# OMRON

# **Lighted Pushbutton Switch**

A3A

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

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



# Ordering Information

**A3A**  $\square_1$  -9  $\square_2$   $\square_3$  1-00  $\square_4$ 

### ☐ 1 Pushbutton Shape

Code	Shape	
Α	Square	
T	Round	

#### 2 Terminals

Code	Туре	
0	Solder	
1	PCB	

## ☐ 3 Action

Code	Action	
K	Momentary	
L	Alternate	

### 4 Pushbutton

Code	Colour Type	Туре	
ER	Red	Illuminated	
EY	Yellow	Illuminated	
EG	Green	Illuminated	
L	Grey	Non-illuminated	
R	Red	Non-illuminated	
Υ	Yellow	Non-illuminated	
G	Green	Non-illuminated	
Α	Blue	Non-illuminated	
В	Black	Non-illuminated	

# **Specifications**

### ■ LED Ratings

#### **Absolute Maximum**

Characteristic	Unit	Value
Reverse Voltage	VR	4V
Forward Current	lF	25mA
Permissable loss	Pb	70mW
Operating Temp	Topr	-20 to + 75 C
Storage Temp	Тѕто	-30 to + 100 C

## **■** Contact Ratings

Voltage	Current (A)			
(V)	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

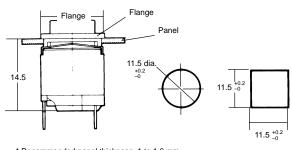
Characteristic	Unit	Condition	Typical	Max
Forward voltage	VF	IF = 15mA	2.05V	2.8V
Reverse current	lr	VR = 4V	-	100mA

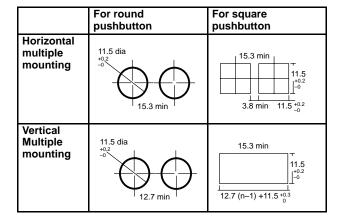
## **■** Characteristics

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

# **Dimensions**

#### Panel cutout For separate mounting





\* Recommended panel thickness: 1 to 1.6 mm

Round pushbutton type

15.24

\*\* Flange dimensions:

Round: 12.7 dia.

Square: 

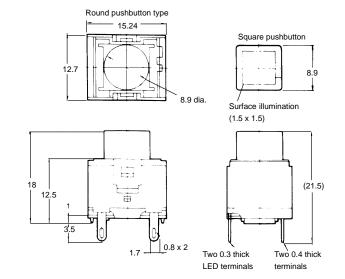
12.7

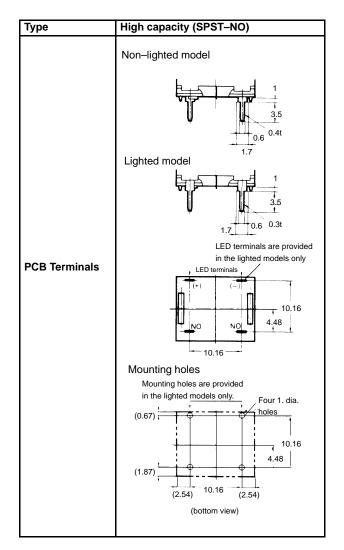
- Note:
- Unless otherwise specified, a tolerance of+/- 0.2mm applies to all dimensions.
   The illustrations below show switches with solder terminals, without flange or leafspring.

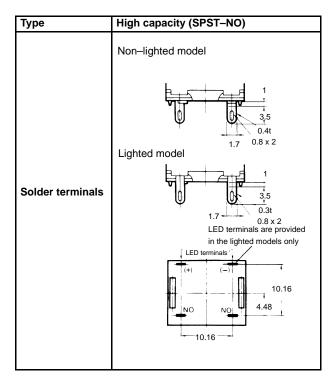
Illuminated

## Non-lighted

# Square pushbutton 12.7 8.9 dia. Mechanical indication (21.5) 0.8 x 2 Two 0.4 thick terminals







# Accessories (Order Separately)

Flange (select according to colour)

Name	Shape	Classification	Model	Remarks
	•	3	Black	A3A-251
	<u> </u>		Light grey	A3A-252
		Flange alone	Black	A3A-241
		Light grey	A3A-242	
Flange		Leaf spring		A3A-200
			Black	A3A-221
			Light grey	A3A-222
		Flange and leaf spri (one each)	ng 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.