light grey | АЗA-252 |
|  |  |  | Black | A3A-241 |
|  |  |  | Light grey | A3A-242 |
|  | $>$ | Leaf spring |  | A3A-200 |
|  | $\pi^{2}$ | Flange and leaf spring (one each) | Black | A3A-221 |
|  |  |  | Light grey | АЗA-222 |
|  | $\Omega$ |  | Black | A3A-211 |
|  |  |  | Light grey | A3A-212 |

Note: Switch units having solder terminals are supplied with a black flange (appropriately round or square) and a metal leaf spring, used when panel mounting.

